General Studies - 1

1. The disintegration of the Ottoman Empire created many fault lines for Europe's future. Do you agree? Substantiate.

Approach - As the directive here is substantiating it is necessary to give examples while giving an argument. In the introduction you can explain about how and when the disintegration of Ottoman Empire took place. In the main body part, it is necessary to explain what kind of effects it created citing Europe's future. While concluding it is necessary to connect it with the recent developments.

Introduction

At the start of World War, I, the Ottoman Empire was already in decline. The Ottoman army entered the war in 1914 on the side of the Central Powers (including Germany and Austria-Hungary) and were defeated in October 1918. Following the Armistice of Mudros, most Ottoman territories were divided between Britain, France, Greece and Russia.

Body

Disintegration of the Ottoman Empire and fault lines for Europe's future:
- The Ottoman Empire officially ended in 1922 when the title of Ottoman Sultan was eliminated. Turkey was declared a republic on October 29, 1923, when Mustafa Kemal Atatürk (1881-1938), an army officer, founded the independent Republic of Turkey.
- He then served as Turkey's first president from 1923 until his death in 1938, implementing reforms that rapidly secularized and westernized the country.
- Following the Armistice of Mudros, most Ottoman territories were divided between Britain, France, Greece and Russia.
- The Aftermath of dissolution of Ottoman Empire drastic political, cultural, economic, and social changes across Europe observed.
- The former empire of Austria-Hungary was dissolved, and new nations were created from its land such as Austria, Hungary, Czechoslovakia, and Yugoslavia.
- In Europe, they retained only the country of Turkey. Poland, which had long been divided among Germany, Russia, and Austria-Hungary, was reconstituted. Within the British Empire too, disaffected nations fought for independence.
- Hence, in geographical sense it completely changed the political map of Europe by creating or dividing the nations.
- However, it was not just the effect of the fall of Ottoman Empire but also the impact of end of First World War which changed the political discourse across Europe.
- The harsh conditions forced upon Germany after the end of World War I actually supplemented the anger of Germans, thereby it supplemented rise of Hitler, who became the prominent figure for World War II.

- Besides it also increased the ideological debate between Western thinkers and Eastern thinkers. As a result, two polar opposite ideologies as communism and liberalism gained prominence in Europe. Which in fact led to creation of Berlin wall in 1961.
- It not only affected the political sphere but it also affected the economic sphere too. For instance, after disintegration of Ottoman Empire, we can easily observe economic hardships of many European countries.
- For instance, around in 1923, 42 billion German marks were worth the equivalent of one American cent.
- The effects of disintegration of Ottoman Empire are not just limited to supplement the impact of World War I and World War II but they are impacting even today's world too. For instance, UK left European Union i.e. Brexit.

Conclusion

The aftermath effects of disintegration of Ottoman Empire are still visible today. However, Europe due to its strategic location suffered the most after disintegration of Ottoman Empire. The effects are still relevant today as many nations are asking to come out of European Union. However, Europe needs to understand the rise of China and should have foresight to tackle this challenges, else it might culminate in to world war III or new imperialism.
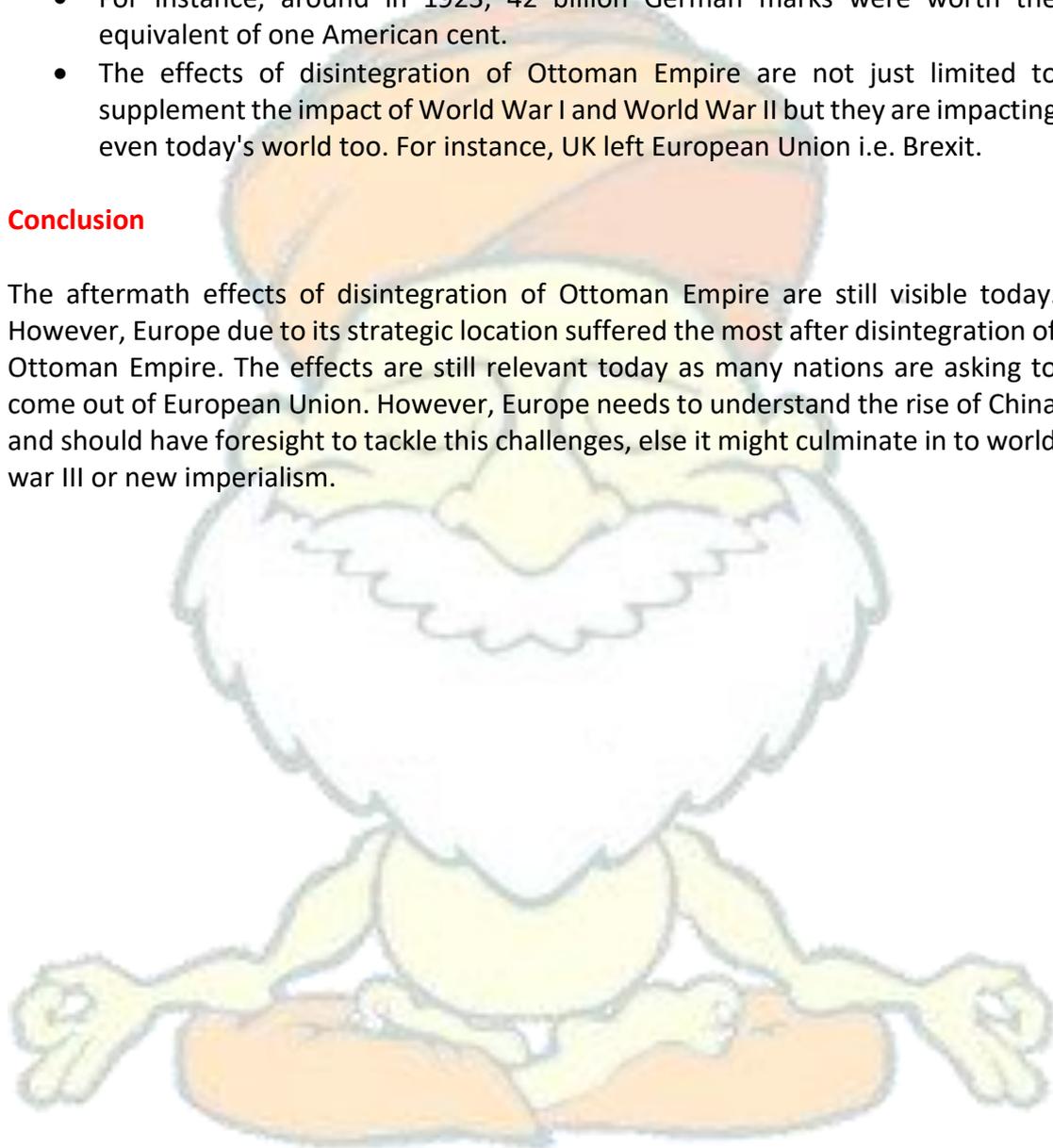
2. Industrial revolution became the engine of European colonialism in the 19th century. Comment.

Approach - As the directive here is comment, it is necessary to give different viewpoints and then own opinion. You can start in introduction by telling what is industrial revolution and when it started. In the first half of main body part you are expected to show how Industrial revolution gave impetus to European colonialism in the 19th century. In the conclusion, you can show how it affected the history of colony and changed the course of world history.

Introduction

The Industrial Revolution, now also known as the First Industrial Revolution, was the transition to new manufacturing processes in Europe and the United States, in the period from about 1760 to sometime between 1820 and 1840. This transition included going from hand production methods to machines which led to the rise of the mechanized factory system.

Body

Industrial revolution became the engine of European colonialism in the 19th century:
* European power acquired colonies which ensured a regular supply of raw materials. In return the countries which were industrially advanced took this raw material, processed it and sold the manufactured products in to the colonies itself.
* European powers overseas colonies were the captive market for the goods it produced now. Textile industry and the iron industry adopted some innovations of its own as well. Hence, it led to colonies being the backyard as well as market for the European countries.
* Innovated machines like the flying shuttle, spinning jenny and power loom, made the production much easier and faster, while at the same time requiring less human capital.
* It resulted in large scale production of manufactured goods. However, the market in Europe was not that much developed to assimilate such huge quantity of product. Hence, Europeans tried to expand their market in the colonies.
* It led to flourishment of trade, market, and communication across the world.
* Due to industrial revolution shipping industry also got developed. Which led to transport revolution.
* To expand facilities for transport by water much cheaper than overland, European countries began connecting rivers and lakes with canals. Canal building spread to Europe and America and was a big help in providing cheaper transportation, especially after steam boats came into use.
* It not only led to market expansion in colonial countries but it also led to local market destruction in colonies too. For instance, the large quantities of

European produce in the market side-lined locally produced handicrafts in India.

It resulted in following effects:

- It strengthened the roots of colonialism by capturing the markets of colonised countries.
- It also strengthened the expansionist policies of European colonial countries.
- It increased the settler colonialism, i.e. foreign citizens move into a region and create permanent or temporary settlements called colonies.
- It is exemplified in the colonies established in what became the United States, New Zealand, Namibia, South Africa.
- However, it also led to exploitative colonialism, where foreign armies conquer a country in order to control and capitalize on its natural resources and indigenous population. Europeans established authoritarian regimes in these colonies, which had no limits on state power. For instance, in Congo Basin.

Hence, it can be said that, Industrial revolution led to dominance of European countries over colonies they captured and after that they settled down there. It resulted in expansion of European colonialism.

Conclusion

Industrial Revolution observed the emergence of modern capitalist economies around the world at this time as the GDP per capita saw an exponential rate of growth around this time. Economic historians regard the Industrial Revolutions as the most important moment in human history since the domestication of animals and plants and hence it can be said that Industrial revolution became the engine of European colonialism in the 19th century.

3. How did ideas of enlightenment affect the European history? Briefly describe.

Approach - It expects students to write about enlightenment and how enlightenment ideas affected the European history.

Introduction

The Enlightenment was a period from the late 17th century into the 18th century were new ideas about government, personal freedom and religious beliefs began to develop in Europe. Each of them had their specific ideas and views about what made themselves and their age different from the previous people and their ages. However, all of them strongly believed in certain major concepts & ideas. These are faith in reason, belief in change & progress and finally faith in the concept of nature.

Body

Characteristics of enlightenment:
- Reason
- Empiricism
- Science
- Universalism
- Individualism
- Toleration
- Uniform human nature
- Secularism

Ideas of enlightenment affected European history in the following ways:
- Degeneration of the Absolute Monarchy: Absolute monarchy reached its peak under Louis XIV, and began to degenerate during his lifetime. Refusal of Louis XV to remedy the abuses of the old order, inefficiency of Louis XVI, all added to the initiation of the process of French revolution.
- Hegemony of the ideology of profiteering: There were some historical events also which intensified the process of modernity. In Western Europe industrialisation had come with the ideology of capitalism. The desire for mass production urged the mercantile community to find out new markets for the sale of their product. For example, East India company in India.
- Process of different revolutions: The economic (the global capitalist economy), the social (formation of classes and an advanced sexual and social division of labour), the cultural (the transition from a religious to a secular culture) and political (the rise of the secular state and polity).
- Spread of modern ideas: During the 18th-century people began to look at the whole world and the role of people in a different way. The French Philosopher and writer Francois Marie Voltaire attacked the authority of the religious institutions and the governments of the day. Jean-Jacques Rousseau criticised civilisation itself saying that people should not obtain more possession or power than needed.

- The triumph of liberalism: The objective of enlightenment was to attain social justice for the mankind as a whole. This justice could be materialised by development. Thus, liberalism triumphed over feudalism and created a model of social justice and progress. As a matter of fact, liberation is the dominant ideology of the western democracies, with its roots in enlightenment thought.
- Modern capitalism: There was capitalism in some form or the other before the advent of enlightenment. But, in the aftermath of urbanisation, industrialisation, colonialism and democracy, capitalism took a modern form. Enlightenment made capitalism an international affair. There emerged capitalist market relations at a global scale.
- Birth of modernity: Modernity thus created the institution of nation-state and an international system of states, a dynamic and expansionist capitalist economic order based on private property, industrialism, the growth of large-scale administrative and bureaucratic systems of social organisation and regulation, the dominance of secular, materialist, rationalist and individualist cultural values, and the formal separation of the 'private' from the 'public'.
- Affected legal codes and governmental structures: The Age of Enlightenment influenced many legal codes and governmental structures that are still in place today. Montesquieu a huge proponent of the Enlightenment, Montesquieu suggested the theory of the separation of powers in order to obtain a political system of checks and balances, promoting order and equality. Principles of the Enlightenment also featured heavily in the Bill of Rights and the Declaration of Independence.

Conclusion

The old way of life was represented by superstition, an angry God, and absolute submission to authority. The thinkers of the Age of Reason ushered in a new way of thinking. This new way championed the accomplishments of humankind. Individuals did not have to accept despair. Science and reason could bring happiness and progress. Kings did not rule by divine right. They had an obligation to their subjects. Europeans pondered the implications for nearly a century.

4. The history of African decolonisation is sharply contrasted from its Asian counterparts. Elucidate.

Approach - It expects students to write about African decolonization and how its sharply contrasted from its Asian counterparts.

Introduction

The decolonisation of Africa took place in the mid-to-late 1950s to 1975. The changes that came during the process was sudden and radical as the colonies made their transition towards independence at times marred by political violence. The decolonisation of Asia was the gradual growth of independence movements in Asia, leading ultimately to the retreat of foreign powers and the creation of a number of nation-states in the region.

Body

Decolonisation of Africa sharp contrast from its Asian counterparts:
- Neo-Colonialism: The old European powers sought to exert influence in newly independent trades through biased trade policies. Colonial powers were technologically advanced. So they used it as a leverage in directing foreign investment and hence controlling the new states. This came to be known as Neo-Colonialism. This was dominant in African decolonising countries whereas Asian countries were free to decide their own economic and trade policies.
- Nature of Discrimination: Religious and Caste based discrimination was highlight of Asia. In Africa it is racial Discrimination which was dominant.
- Pan-Africanism: A feeling of brotherhood was growing within the indigenous people of Africa. This meant a pooling of resources and external support in the struggle for independence. As more and more countries attained freedom, the entire process was hastened. This type of pan regional phenomenon was missing in Asian decolonisation process.
- Democratic System: In Asia after independence, democracy prevailed but most of former colonies of Africa fell into Dictatorship.
- Tribal differences: Many countries were brought together by the sheer military forces of the colonisers. Lack of a common cultural past and tribal belligerence meant that they slaughtered each other inside these artificial boundaries imposed upon them. This led to worst genocides in Nigeria, Congo (Zaire), Burundi and Rwanda. Asian countries lacked such tribal dominance and were divided on natural cultural boundaries.
- Border Demarcation: National boundaries were demarcated based on Religious and Geographical lines but it was absent in Africa where still Civil war is going on for nation based on Ethnicity.
- Ethnic conflict: In some countries with an influential white settler population, Decolonisation was a more complex affair. They offered firm resistance because they were privileged under the old system. E.g. Rhodesia (Zimbabwe) and the erstwhile Apartheid regime of South Africa. Sometimes, as in

Zimbabwe, forced taking away of estates from the white minority led to an overall fall in productivity and caused economic crises. Such influential white settlers were minute in Asian countries and had very much limited influence.

- Spill over effect: In Asia starting from India, majority of nation got independent within few years but in Africa it continued for decades.
- Aftermath of Decolonisation: Army coups were common in countries with weak leadership and limited mass base in democratic processes. For example, Ghana, Nigeria, Uganda, Burundi, Rwanda, Congo etc.
- Sovereignty: Most of Asia gained sovereignty in its external and internal matters but still Colonial influence exists in Africa. Ex: French intervention in Chad, Mali etc.

There are certain similarities in both of their struggles:
- Inspirations: Both continents derived inspiration from Western Educated elites like Mahatma Gandhi, Nehru, Sardar Patel, Dr. Kwame Nkrumah etc.
- Administration: Both country still follows European institutional systems in Administration like Bureaucracy and Judiciary.
- War: War followed in both continents after independence like Indo-Pak wars, Vietnam Wars, Arab-Israel wars, Algerian wars etc.

Role of India:

After Indian independence, India supported Decolonisation strongly in International fora through the leadership of Non-Alignment movement. India actively mobilised international opinion in favour of Decolonisation. In Indonesia and Africa, it was vocal in support. It also sent troops to solve the Congo Crisis of the 1960s. Besides, India contributes actively to the UN peacekeeping forces that operate in different parts of Africa.

Conclusion

Decolonisation was a force of good that helped liberate billions of people across the globe from exploitation under an oppressive foreign rule. As a cultural process, it is continuing to date. It ended up with the majority of the world achieving self-determination and self-rule. Majority of the so-called "Third world" is still mired in extreme poverty. The way forward is through human development, the spread of education and building of institutions through regional Pan-African, Pan-South Asian cooperation. The democratisation of international order will help the third world more in getting its grievances addressed and in building a more equitable world.

5. Do you agree with the assertion that capitalism had triumphed with the disintegration of the USSR? Critically comment.

Approach - As the directive here is critically comment, it is necessary to give both sides views and then put forth your own opinion. In the introduction you can start by giving how and when the disintegration does took place. In the first half of main body part it is necessary to give views in support of triumph of capitalism. In the next half give arguments in against triumph of capitalism. You can conclude by showing how it is still relevant this debate is still relevant today.

Introduction

The Union of Soviet Socialist Republics (USSR) was a loose confederation of 15 republics with Russia as the leader. USSR was a strong bloc with great control over global politics from 1922 to 1991, when it was disintegrated into smaller units. However, it is asserted by the western countries that capitalism had triumphed with the disintegration of the USSR.

Body

Capitalism had triumphed with the disintegration of the USSR:
- The disintegration of USSR brought at the forefront the lacunae of socialistic model of economic governance to the developing world. It was seen as a victory of capitalism over socialism, often termed as 'end of ideology' thesis.
- Western institutions like IMF and World Bank in the global economic governance pushed developing countries to adopt neo-liberal economic policies. Hence, rise of free economic market took place.
- Changes in politics of Europe led to disappearance of division between Western and Eastern Europe. Demolition of the Berlin wall, the unification of Germany, the end of the Warsaw Pact and rise of democratic regimes changed the politics of Europe.
- Disintegration of USSR also affected the relations with the other countries. For instance, financial aid from the Soviet Union to India was significantly reduced.
- Rise of free market economy, fall of Berlin wall, increased globalisation, and wide spread of liberal ideology supplemented the triumph of capitalism.

As a result, the disintegration of the USSR resulted in USA's dominance along the world politics table. However, it can't be exactly said that capitalism triumphed across the globe. As many of the countries across the globe were following their own policies.

Survival of parallel ideologies/flows after disintegration of USSR:
- The Non-Aligned Movement was formed during the Cold War as an organization of States that did not seek to formally align themselves with either the United States or the Soviet Union, but sought to remain independent or neutral.
- One of the biggest challenge to capitalism came from Vietnam. The Democratic Republic of Vietnam (DRV) in the north was supported by the Soviet Union,

China, and other communist countries, while the United States and its anti-Communist allies backed the Republic of Vietnam (ROV) in the south.

- The Socialist Republic of Vietnam was formally established on July 2, 1976 and the loss of USA in Vietnam war still persists as a 'Vietnam Syndrome' in every western thinker's mind who thought that Capitalism has triumphed.
- Besides Rise of China posed greatest challenge to capitalism. It literally overshadowed the assertion that capitalism has triumphed. For instance, current trade war between USA and China.
- It's not just about the Asian countries, but communism also spread in the backyard of USA, i.e. in Cuba.
- Also USA's invasion in Afghanistan, Iraq shows that, capitalism triumph after disintegration of USSR is just an illusion, and USA is still trying to gain dominance over middle-east Asian countries through capitalism. It's actually an endeavour to assert capitalism in an attempt to capture the oil resources and strategic locations.

Conclusion

It is of no doubt that after the disintegration of USSR, power equations across the world changed. It led to rise of USA and made the world a uni-polar world on political scale. However, different ideological flows still persisted which overshadowed the assertion of triumph of capitalism. The attempt of USA to pose capitalism as a triumphed ideology is still continuing. However, other ideological flows also have maintained their stronghold in their respective spheres.
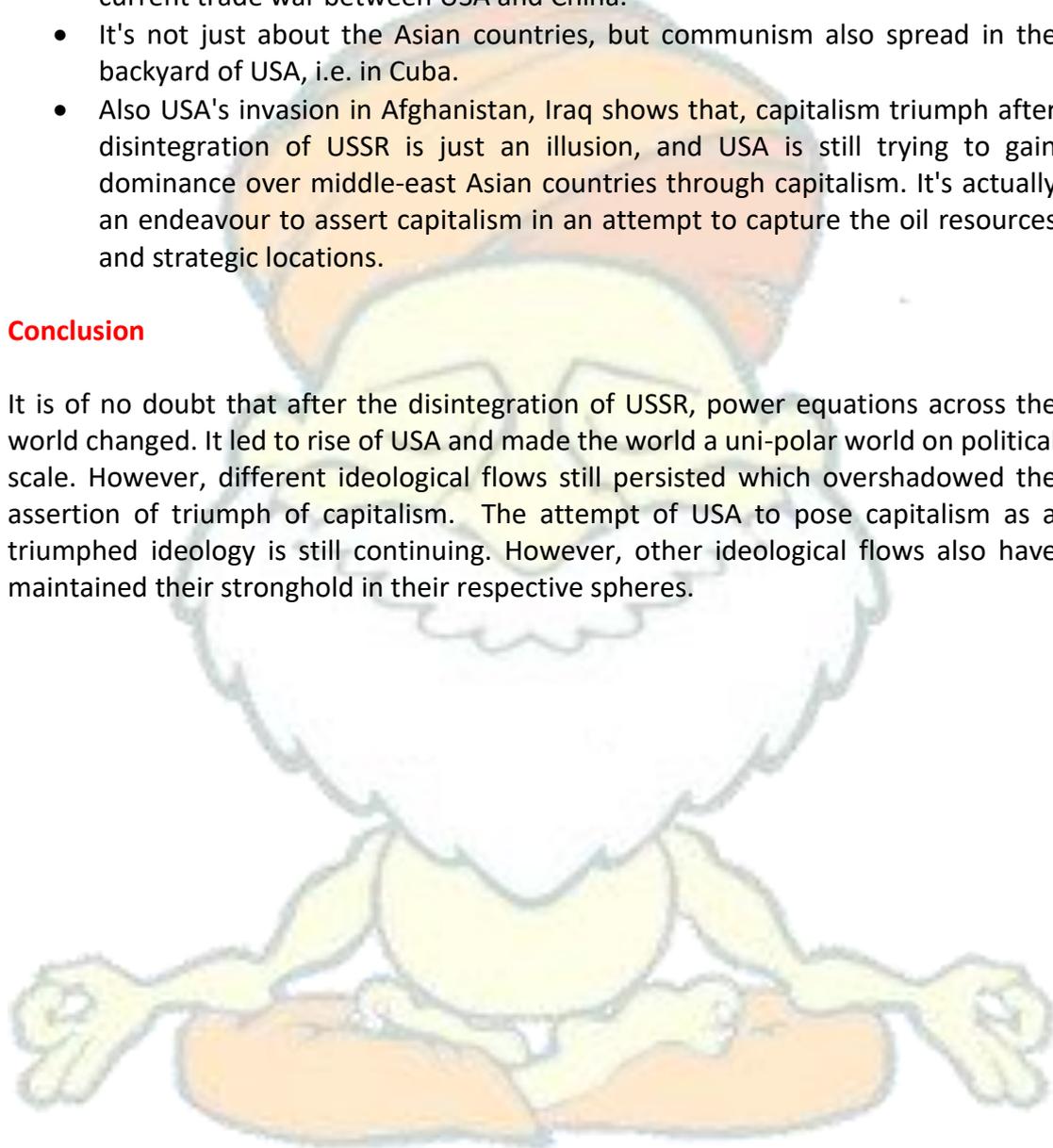
6. What are the factors contributing to India's below par performance on addressing hunger and malnutrition despite having adequate food stocks? Examine.

Approach - As the directive here is examine, it is necessary to cover various angles of the issue and there by provide a solution in brief. In the introduction you can start by showing India's performance in Global Hunger Index, thereby showing its below par performance. In the main body part it is necessary to show how much adequate food stock India has and then explain factors contributing to India's below par performance on addressing hunger and malnutrition. In the next part give government initiatives and way forward in brief.

Introduction

India has been ranked 94 on the 2020 Global Hunger Index (GHI), lower than neighbours like Bangladesh and Pakistan. India falls in the 'serious' category on the Index, with a total score of 27.2. India's poor score comes almost entirely from the child stunting and wasting parameters.

Body

Adequate food stock in India:
- Although India has overall food security with record levels of foodgrain production. In recent years, access to healthy food is still difficult for poor households.
- Food Corporation of India(FCI), has grain stocks of about 91-92 mmt, against a buffer stock norm of 41.12 mmt, that are required for public districution systems and some strategic reserves. Hence, FCI has "excess stock" of nearly 50 mmt.

Factors contributing to India's below par performance on addressing hunger and malnutrition:
- Although foodgrain production has increased fivefold since Independence, it has not sufficiently addressed the issue of hunger and malnutrition due to long time focus on increasing one specific crop i.e. monoculture. For instance, in the regions around Punjab mostly wheat production took place. Which led to surplus production of one specific variety of crops.
- Lax implementation: Providing nutritious food to the country's children is more a matter of political will and effective policy implementation at the grassroots level. For instance, sever levels of Hunger and malnutrition in the Melghat region of Maharashtra shows lax policy implementation.
- Food consumption patterns have changed substantially in India over the past few decades, which has resulted in the disappearance of many nutritious local foods like millets.
- Besides, flaws in the implementation of Integrated child development scheme (ICDS), Mid-day meal scheme, also resulted aggravating the problem of

malnutrition in India. For instance, In a recent incidence in Uttar Pradesh, through mid-day meal scheme students were provided salt with chapatis.

- Lack of storage: Due to inadequate number of godowns for storage, a part of procured grains is maintained as outdoor stacks ('Cover-and-Plinth' system), which face high risk of rain damage and pilferage.

- Poor quality of food grains & high wastage: Due to insect infestation, microbiological contamination, physiological changes due to sprouting and ripening etc., the shelf life of food grains remain poor. Lack of irradiation facilities also impedes long term storage.

- FCI delivers food grains to State Govt./ State Agencies from its base depots for distribution by the latter through Fair Price Shops. However, damage and loss during transmission or corruption in the transport process creates impediments delivery of essential food grains.

- For instance, despite receiving the required number of stock for a month if a PDS shopkeeper sells the food grains through black market. It creates the inaccessibility to required food grains for the poor.

- Poor sanitation, leading to diarrhoea, is another major cause of child wasting and stunting thereby aggravating hunger and malnutrition. At the time of the last NFHS, almost 40% of households were still practising open defecation. Only 36% of households disposed of children's stools in a safe manner.

- Along with it, prevalent structural inequities such as caste inequities have also aggravated the issue of hunger and malnutrition in India.

Steps to address the issue and Government Initiative:

- Expansion of government schemes by increasing access to maternal and child health care, as well as education on healthy diets and child feeding practices.

- An all-inclusive policy making approach needs to be adopted. For instance, inclusion of all stakeholders while making the policy. The stakeholders include, government, NGO's, child rights organisations, women rights organisations.

- Finding out the flaws in governments schemes and addressing them is necessary. For instance, POSHAN ABHIYAAN, Mission Indradhanush, Mid-day meal scheme, ICDS etc.

- The National Food Security Act, (NFSA) 2013 legally entitled up to 75% of the rural population and 50% of the urban population to receive subsidized food grains under the Targeted Public Distribution System. Strict implementation of PDS while strategizing to achieve the targets is necessary.

- Universalisation of PDS to avoid under coverage, Inclusion and Exclusion Errors and in preventing the leakage in the delivery system, for all the problems are related to including only a section of society under the scheme. Implementing the recommendation of the Shanta Kumar committee for reforms in the public distribution system can be a good step in the efficient functioning of PDS.

Conclusion

National Nutrition Mission (POSHAN Abhiyaan) seeks to ensure a "malnutrition free India" by 2022. However, there is no single solution, as the issue of India's below par

performance on addressing hunger and nutrition is multifaceted. Indian needs an all-inclusive, multi-pronged approach to address the issue of malnutrition and hunger in India. Which will help India to contribute to achieve SDG 2's target to end all forms of hunger and malnutrition by 2030.

7. India's social security infrastructure has created some wonderful frameworks. Do you agree? Substantiate your views.

Approach - It expects students to write - in first part write about how social security infrastructure - while in second part mention about lacuna in India's social security infrastructure.

Introduction

According to the International Labour Organisation (ILO), Social Security is a comprehensive approach designed to prevent deprivation, give assurance to the individual of a basic minimum income for himself and his dependents and to protect the individual from any uncertainties.

Body

Performance of India's social security infrastructure:
- Food security:
  - Under NFSA, MDM, ICDS and Antodya Aan Yojana, food security is provided to every vulnerable category and age group according to statistics of world's food reports.
  - But weak beneficiary selection criteria, age old storage infrastructure, ineffective implementation and wide scale corruption mars the very notion of this scheme.
- Health security:
  - Like AABY, govt. recently attached various insurance schemes for unorganized sector and entrepreneurs to Aadhar linked bank account. Further, govt. decision to increase FDI in insurance sector raised expectation to improve health insurance in country. Similarly, NHM is directed to provide health care facilities in locality.
  - Lack of staff, weak supporting infrastructure and lack of private sector's interest towards these schemes are affecting its final output.
- Livelihood security:
  - MGREGA is provided as legal right to unskilled workers to guaranteed work of 100 days per year. This scheme was hailed as most innovative scheme of developing world.
  - But problems like inability of states to provide required day of work, manipulation in payrolls and delayed payments, scheme's failure to improve skilled capacity of workers and highly discriminatory and politicized panchayats, as main executive authority, towards worker selections are some roadblocks in this scheme's effective implementation and workings.
- Economic security:
  - PMJDY and allied schemes under financial inclusion programme aimed to provide savings instrument and infrastructural support for DBT transfers have gained attraction of world financial reporting during last whole year.

  ○ But, unfunded accounts and illiterate consumers unable to operate accounts are problems from consumer side, and weak banking infrastructure in rural hinterlands, unresponsive banking staff and failure to link other financial schemes under PMJDY are govt. side problems.

Conclusion

India's social protection needs to be reshaped to address increased poverty vulnerability and increased uneven playing field. The declining share of labour in total income and accumulation of capital wealth in the hands of a few have raised concern. We need new ways of scaling up social protection for 80% of working people in India who have no or little access to social protection.

### 8. How does plate tectonics lead to orogeny? Illustrate.

Approach - It is straightforward question where it expects students to illustrate how does plate tectonics process leads to orogeny. Try to draw diagram in such questions. In end for extra information we mentioned ongoing orogenies examples.

Introduction

Plate tectonics is a scientific theory describing the large-scale motion of seven large plates and the movements of a larger number of smaller plates of Earth's lithosphere, since tectonic processes began on Earth between 3.3 and 3.5 billion years ago.

Body

Orogeny: Mountains Created by Plate Tectonics:
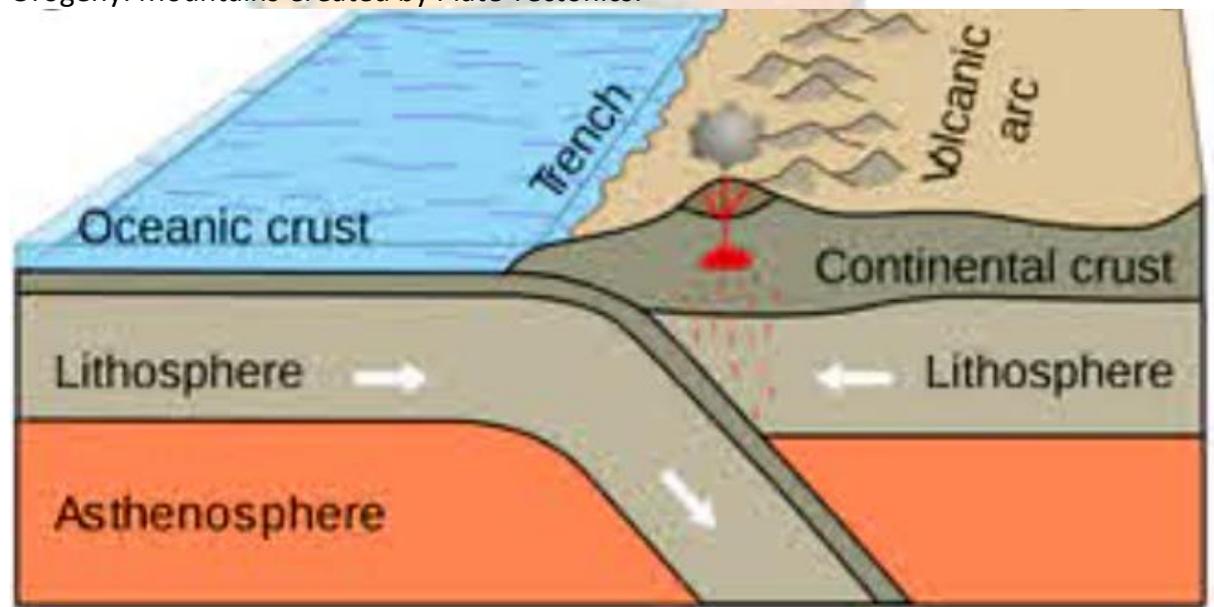
- The Earth is made up of layers of rock and minerals. The surface of the Earth is called the crust. Just below the crust is the upper mantle. The upper mantle, like the crust, is relatively hard and solid. The crust and upper mantle together are called the lithosphere.
- While the lithosphere doesn't flow like lava, it can change. This happens when gigantic plates of rock, called tectonic plates, move and shift. Tectonic plates can collide, separate, or slide along one another. When this occurs, the Earth's surface experiences earthquakes, volcanoes, and other major events.
- Orogeny (or-ROJ-eny), or orogenesis, is the building of continental mountains by plate-tectonic processes that squeeze the lithosphere. It may also refer to a specific episode of orogeny during the geologic past. Even though tall mountain peaks from ancient orogenies may erode away, the exposed roots of those ancient mountains show the same orogenic structures that are detected beneath modern mountain ranges.
- In classical plate tectonics, plates interact in exactly three different ways: they push together (converge), pull apart, or slide past each other. Orogeny is limited

to convergent plate interactions; in other words, orogeny occurs when tectonic plates collide. The long regions of deformed rocks created by orogenies are called orogenic belts, or orogens.

- In actuality, plate tectonics is not at all that simple. Large areas of the continents can deform in blends of convergent and transform motion, or in diffused ways that do not give distinct borders between plates. Orogens can be bent and altered by later events, or severed by plate breakups. The discovery and analysis of orogens is an important part of historical geology and a way to explore plate-tectonic interactions of the past that do not occur today.

Ongoing Orogenies examples:

- The Mediterranean Ridge is the result of the African plate sub ducting (sliding) underneath the Eurasian plate and other smaller microplates. If it continues, it will eventually form extremely high mountains in the Mediterranean.
- The Andean Orogeny has been occurring for the past 200 million years, although the Andes have only arisen in the past 65 million years. The orogeny is the result of the Nazca plate sub ducting underneath the South American plate.
- The Himalayan Orogeny started as the Indian subcontinent began moving towards the Asian plate 71 million years ago. The collision between the plates, which is still ongoing, has created the largest landform of the past 500 million years; the combined Tibetan Plateau and Himalayan Mountain range. These landforms, along with the Sierra Nevada range of North America, may have induced a global cooling around 40 million years ago. As more rock is lifted to the surface, more carbon dioxide is sequestered from the atmosphere to chemically weather it, thus decreasing Earth's natural greenhouse effect.

Conclusion

Orogenic belts can form from the collision of an oceanic and continental plate or the collision of two continental plates. There are quite a few ongoing orogenies and several ancient ones that have left long-lasting impressions on the Earth's surface.

9. How do local weather conditions affect pollution? Discuss with the help of suitable examples.

Approach - As the directive here is discuss, it is necessary to cover the topic from various angles. In the introduction in brief tell what pollution is and what major forms pollution are. In the main body part explain those local weather conditions which affect pollution. Giving a way forward with relative examples will fetch you more marks.

Introduction

Pollution is the introduction of contaminants into the natural environment that cause adverse change. Major forms of pollution include air pollution, light pollution, litter, noise pollution, plastic pollution, soil contamination, radioactive contamination, thermal pollution, visual pollution, and water pollution.

Body

There are six components of weather:
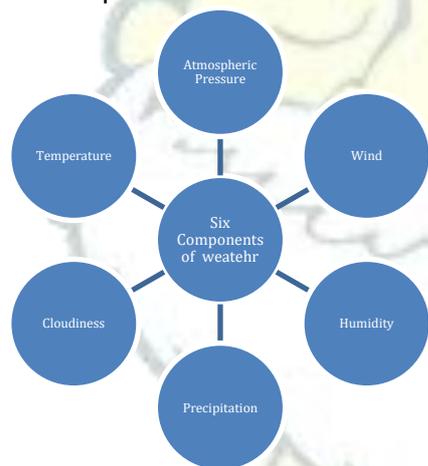
Effect of local weather conditions on pollution:
- Atmospheric Pressure: Atmospheric pressure affects the level of rise or fall of air pollutants. During high atmospheric pressure systems, the air is usually still which allows pollution levels to build up but during low pressure systems the weather is often wet and windy, causing pollutants to be dispersed or washed out of the atmosphere by rain.
- For instance, with the onset of winter in Delhi and nearby region, atmospheric pressure is high which makes the air still, thereby it increases the pollution level due to stabilisation of air.
- Wind: Pollutants tend to pile up in calm conditions, when wind speeds are not more than about 10kmph. Speeds of 15kmph or more favour dispersal of pollutants, which, literally, clears the air. Winds of up to 35kmph brought AQI down from 458 ('severe') to 215 ('poor') in less than 48 hours in Delhi.

- Temperature: Hot air rises while cold air stays close to the ground. This is why pollution in north India peaks in winter. Temperatures are the key determinant of 'mixing height' - which is the depth of the layer of air closest to the ground within which pollutants and aerosols move. In cold conditions, pollutants are trapped close to the ground because of low mixing height.
- The effect of temperature is also connected to the water pollution and soil pollution, as in the cooler regions there is less scope for microorganism's activity. Which increases the degrading time of organic contents. There by it increases the pollution in water as well as in soil.
- Cloudiness: In general, overcast skies lead to cool days and low mixing heights while sunny days have the opposite effect. Most smog episodes in NCR this month coincided with cloudy skies. Low clouds increase humidity, which can lead to fog formation.
- Rain washes away pollutants and can quickly clean the air. It also supplements cleaning of water pollution by increasing the fresh flow of water.
- However, wet spells leave behind high humidity, which can lead to fog under calm winds. Fog increases pollution as water droplets act as secondary particles interacting with pollutants.
- Humidity affects the natural deposition of particulate matter in the air. With an increase in humidity, the size of the particulate matter also increases. Eventually, it becomes too heavy to remain in the air and begins to fall off. This is what is called the dry deposition of particulate matter. These types of pollution affects the human health as shown in following Figure 1:
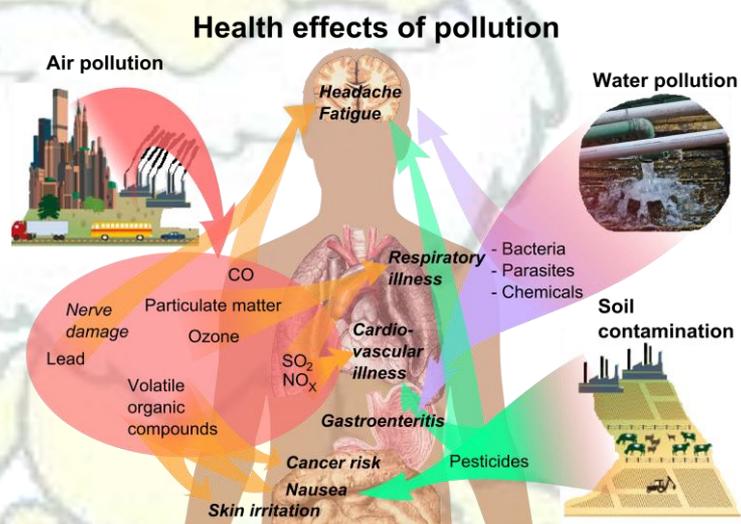

Figure 1: Adverse effects of pollution on human health

As the types and sources of pollution are diverse their solutions are diverse, solutions and government initiatives to tackle the menace of pollution are as mentioned below:

- Appropriate political will and aware citizenry is a prerequisite to tackle the menace, otherwise, all the measures will remain on paper only and greater public transparency is essential to the success of winning the war on air pollution.
- The System of Air Quality and Weather Forecasting And Research (SAFAR) is a national initiative introduced by the Ministry of Earth Sciences (MoES) to measure the air quality of a metropolitan city, by measuring the overall pollution level and the location-specific air quality of the city.

- An active citizen is better watchdog, a citizen centric pollution monitoring will not only help to tackle the issue of pollution but it will also reduce the pollution also.

All comprehensive approach of
Reduce, Reuse and recycle is necessary.

Conclusion

Our planet and resources on it make life possible on earth. If we lose these resources, it would hard for human to survive on earth. However, with increasing level of pollution these resources are either getting destroyed or are depleting with fast pace. We only have one planet, to save it, it is necessary to have a well worked out plan. Tackling the menace of pollution would not only help the humankind to survive but will also help to conserve our beautiful planet in its true essence.

10. What are the pieces of evidence of seafloor spreading? Discuss.

Approach - It expects students to write about seafloor spreading and pieces of evidence of seafloor spreading.

Introduction

Seafloor spreading is a process that occurs at mid-ocean ridges, where new oceanic crust is formed through volcanic activity and then gradually moves away from the ridge. The idea that the seafloor itself moves (and carries the continents with it) as it expands from a central axis was proposed by Harry Hess.

Body

Mechanism of seafloor spreading:
- Seafloor spreading helps explain continental drift in the theory of plate tectonics. When oceanic plates diverge, tensional stress causes fractures to occur in the lithosphere.
- Basaltic magma rises up the fractures and cools on the ocean floor to form new seafloor.
- Older rocks will be found farther away from the spreading zone while younger rocks will be found nearer to the spreading zone.

Pieces of evidence of seafloor spreading:
- Origin and composition of rocks: The rocks obtained on land were having similar characteristics to that of oceanic rocks. The composition of rocks contain various minerals and deposits that are of oceanic origin. This gives evidence of the way the rocks were formed.
- Mid oceanic ridges: Mid oceanic ridges discovered under sea provides evidence of Magma activity that resulted in formation of rocks. The rock cycle provides the indication of rock recycling. The width of ridges vary continuously indicating an intense activity shows evidence of seafloor spreading.
- Wagner's theory: Wegner proposed continental drift theory that gave evidence of how continental mass separated. The force or event that resulted in continental drift was explained by sea floor spreading. Thus, both theories filled the missing pieces of the puzzle.
- Evidence From Drilling Samples: The final proof of sea-floor spreading came from rock samples obtained by drilling into the ocean floor. The Glomar Challenger, a drilling ship built in 1968, gathered the samples. The youngest rocks were always in the center of the ridges. This showed that sea-floor spreading really has taken place.
- Modern study: Latest studies have indicated that continents are moving away from each other. The rock samples collected from deep oceans are younger in nature. This shows that new crust is continuously formed and old ones destroyed. The age of rocks of continents are older than that of ocean.

- Evidence From Molten Material: In the 1960s, scientists found evidence that new material is indeed erupting along mid-ocean ridges. Such rocks form only when molten material hardens quickly after erupting under water. These rocks showed that molten material has erupted again and again along the mid-ocean ridge.
- Subduction – Process by which the ocean floor sinks beneath a deep-ocean trench and back into the mantle; allows part of the ocean floor to sink back into the mantle.
- Deep-Ocean Trench – This occurs at subduction zones. Deep underwater canyons form where oceanic crust bends downward. Shows evidence of seafloor spreading.

Conclusion

Seafloor spreading helps explain continental drift in the theory of plate tectonics. Sea floor spreading proposed the magma as the cause of new crust and subduction of crust at the ocean-continent boundaries. This was further expanded by scholars to propose plates and their movement due to this magma. It is these tectonic plates and not the continents that have been moving since the inception of earth.
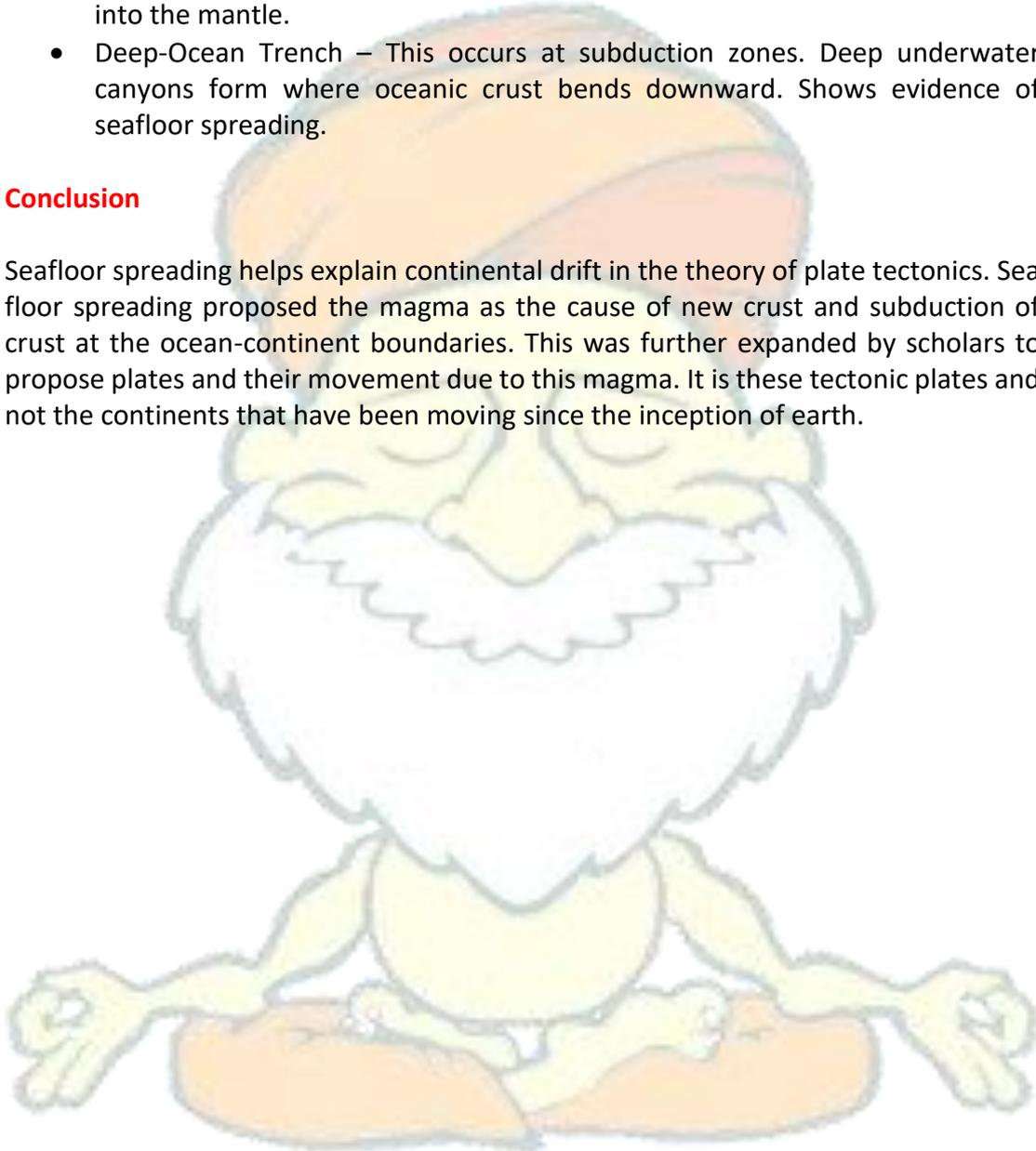
11. While discussing their origin, explain the differences between tsunami and tides.

Approach - Students are expected to write about the differences between tsunami and tide with reference to their origin.

Introduction

Although both are sea waves and it is assumed that there is no difference between a tide and a tsunami, but actually both are two different and unrelated phenomena. While both of the waves carry the power of destruction, the greatest difference is how each is born. A tidal wave is directly impacted by the atmosphere and it is a 'shallow water wave' however Tsunamis is an ocean wave and are powered by a geological force.

Body

Differences between tsunami and tides:

Difference	Tsunami	Tides
Origin	• The principal generation mechanism of a tsunami is the displacement of a substantial volume of water or perturbation of the sea. This displacement of water is usually attributed to either earthquakes, landslides, volcanic eruptions, glacier calving. • The origin of the tsunami is much deeper. It is caused by a deep disturbance along the ocean floor. The deeper origin of the tsunami creates a more emphatic wave. It will often carry itself across hundreds, or even thousands, of miles of ocean before making landfall. • The tsunami has the potential to develop anywhere. The placement of the earthquake or landslide, or even the unique event of an underwater eruption, compels the start of the wave. Just like the tidal wave,	• A tide is directly impacted by the atmosphere. The correlating factors between the sun, moon, and Earth cause a disturbance in the sea, and a 'shallow water wave' is formed which is called tide. Shallow water waves imply that the development of a tidal wave is much closer to the shoreline of a land mass that will ultimately be in its path. • The tidal wave has what we would call regional preferences. It is unlikely that a tidal wave would make landfall in areas of temperate climates, or northern countries. The various elements which cause its development form, in their precise manner, in lower latitudes, creating a higher possibility for landfall in places like the West Indies, for example. • The tidal wave follows the currents, and therefore, is only able to strike areas within the current flow.

	the tsunami also follows the currents.	
Intensity	Tsunamis can have wavelengths of up to 200 kilometres and can travel over 800 kilometres per hour. When tsunamis approach shallow water near land masses, the speed decreases, and the amplitude increases very rapidly.	The intensity of a changing tide is noticeable only in certain parts where it's high enough (As high as 55 feet in the Bay of Fundy, Canada)
Location	A majority of tsunamis (80%) occur in the Pacific Ocean but can occur in any large body of water if the underlying causes are present.	Tidal waves are phenomena seen most at coastal areas.
Occurrence	• Tsunamis occur only when there is seismic disturbance in large water bodies. • Tsunami originate in deep sea under impact of crustal movement	• Tidal waves occur daily at a coastal area • Tide originate on surface of water under impact of gravity of moon and the sun
Size	Tsunami become giant wave on reaching the shore	Tides may become big but not as big as Tsunami
Potential	Tsunami usually leads to destruction and disaster along coastline. Example-The 2004 Indian Ocean tsunami was among the deadliest natural disasters in human history. At least 230,000 people killed or missing in 14 countries bordering the Indian Ocean.	Tides can be harnessed to create energy, transportation for inland ports etc
Frequency	Tsunami are non-frequent and occurs only due to disturbance in natural movement of water body.	Tides are frequent and can be predicted on basis of position of moon and sun i.e spring tide and neap tide.
Prediction	A tsunami cannot be precisely predicted, even if the magnitude and location of an earthquake is known.	Tide prediction method follows the method of harmonic analysis introduced in the 1860s by William Thomson. It is based on the principle of astronomical theories of the motions of Sun and Moon.

Conclusion

Tsunamis, though infrequent, are significant natural hazards that can cause great destruction and loss of life within minutes on shores near and far. The great Sumatra

earthquake of 2004, with magnitude 9.1, rated as the world's third largest recorded earthquake. Tsunami safeguard measure like early warning system, standardised operation protocol, capacity building for rapid deployment of navy and NDRF personnel etc. have been developed in the wake of Chennai Tsunami disaster.

12. What are permafrost's? What is their ecological significance? Discuss.

Approach - It is straightforward question where it expects to write about – in first part write what is permafrost – while in second part write permafrost's ecological significance.

Introduction

The principal reason that led to the recent 20,000-tonne oil leak at an Arctic region power plant in Russia that is now being recognised is the sinking of ground surface due to permafrost thaw.

Body

Permafrost:
- Permafrost is ground that remains completely frozen at 0 degrees Celsius or below for at least two years and is defined solely based on temperature and duration.
- It is composed of rock, sediments, sand, dead plant and animal matter, soil, and varying degrees of ice and is believed to have formed during glacial periods dating several millennia.
- It is mainly found near the polar zones and regions with high mountains covering parts of Greenland, Alaska, Russia, Northern Canada, Siberia and Scandinavia.
- Its thickness reduces progressively towards the south and is affected by a number of other factors, including the Earth's interior heat, snow and vegetation cover, presence of water bodies, and topography.

Ecological significance of permafrost:
- An estimated 1,700 billion tonnes — twice the amount currently present in the atmosphere — of carbon is locked in all of the world's permafrost.
- Even if half of that were to be released to the atmosphere, it would be game over for the climate.
- Albedo of Snow is high which helps balancing heat budget of earth melting of permafrost will disrupt the balance
- Health Risk: microbes that have been frozen in the permafrost for millennia can come back to life after the thaw. There has already been the re-emergence of ancient viruses like anthrax, as recently discovered by French and Russian researchers.
- Roadways are warping and foundation shifting: Bethel, Alaska, roadways are literally rippling and warping as the ground beneath them becomes less solid. In other places, the melting permafrost is creating craters and sinkholes. Buildings can lose structural integrity and become unstable even with modest increases in ground temperature, well before all-out melt. In Alaska alone, the destruction of buildings and infrastructure due to permafrost thaw over the next century could cost more than $2 billion, according to a 2017 study

- Methane and Mysterious craters: Ice like mixtures of methane and water, trapped below and within the permafrost, expands as they warm, heaving up the ground until it erupts. This will be like a ticking time bomb.
- The upper air circulation due to polar winds might get effected .This will alter movement of temperate cyclones.

However, few positives of perma frost melting could include:
- Reviving ancient plants which were frozen for longest time: In 2012   when researchers from the Russian Academy of Sciences sprouted three dozen Silene stenophylla, herby white tundra flowers, from 30,000-year-old fruits.
- It would promote floral growth in the region, thereby creating additional carbon sink, helping somewhat neutralize the global warming trend.
- It might provide refuge to the faunal species from neighbouring temperate regions, which too are facing temperature rise.

Conclusion

Paris Climate Accord seeks to limit global warming to 2° Celsius rise from 1990 levels. The extent to which permafrost melts would be reflection of the leaders' commitment and dedication to this target.
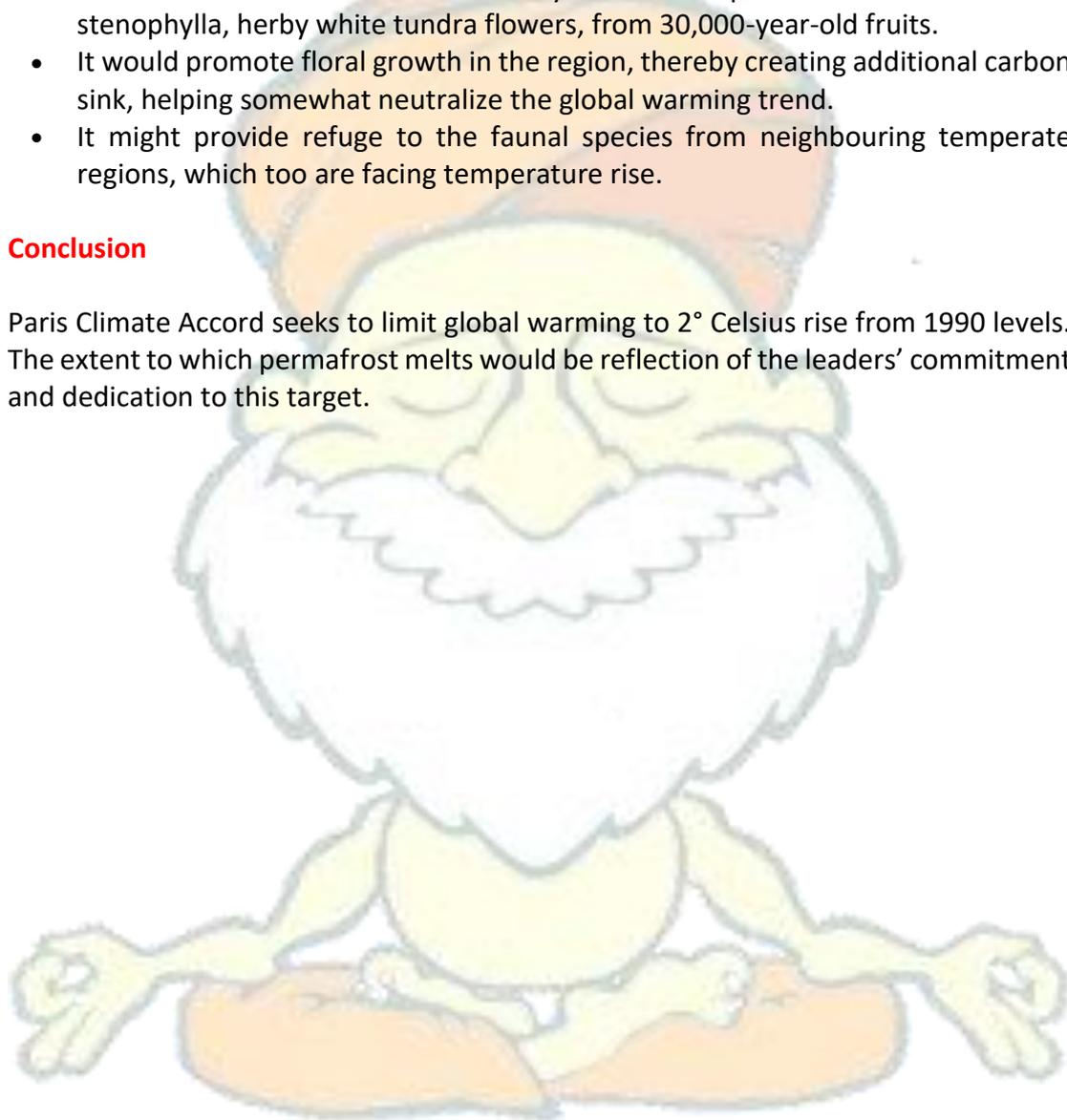
13. A sustainable resource management policy should be framed in terms of availability, exhaustibility, and remaining reserves. Comment.

Approach - It expects students to write about - in first part write about need of Sustainable resource management policy - in second part write about how policy should be framed for sustainable resource management.

Introduction

Sustainable Resource Management is the use of the available in a way that creates the ability of a system to thrive by maintaining economic viability and also nourishing the needs of the present and future generations by limiting resource depletion.

Body

Need of Sustainable resource management policy:
- According to Global resources outlook 2019
  - Resource extraction has more than tripled since 1970
  - Resource extraction is responsible ~ 50% of greenhouse gas emissions and over 90 per cent of biodiversity loss and water stress.
- Exploding human consumption is the driving force for Anthropocene extinction as per 'The living planet report' of WWF.
- Economic activity (GDP)
  - Employment need increasing the industrial base.
  - Doubling the farmer's income require high energy consumption.
  - To increase India's manufacturing base and to decrease dependence on mineral import, resource extraction is important.
- Environmental impact
  - IPCC report has said that this is the last chance for fight against climate change.
  - Resource extraction is responsible ~ 50% of greenhouse gas emissions and over 90 per cent of biodiversity loss and water stress as per global resources outlook 2019 (UNEP).
  - Sustainable future is one three biggest challenges as per World Economic Forum.
  - Mean temperature in Indian has risen by 0.66-degree C.
  - Disaster – Kerala floods etc.

To resolve these issues sustainable resource management policy should be:
- It should be framed by keeping in mind various factors like availability, exhaustibility, and remaining reserves.
- Organisation like NITI Ayog should make medium and long term roadmap by keeping in mind various factors.
- Resource mapping need to be done in terms of availability and abundance of remaining resources.
- Policy should adopt best practices from across the world where sustainable resource management practices are adopted like Scandivian countries.

- Alternative resources should be streamlined to reduce dependence on traditional resources.
- 70% of India's power requirement is still fulfilled by coal. By promoting research and development in renewable energy as well as incentivising it can lead to check exhaustibility of traditional resources.

Conclusion

The economy cannot be based on the use of non-renewable resources such as coal, petroleum, because these resources cannot be replenished. A truly sustainable resource does not degrade environmental quality. Over-exploitation of natural resources leads to the exhaustion of the resources. Therefore, the current resources cannot be used at the same pace as nothing will be left for future generations.

14. Marine resources form the next frontier of man's quest for development. Comment.

Approach - It expects students to write about marine resources and highlight on marine resources as man's new quest for development

Introduction

The oceans of the world cover around 70% of the surface of the Earth. Thus, they contain a major amount and variety of geological processes within them. These processes over a period of time, result in the formation of different minerals which when proved usable by human beings become Marine Resources. Examples of some minerals that are extracted today for human use are salt, magnesium, fresh water, etc. As most of these resources are used in our day-to-day activities, it's quite obvious why these resources are important.

Body

Some of the important marine resources are listed below –
- Salt
- Potassium
- Sand
- Limestone and Gypsum
- Manganese Nodules
- Gold and Diamonds
- Water
- Oil and Gas
- Coal

Marine resources as next frontier of man's quest for development -
1. Energy resources security: The main energy resources present in Indian Ocean are petroleum and gas hydrates. Petroleum products mainly includes the oil produced from offshore regions. Gas hydrates are unusually compact chemical structures made of water and natural gas. It will help in diversification of energy resources and will provide new resources for energy e.g. gas hydrates.
2. Employment generation: It will provide jobs, improve livelihoods of many. This will help in inclusive growth. E.g improving fishery resources exploitation can provide livelihood to many.
3. Food security: It will lead to food security through fishery sector and other sea food resources. It would also help in reducing malnutrition issue in India as fishes are good source of nutrition.
4. Efficient transportation and logistics: Indian Ocean is a major gateway of trade with 80% of global oil trade happening through it. Better connectivity in the region will significantly cut the transport cost and will reduce logistics inefficiencies.

5. Women empowerment: It will help in women empowerment especially fishery sector by providing them jobs. As these jobs do not require high skills, women will find it easy to earn a livelihood.
6. Climate Change: Oceans provide an alternate and cleaner source of energy. It also act as an important carbon sink. This will help in mitigating climate change.
7. Manganese Nodules and Crusts: Manganese nodules contain significant concentrations of manganese, iron and copper, nickel, and cobalt all of which have a numerous economic uses and development of humanity.
8. Sustainable development: Marine resources from Indian Ocean can serve as the backbone of India's economic growth and can help India to become a 5 trillion dollar economy by 2022. Blue economy, through sustainable use of oceans, has great potential for boosting the economic growth.

Why marine resources extraction is limited –
- Much of these resources, however, are not easily accessible, so their recovery involves technological challenges and high cost.
- Drilling in these oceanic deposits could destabilize the seabed, causing vast swaths of sediment to slide for miles down the continental slope.
- There are issues involved in issuance of licenses by International seabed authority etc.

Action areas in this regard for marine sustainable development:
- Reducing marine pollution and debris including from land-based activities.
- Promoting sustainable exploitation of marine resources.
- Halting the destruction of marine resources especially through acidification.
- Eliminating harmful subsidies that promote fishing overcapacity.
- Ensuring full implementation of regional and international regimes governing oceans and seas.
- Protecting marine recourses in areas beyond national jurisdiction, including by establishing Marine Protected Areas.
- Encouraging sustainable small-scale fisheries.

Conclusion

Sustainable Development Goal (SDG 14), calls to conserve and sustainably use the oceans, seas and marine resources for sustainable development. India should expedite its efforts to exploit oceanic resources in Indian Ocean. What is required is use of technology to exploit oceanic resources in Indian Ocean. India has rightly launched O-SMART scheme aiming at regulated use of oceans, marine resources for sustainable development in this direction.

15. What are the key factors that leading to the ongoing global water crisis? Discuss.

Approach - It expects students to write about global water crisis and about factors leading to global water crisis.

Introduction

Water is at the core of sustainable development and is critical for socio-economic development, healthy ecosystems and for human survival itself. It is vital for reducing the global burden of disease and improving the health, welfare and productivity of populations. It is central to the production and preservation of a host of benefits and services for people. Water is also at the heart of adaptation to climate change, serving as the crucial link between the climate system, human society and the environment.

Body

Water is essential to life, yet 785 million people in the world - 1 in 9 - lack access to it as per water.org is a global water crisis.
Key factors that leading to global water crisis:

- Groundwater Is Being Depleted: About 30 percent of Earth's fresh water lies deep underground in aquifers. And it's extracted daily for farming, drinking and industrial processes often at dangerously unsustainable rates. Nowhere is this more evident than India, which guzzles more groundwater than any other country. 54 percent of India's groundwater wells are decreasing, meaning that water is used faster than it's replenished. Unless patterns shift, in 20 years, 60 percent of India's aquifers will be in critical condition.
- Water Is Wasted: Although it's true that water is a renewable resource, it's often wasted. Inefficient practices like flood irrigation and water-intensive wet cooling at thermal power plants use more water than necessary. What's more, as we pollute our available water at an alarming rate, we also fail to treat it. About 80 percent of the world's wastewater is discharged back into nature without further treatment or reuse.
- Natural Infrastructure Is Being Ignored: Forested watersheds around the world are under threat: watersheds have lost up to 22 percent of their forests in the past 14 years. Loss of vegetation from deforestation, overgrazing and urbanisation is limiting our natural infrastructure and the benefits that it provides.
- Wrong pricing of water: Water is seriously undervalued. Its price does not reflect the true, total cost of service, from its transport via infrastructure to its treatment and disposal. This has led to misallocation of water, and a lack of investments in infrastructure and new water technologies that use water more efficiently.
- Water Infrastructure Is in a Dismal State of Disrepair: Having enough water to go around is only the beginning. That water also needs to be transported, treated, and discharged. Around the world, water infrastructure treatment plants, pipes, and sewer systems is in a state of disrepair.

- More Water Demand: As populations increase and incomes grow, so does water demand. The world's population, now at 7.5 billion, is projected to add 2.3 billion more people by 2050. Growing incomes also exacerbate the water problem, because of the water-intensive products like meat and energy from fossil fuels that richer populations demand.
- Changing the Climate and Making Dry Areas Drier: Climate change is warming the planet, making the world's hottest geographies even more scorching. At the same time, clouds are moving away from the equator toward the poles, due to a climate-change driven phenomenon called Hadley Cell expansion. This deprives equatorial regions like sub-Saharan Africa, the Middle East and Central America of life-giving rainwater.

Effects of global water crisis:
- Death and disease: All life needs water; every 90 seconds, a child dies from water-related illness and disease.
- Warfare: Regional conflicts have arisen due to the loss of safe water sources.
- Lack of hygiene and sanitation and malnutrition: 1/3 of the world's population lives without access to a toilet. This leads to disease and kills nearly 1 million people each year. 160 million children suffer from chronic malnutrition linked to water and sanitation.
- Poor education: Most schools in the worst affected areas do not have a toilet or safe drinking water for students, which leaves students dehydrated and mentally incapable of achieving well in schools.

Sustainable solutions for global water crisis.
- Bilateral multilateral Integrated Water Resource Management through reuse and aquifer recharging.
- To follow holistic water resource approach, referred to as the Dublin - Rio principle (UNCED Rio de Janeiro 1992).
- Water pricing.
- Educate to change consumption and lifestyles.
- Improve water catchment and harvesting.

Conclusion

Governments, businesses, universities and citizens around the world are waking up to water challenges, and beginning to take action. Each year brings more solutions – like using wastewater for energy, using restoration to bring water back to dry topographies, and monitoring groundwater levels more closely. However, even the best solutions will not implement themselves. Along with fresh water, political will and public pressure are critical resources in ensuring a sustainable future for all.

16. Examine the factors responsible for the transforming locational pattern of cotton textile industry in India.

Approach - It is strait forward question where, it expects students to write about – various factors responsible for transforming locational pattern of cotton industry from 19th century.

Introduction

Cotton textile industry is largest organised modem industry of India. There has been a phenomenal growth of this industry during the last four decades. About 16 per cent of the industrial capital and over 20 per cent of the industrial labour of the country is engaged in this industry.

Body

Initially they used to be dependent on sources of supply of raw material, but with the progress in science and technology, there are frequent changes in factors, on which location of the industries depends. A host of factors such as low labour costs, government subsidies, irrigation, and proximity to ports led to the spread of the cotton textile industry.

Pre-1920's: Traditionally, the cotton industry in India was largely concentrated in cotton-growing areas of the peninsula, Like Gujarat (Surat), Maharashtra (Mumbai). These areas had advantages of proximity to the market, capital facility, cheap labour, proximity to port facility and favourable humid climate. But cotton is lightweight, non-perishable material, humidity can be created artificially and there is hardly any weight loss during production. As a result, proximity to raw material becomes a non-critical factor in location. Production can be carried out anywhere with cheap labour, energy and water supply is available for dyeing.

Post-1920: Dispersal of industry from the old nuclei started after 1921 with railway lines penetrating into the peninsular region. Gradually industry shifted towards small towns and cities. Example: centres like Coimbatore, Madurai, Bangalore, Nagpur, Indore, Solapur, Vadodara, Jaipur, Jodhpur, Indore, and Amritsar. These were favourably located in respect to raw material, market and labour than places of original locations. This industry also reached some places with some additional advantages, such as nearness to coal (Nagpur), financial facilities (Kanpur) and wide market with port facilities (Kolkata). Dispersal of the cotton textile industry was further boosted with the development of hydroelectricity. The growth of this industry in Coimbatore, Madurai and Tirunelveli is largely due to the availability of hydroelectricity from Pykara dam.

Post-Independence: The industry also tended to shift from areas of high labour cost to those with low labour cost. The labour cost factor played a crucial role in establishing this industry at Madurai, Tirunelveli, and Coimbatore. Government Incentives: Handloom industry considered highly labour-intensive, beneficial to the

village economy and women empowerment. Therefore, the government aids them with measures such as the Integrated Village Handloom Development scheme and National Silk Yarn Scheme. Handloom sector employs more than 65 lakh people and contributes to 15 % of total textile productions. They are widely distributed throughout the country, states of Tamil Nadu, Uttar Pradesh, Assam and Manipur account for nearly 50 per cent of the production capacity.

Conclusion

Cotton textiles sector carries huge potential for employment generation and solving India's employment generation crisis. Therefore, the sector must be harnessed to its maxima with effective policy support.
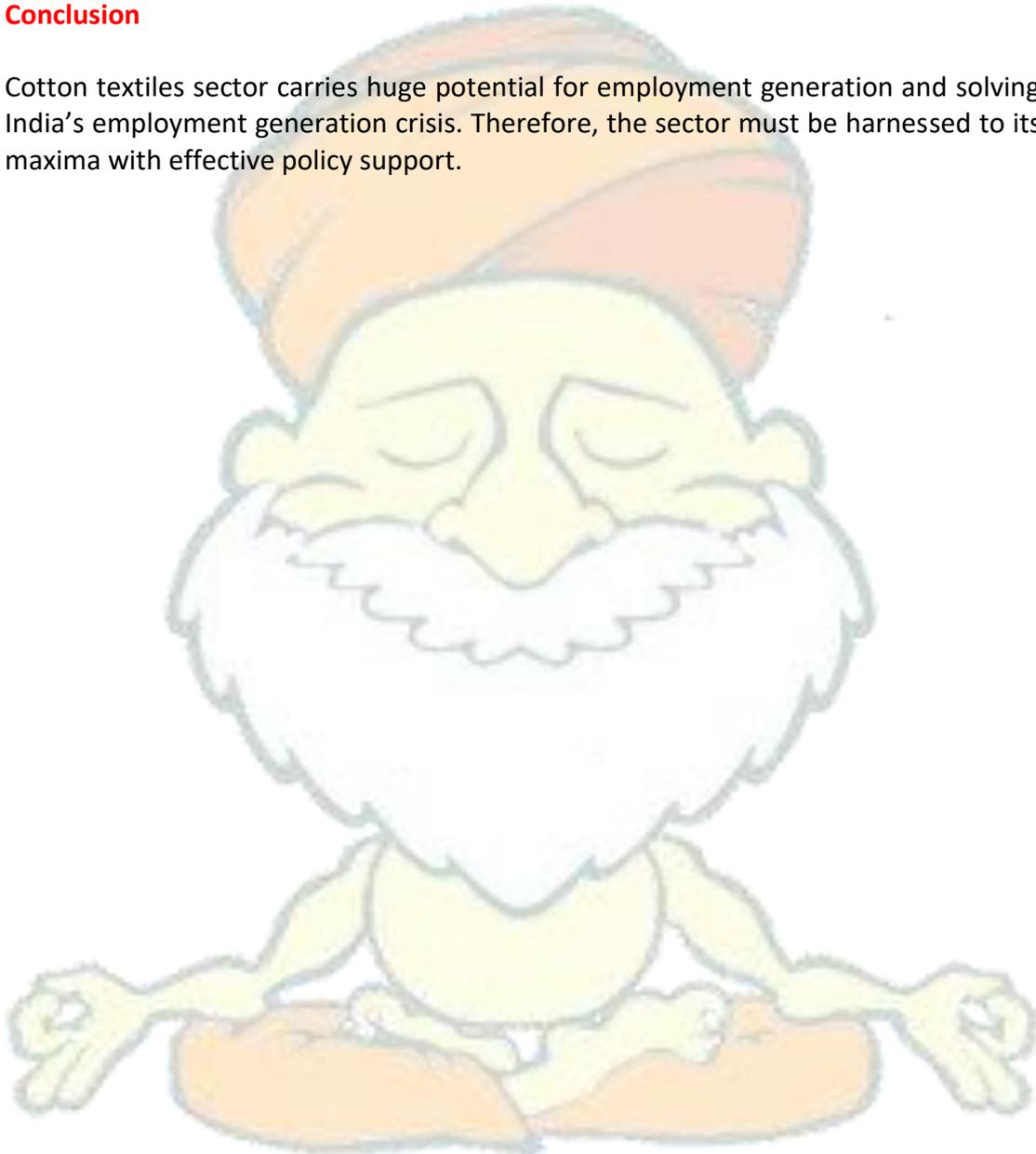
17. What are the key factors deciding the location of fertiliser industry? Discuss.

Approach - It is strait forward question where it expects students to write about various key factors responsible for locating fertiliser industry.

Introduction

Indian soils are generally deficient in fertilizing elements namely NPK – Nitrogen, Phosphorus and Potassium, hence do not give high yield. It is therefore essential to feed these soils with the chemical fertilizers so that their productivity increases. The significant contribution made by the chemical fertilizers can be seen from the impact of green revolution on Indian agriculture.

Body
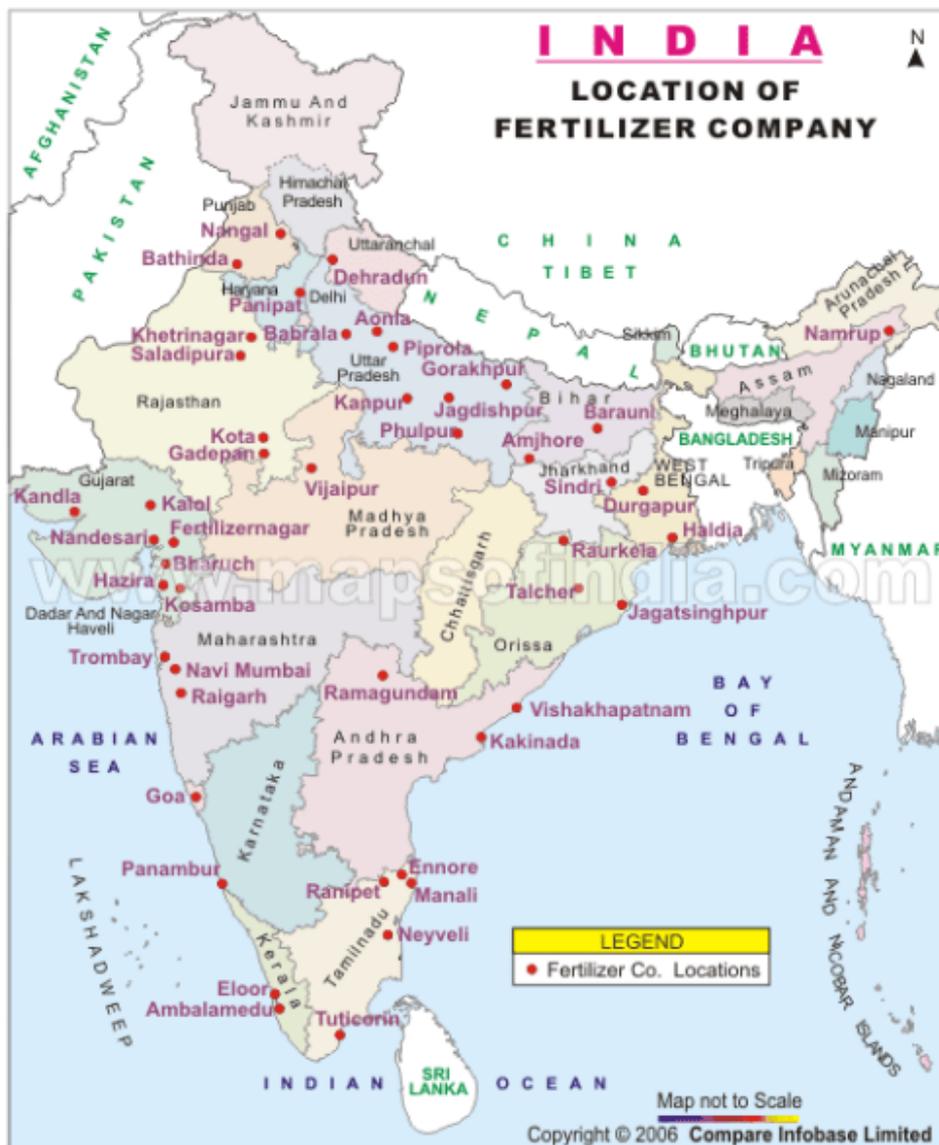
Locational factors of fertiliser industry:

- Presence of oil refinery: About 70% of the plants producing nitrogenous fertilizers use naphtha as the basic raw material. Example: Gujarat-Maharashtra region fertilizer plants at Hazira, Mumbai, Trombay, Vadodara etc.
- Proximity to natural gas source: For the production of Urea and nitrogen based fertilizers, natural gas is a necessity.
- Presence of Iron and steel industry in the vicinity: Some fertilizer plants draw their feed stock from steel slug as well as coke and lignite.
- Pipeline infrastructure: During the recent year's transportation of Naphtha or Gas through rail or pipelines has facilitated the widespread distribution of fertilizer plants with priority to seaboard location. Example: Hazira-Bijaipur-Jagdishpur (HBJ) pipeline and subsequent fertilizer industry in Bijapur, Sawai Madhopur, Shahjahanpur etc.
- Port facilities: Some fertilizer plants import phosphate, potash etc. Many fertilizer plants export their produce to other countries via sea ports and pipelines.
- Raw materials: Availability of mineral phosphate, raw potash material etc. Example: Florida, North Carolina, Utah and Idaho; India: UP, MP, Rajasthan.

Conclusion

Fertilizer industry is not only a significant market in terms of size, but also an essential industry serving global food production. With a stable and streamline policy for Fertilizers, Joint ventures with countries well-endowed with resources for fertilizer production, India can have a robust fertiliser industry and meet its agricultural and food security needs.

18. What role does innovation and investment climate play in deciding the location of tertiary sector industries? Illustrate.

Approach - As the directive here is illustrate, it is necessary to describe the factors of innovation and investment climate play in deciding the location of tertiary sector, you can start by explaining the meaning of tertiary sector industries. In the main body part explain how innovation and investment climate gives impetus to set up tertiary sector industries i.e. explain their essentiality. You can conclude by stating how India has given impetus to innovation and investment and how it will help India.

Introduction

The tertiary sector industries consists of the production of services instead of end products. Services (also known as "intangible goods") include attention, advice, access, experience, and affective labour. It involves the provision of services to other businesses as well as final consumers.

Body

Role innovation and investment climate play in deciding the location of tertiary sector industries:

- Institutions: Having a good research and innovation culture in a country makes it easy for adaptation of technology there by it attracts the investors to look for the location where such culture is ripe. For instance, Silicon Valley in USA.
- Human capital and research: Deep penetration of innovation culture is possible when a sufficient intellectual human capital is there to serve the innovation needs. Besides, an investor looks for such place where innovation culture is deeply penetrated and there the investor invests. For instance, as per global innovation index 2020, India is one of the leading innovation achievers in the central and southern Asian region, as it has shown a consistent improvement in its innovation ranking for the last 5 years.
- Infrastructure: Only having a sufficient innovation culture will not decide the location of Industry. But having required infrastructure to cater to the needs and reduce investment cost also impacts location of industries. For instance, in Pune region Magarpatta region has sufficient office space infrastructure to set up an IT company.
- Market Sophistication: Investor invests in such a project where she gets a sufficient amount of return. However, if a countries market is not that much developed to adapt the new innovation and provide security of return then investors will not choose to invest in that country. For instance, Vietnam is attracting BPO industry investors and challenging the BPO industry in India.
- As per 'Ease of doing business' report, One of the main factor to specify the location of industry is Credit availability, an investor is not in full capacity to invest 100% amount in a project then she needs to apply for credit. Hence, Investment through easy or difficult credit route also affects the location of industries.

- Protection to minority investors: A minority investor cannot stand toe-to-toe with a big investor company. Hence, while doing investment an investor will definitely think about the protection. Depending on it the location of industry will vary.

India ranks in the top 15 in indicators such as the Information and Communication Technology (ICT) services exports, government online services, graduates in science and engineering, and Research and Development-intensive global companies. The improvement in the index rankings is owing to the immense knowledge capital, the vibrant startup ecosystem, and the amazing work done by the public and private research organisations.

Conclusion

India's tertiary sector employs 24 % of the workforce and contributes to 51% of GDP. Besides, as per the study conducted by University of Mysore, India ranks 9th in the world in tertiary sector output. It's contribution in the growth and development of India increased due to favourable innovation and investment oriented policies. Hence, for the location of tertiary sector industries role of innovation and investment climate plays a cardinal role.
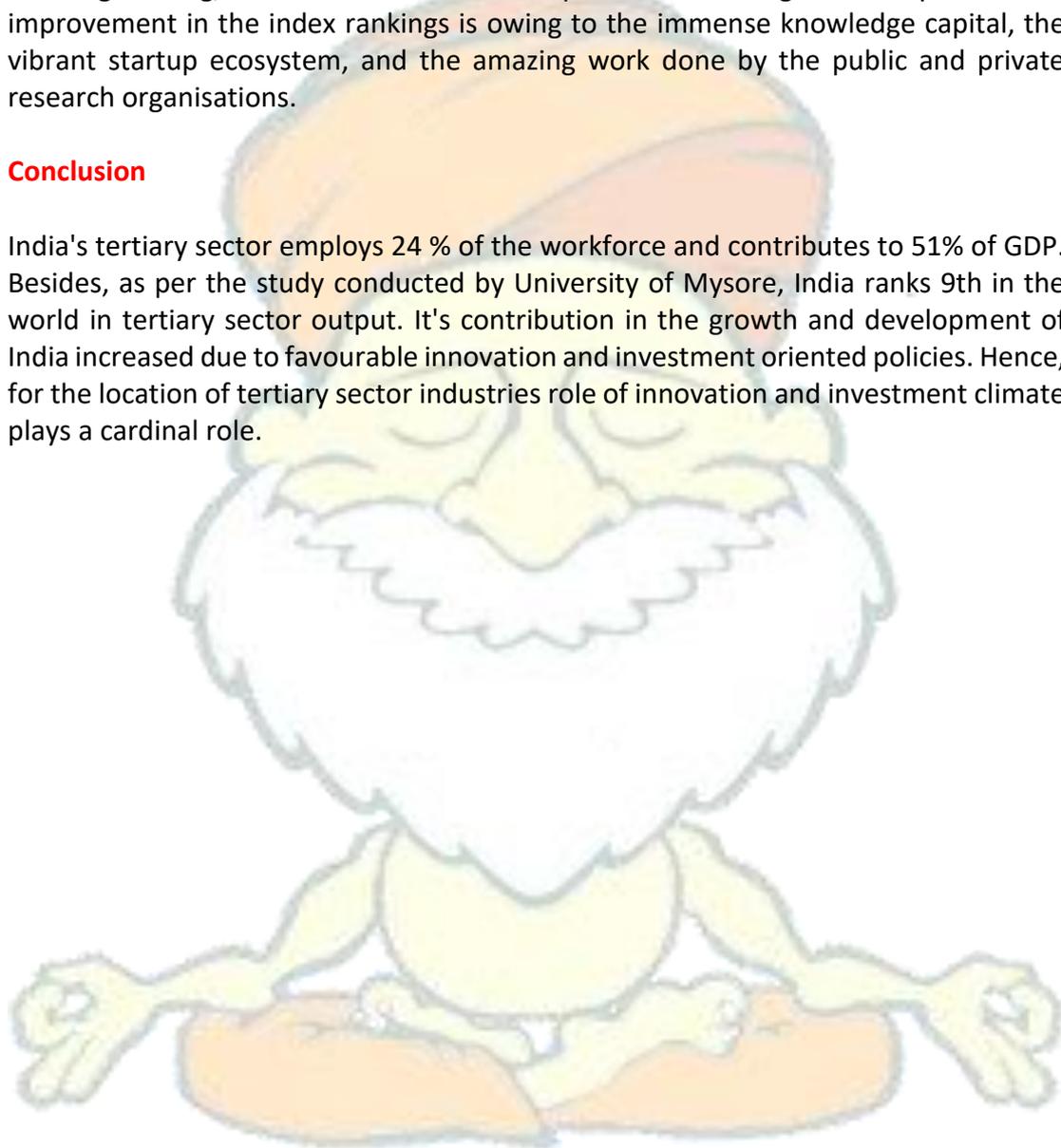
19. What are different weather phenomena associated with low pressure systems? Discuss.

Approach - It is strait forward question where it expects students to write various weather phenomena associated with low pressure system.

Introduction

A low pressure system is a large mass of air that is rising due to warmer land or water below it. The air becomes hot and starts to expand, becoming less dense. When there is also moisture in the air mass, it will weigh less due to the water vapour whose molecules are lighter than air molecules. The end result is wet, less dense air that rises and begins to cool in the upper atmosphere.

Body

Different weather phenomena associated with low pressure systems:
- Wind is initially accelerated from areas of high pressure to areas of low pressure. This is due to density (or temperature and moisture) differences between two air masses. Since stronger high-pressure systems contain cooler or drier air, the air mass is denser and flows towards areas that are warm or moist, which are in the vicinity of low-pressure areas in advance of their associated cold fronts.
- The stronger the pressure difference, or pressure gradient, between a high-pressure system and a low-pressure system, the stronger the wind. Thus, stronger areas of low pressure are associated with stronger winds.
- The Coriolis force caused by the Earth's rotation is what gives winds around low-pressure areas (such as in hurricanes, cyclones, and typhoons) their counter-clockwise (anticlockwise) circulation in the northern hemisphere (as the wind moves inward and is deflected right from the centre of high pressure) and clockwise circulation in the southern hemisphere (as the wind moves inward and is deflected left from the centre of high pressure).
- Thermal lows form due to localized heating caused by greater sunshine over deserts and other land masses. Since localized areas of warm air are less dense than their surroundings, this warmer air rises, which lowers atmospheric pressure near that portion of the Earth's surface. Large-scale thermal lows over continents help drive monsoon circulations.
- Low-pressure areas can also form due to organized thunderstorm activity over warm water. When this occurs over the tropics in concert with the Intertropical Convergence Zone, it is known as a monsoon trough.
- Monsoon troughs reach their northerly extent in August and their southerly extent in February. When a convective low acquires a well-hot circulation in the tropics it is termed a tropical cyclone. Tropical cyclones can form during any month of the year globally, but can occur in either the northern or southern hemisphere during December.
- Atmospheric lift will also generally produce cloud cover through adiabatic cooling once the air becomes saturated as it rises, although the low-pressure area typically brings cloudy skies, which act to minimize diurnal temperature

extremes. Since clouds reflect sunlight, incoming shortwave solar radiation decreases, which causes lower temperatures during the day.

- At night the absorptive effect of clouds on outgoing longwave radiation, such as heat energy from the surface, allows for warmer diurnal low temperatures in all seasons. The stronger the area of low pressure, the stronger the winds experienced in its vicinity.

Conclusion

Low pressure conditions create phenomenon that widely affects the life and agriculture of people affecting economies of country in both productive and destructive way.

20. Why are some parts of India are highly prone to earthquakes? Explain.

Approach - It expects aspirants to write reason behind frequent earthquake in some part of India. You can also draw map to show high earthquakes occurring region.

Introduction

Earthquakes are caused due to tectonic shifts below the earth surface. India's case is quite serious as the Indian subcontinental plate grinds against the Asian continental plate. India cities, particularly towards the north and closer to the Himalayas, face a bigger threat.

Body

Due to the country's topography, it is important to classify the regions into seismic zones with respect to the likelihood of an earthquake occurring in the region:

- The Bureau of Indian Standards has classified regions in India into four seismic zones on the basis of historical seismic activity. Zone-2, zone-3, zone-4 and zone five. Of these, the least threatened is Zone 2 and the highest risked is Zone-5. All the states of North-East, Jammu and Kashmir, Uttarakhand and parts of

Himachal Pradesh fall under Zone-5. Delhi falls in Zone-4, central India falls under relatively low danger zone of Zone-3, while most of the south falls in Zone-2 with limited danger, but it is a thicker classification.

- There are some areas in Delhi which can be as dangerous as Zone-5. Thus, there may be many places in the south states which may be hazardous like zone-4 or zone-5. Other Zone-5 may also have some areas where earthquake risk is very low and they are less hazardous like Zone-2.

Reasons why some regions are prone to Earthquakes in India: -

North east:

- The geological stress in the Northeast's hills, due partly to frequent tremor-driven weakening of the Himalayas, and the colliding of the Himalayan plate with the Indo-Burmese plate, has put the entire region on high alert.
- Most earthquakes occurring in the region are related to subduction of the India-Burma tectonic plate under the Java-Sumatra tectonic plate.

North India:

- North India is located near boundary between the Eurasian and Indo-Australian plate tectonics. Obviously, there's immense pressure where these two plates meet. Every once in a while, the stress releases in the form of vibrations.
- Besides, seismologists feel that the tectonic plates west of the epicentre of the recent Nepal earthquake are still locked, indicating that another trigger is about to go off.

Peninsular India:

- The general understanding of earthquakes in Peninsular India is that the Precambrian terrain is heterogeneous in strength, criss-crossed with rifts, shear zones and old orogenic belts and these ancient zones of weak crust get reactivated from time to time and rupture.
- When Indian and Eurasian plates collided because of intense pressure the peninsula has up warped in many places. The ancient rifts that had crisscrossed the nations subsurface strata are suddenly being activated.

Conclusion

The threat is as real as it gets and preparedness is the only solution to avert something that is beyond human control. Although none of the metropolises have been hit by major quake in India recently, the potential devastation it could cause is catastrophic.

**21. Discuss various geophysical phenomena associated with plate tectonics.**

Approach - As directive here is discuss, it is required to cover various angles related to the topic. In the introduction explain what plate tectonics is. In the main body part explain various geophysical phenomena associated with plate tectonics. You can conclude by explaining the role played by plate tectonics in shaping the different physical features on the earth.

Introduction

Plate tectonics, is a scientific theory describing the large-scale motion of seven large plates and the movements of a larger number of smaller plates of Earth's lithosphere, since tectonic processes began on Earth between 3.3 and 3.5 billion years ago.

Body

Almost all major landforms formed are due to plate tectonics. Following Map 1 represents major and minor tectonic plates:
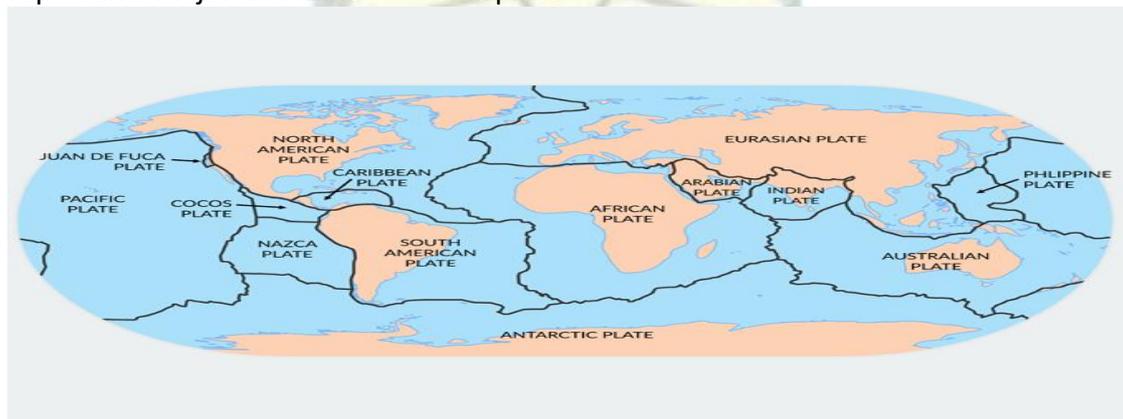
Map 1: Major Tectonic Plates on Earth

Different kinds of geophysical phenomena occur due to different kind of plate boundary movements. Following Figure 1 represents different kinds of plate boundary movements.
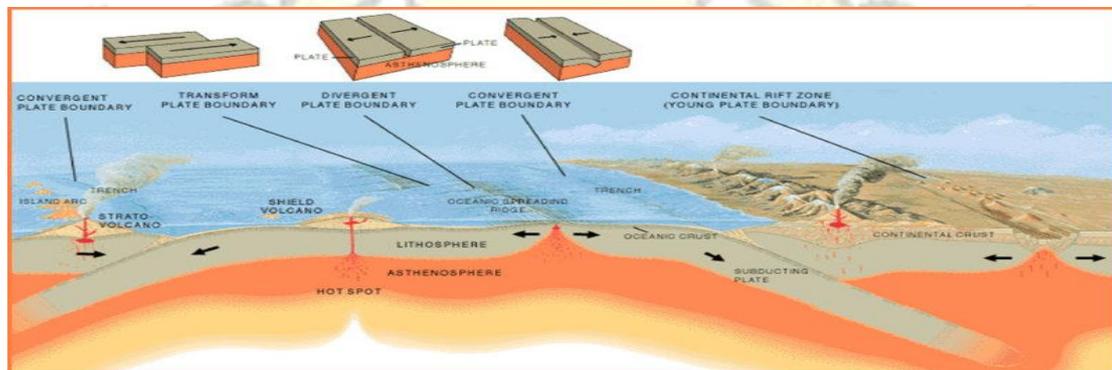

Figure 1: Different kinds of plate boundary movements
Various geophysical phenomena associated with plate tectonics:

- Fold Mountains: The compressional forces stemming from a convergent plate boundary, where two plates collide with one another, can create Fold Mountains. This may involve the collision of two continental plates or a continental plate and oceanic plate, forcing sedimentary rocks upwards into a series of folds.

- Fold Mountains usually form along the edges of continents, because these margins tend to accumulate the greatest sedimentary deposits. When tectonic plates collide, layers of accumulated rock crumple and fold. For instance, the Appalachians and Urals are examples of Fold Mountains.

- Ocean Trenches: Ocean trenches form at two kinds of convergent plate boundaries: where a continental and oceanic plate converge, or where two oceanic plates converge.

- Oceanic plates are denser than continental plates and so plunge beneath them, or "sub ducts"; at an oceanic/oceanic boundary, whichever plate is denser – the older, cooler plate – sub ducts beneath the other.

- In both cases, the subduction forms an undersea trench. These trenches are long, narrow valleys and include the deepest areas of the ocean. The deepest ocean trench is the Marianas Trench, reaching a depth of almost 36,000 feet below sea level.

- Ocean Ridges: At divergent boundaries, plates move away from each other, creating a new crust as magma is pushed up from the mantle. Mid-ocean ridges result from volcanic swelling and eruptions along the divergent boundary. The Mid-Atlantic Ridge serves as a well-known example.

- Volcano: Most volcanoes form at the boundaries of Earth's tectonic plates. ... At a divergent boundary, tectonic plates move apart from one another. They never really separate because magma continuously moves up from the mantle into this boundary, building new plate material on both sides of the plate boundary.

- Island Arcs: The subduction process that occurs when an oceanic plate converges with another oceanic plate can lead to volcanoes being formed paralleling the trench.

- The volcanic debris and lava build up on the ocean floor over millions of years and eventually results in a formerly submarine volcano rising above sea level to create an island. A curved chain of these volcanoes, known as an island arc, usually occurs in these cases.

- Earthquakes: Earthquakes occur along fault lines, cracks in Earth's crust where tectonic plates meet. They occur where plates are sub ducting, spreading, slipping, or colliding. As the plates grind together, they get stuck and pressure builds up. Finally, the pressure between the plates is so great that they break loose.

Conclusion

Plate tectonics, theory dealing with the dynamics of Earth's outer shell-the lithosphere-that revolutionized Earth sciences by providing a uniform context for understanding mountain-building processes, volcanoes, and earthquakes as well as

the evolution of Earth's surface and reconstructing its past continents and oceans. Further progress in understanding the process of plate tectonics will definitely help to realise any threat posed by earthquake like phenomena and will surely provide a way out to face these kind of calamities in future.

22. How do activities associated with the solar surface affect the earth? Illustrate.

Approach - It expects students to write about solar surface and how does it affect the earth with illustrations.

Introduction

The Sun is a sphere, composed almost entirely of the elements hydrogen and helium. It's not solid or a typical gas. Most atoms in the Sun exist as plasma, a fourth state of matter made up of superheated gas with a positive electrical charge. It is a constant in all our lives. It provides the daily rhythm of sunrises and sunsets, and it's vital to all life on Earth. The Sun's heat passes through its surface, and in turn heats the surface of the Earth.

Body

Solar surface - The surface of the Sun, the photosphere, is a 500-kilometre-thick region, from which most of the Sun's radiation escapes outward. This is not a solid surface like the surfaces of planets. Instead, this is the outer layer of the gassy star. We see radiation from the photosphere as sunlight when it reaches Earth about eight minutes after it leaves the Sun.

Activities associated with solar surface affecting earth:
- Impacts of Solar flares: Solar flares release a lot of radiation into space. Solar flares, when powerful enough, can disrupt satellite and radio transmission on the Earth, and more severe ones can cause 'geomagnetic storms' that can damage transformers in power grids.
- Coronal Mass Ejection (CME): They can trigger intense light in the sky on Earth, called auroras. Some of the energy and small particles travel down the magnetic field lines at the north and south poles into Earth's atmosphere. There, the particles interact with gases Oxygen gives off green and red light. Nitrogen glows blue and purple. The aurora in Earth's northern atmosphere is called an aurora borealis or northern lights. Its southern counterpart is called an aurora Australis or the southern lights.
- Impacts of Solar Cycle: Solar Cycle activity can affect satellite electronics and limit their lifetime. Radiation can be dangerous for astronauts who do work on the outside of the International Space Station. Forecasting of the solar cycle can help scientists protect our radio communications on Earth, and help keep satellites and astronauts safe.
- Solar wind: Solar wind from coronal holes will temporarily create disturbances in the Earth's magnetosphere, called geomagnetic storms, auroras, and disruptions to communications and navigation systems.
- Solar minima and maxima: They are the two extremes of the Sun's 11-year and 400-year activity cycle. Due to solar maxima sky watchers may see more auroras, and space agencies must monitor radiation storms for astronaut protection. Power outages, satellite malfunctions, communication disruptions,

and GPS receiver malfunctions are just a few of the things that can happen during a solar maximum. The space weather during solar minimum will also affect Earth's upper atmosphere on satellites in low Earth orbit changes. This means that the Earth's upper atmosphere will cool down which is generally heated and puffed up by ultraviolet radiation from the sun.

- Solar storms: Solar storms are a variety of eruptions of mass and energy from the solar surface. Solar storms have the potential to modify geomagnetic field and disrupt magnetic orientation behaviour of animals, hampering their navigation during long periods of migration. They disrupt earth's magnetic field and the whales' navigational sense. The radio frequency noise created by the solar outburst affects the whales' senses in a way that prevents them from navigating at all.

Some real-world examples of impacts?
- September 2, 1859, disruption of telegraph service.
- One of the best-known examples of space weather events is the collapse of the Hydro-Québec power network on March 13, 1989 due to geomagnetically induced currents (GICs). Caused by a transformer failure, this event led to a general blackout that lasted more than 9 hours and affected over 6 million people. The geomagnetic storm causing this event was itself the result of a CME ejected from the sun on March 9, 1989.

India's first solar mission, Aditya-L1 satellite will aim to measure the solar surface activities and coronal magnetic fields regularly. This will help understand the spectacular solar eruptions and predictions of space weather and many more things.

Conclusion

The sun is the only star we can study up close. By studying this star we live with, we learn more about stars throughout the universe. The sun is a source of light and heat for life on Earth. The more we know about it, the more we can understand how life on Earth developed. As we send spacecraft and astronauts further and further from home, we must understand this space environment just as early seafarers needed to understand the ocean.

23. With the help of suitable examples, discuss the landforms associated with Volcanism.

Approach - Students are expected to write about the landforms associated with volcanism and give suitable examples.

Introduction

Volcano is a rupture in the crust of a planetary-mass object, such as Earth, that allows hot lava, volcanic ash, and gases to escape from a magma chamber below the surface and this process is called Volcanism. Molten magma is mobile rock that forces its way in to the planes of the crust to escape quietly or explosively to the surface. The resultant landforms depend on the strength and fluidity of the magma.

Body

Volcanic landforms are divided into extrusive and intrusive landforms based on whether magma cools within the crust or above the crust.

Intrusive Volcanic Landforms: Intrusive landforms are formed when magma cools within the crust.
- Sills: When an intrusion of molten magma is made horizontally along the bedding plane of sedimentary rocks, these solidified horizontal lava layers inside the earth called sill. Example - Great whin sill of NE England.
- Dykes: When an intrusion of molten magma injected vertically as narrow wall of igneous rocks such structures are called dykes. Lava makes its way through cracks and the fissures developed in the land, it solidifies almost perpendicular to the ground and It gets cooled in the same position. Example- Cleveland Dyke of Yorkshire, England.
- Laccoliths: It is a large blister or igneous mound with dome-shaped upper surface and a level base fed by a pipe-like conduit from below.it arches up the overlying strata of sedimentary rocks. Example- The laccoliths of Henry Mountains in the Utah, USA.
- Lopolith: When the lava moves upwards, some portion of the lava may tend to move in a horizontal direction in weak plane. In case it develops into a saucer shape, concave to the sky body, it is called Lopolith. Example- the Bushveld lopolith of Transvaal, South Africa.
- Phacolith: It is a lens-shaped mass of intrusive rocks, at times, is found at the base of synclines or at the top of anticline in folded igneous country. This material has conduit from beneath for the source. Example- Corndon hill in Shropshire, England.
- Batholiths: These are huge mass of igneous rocks, usually of granite. These rock masses formed due to cooling down and solidification of hot magma inside the earth. They appear on the surface only after the denudation processes remove the overlying materials and forms a massive and resistant upland region. Example- Wicklow Mountains of Ireland; the uplands of Brittany, France.

Extrusive Volcanic Landforms: Magma that reach on the surface and solidify forms extrusive landforms

- Conical Vent and Fissure Vent: A conical vent is a narrow cylindrical vent through which magma flows out violently. Conical vents are common in andesitic (composite or strato volcano) volcanism.
- Composite Cones or Strato volcanoes: They are conical or central type volcanic landforms. Along with andesitic lava, large quantities of pyroclastic material and ashes find their way to the ground. They are accumulated in the vicinity of the vent openings leading to formation of layers, and this makes the mounts appear as composite volcanoes. Example- Vesuvius, Mt. Fuji, Mt. Stromboli (Lighthouse of the Mediterranean) etc.
- Shield Volcanoes or Lava domes: These volcanoes are mostly made up of basalt, a type of lava that is very fluid when erupted. They are not steep. They become explosive if somehow water gets into the vent; otherwise, they are less explosive. Example- Mauna Loa (Hawaii).
- Lava Plains and Basalt Plateaus: Sometimes, a very thin magma escapes through cracks and fissures in the earth's surface and flows after intervals for a long time, spreading over a vast area, finally producing a layered, undulating (wave like), flat surface. Example- Snake Basin, U.S.A, Icelandic Shield, Canadian Shield etc.
- Cinder cone (Tephra cones): Cinder cones are small volume cones consisting predominantly of tephra that result from strombolian eruptions. They usually consist of basaltic to andesitic material. Example- Mt. Paricutin, Mexico.
- Crater: A crater is an inverted cone-shaped vent through which the magma flows out. When the volcano is not active the crater appears as a bowl-shaped depression. Example- The crater of Mount Fuji, Japan
- Calderas: After the eruption of magma has ceased from the cones, the crater frequently turns into a lake at a later time. Water may collect in the crater. This lake is called a 'caldera'. Example: Lake Toba in Sumatra, Crater Lake in Oregon, USA.
- Mid-Ocean Ridges: These volcanoes occur in the oceanic areas. There is a system of mid-ocean ridges more than 70,000 km long that stretches through all the ocean basins. The central portion of this ridge experiences frequent eruptions. The lava is basaltic in nature and it cools slowly and flows through longer distances. It may responsible for sea floor spreading. Example- Mid-Atlantic Ocean ridge; extension is seen in the Iceland.

Conclusion

Volcanic activities have profound influence on earth's landforms as volcanic processes are constantly changing the Earth. Solid, liquid or gaseous materials may find their way to the surface from some deep-seated reservoir beneath. Eruptions can create new islands, build and destroy mountains, and alter landscapes.

24. Discuss the physiographic features of shields and cratons. How do they get formed? Discuss.

Approach - It expects aspirants to write about various physiographic features of shields and craton. Also write about how shields and cratons formed. You can also draw diagram for better illustration.

Introduction

A craton is an old and stable part of the continental lithosphere, which consists of Earth's two topmost layers, the crust and the uppermost mantle. A shield is a large area of exposed Precambrian crystalline igneous and high-grade metamorphic rocks that form tectonically stable areas.

Body:
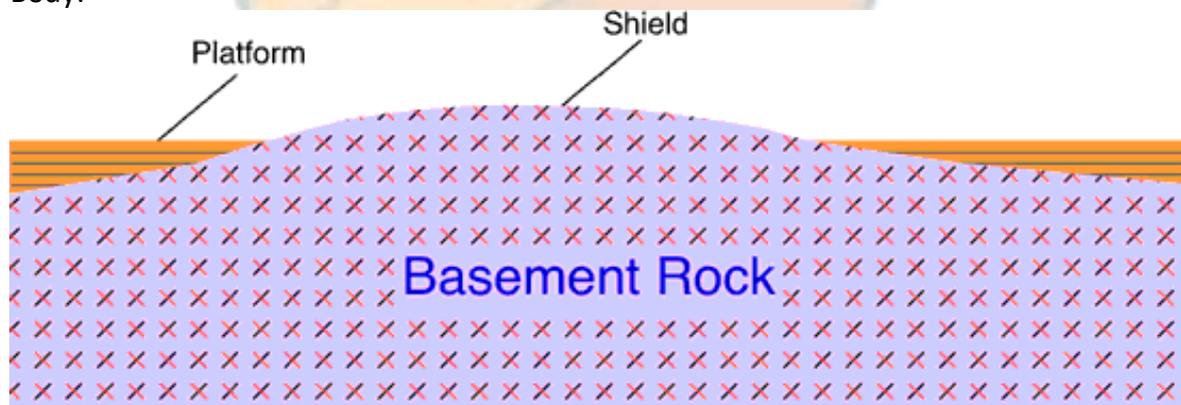
Cratons:

- Cratons have thick lithospheric roots. Mantle tomography shows that cratons are underlain by anomalously cold mantle corresponding to lithosphere more than twice the typical 100 km thickness of mature oceanic or non-cratonic, continental lithosphere. At that depth, craton roots extend into the asthenosphere. Craton lithosphere is distinctly different from oceanic lithosphere because cratons have a neutral or positive buoyancy, and a low intrinsic isopycnic density. This low density offsets density increases due to geothermal contraction and prevents the craton from sinking into the deep mantle. Cratonic lithosphere is much older than oceanic lithosphere—up to 4 billion years versus 180 million years.

- The process by which cratons were formed from early rock is called cratonization. The first large cratonic landmasses formed during the Archean eon. During the early Archean, Earth's heat flow was nearly three times higher than it is today because of the greater concentration of radioactive isotopes and the residual heat from the Earth's accretion. There was considerably greater tectonic and volcanic activity; the mantle was less viscous and the crust thinner. This resulted in rapid formation of oceanic crust at ridges and hot spots, and rapid recycling of oceanic crust at subduction zones. There are at least three hypotheses of how cratons have been formed: 1) surface crust was thickened by a rising plume of deep molten material, 2) successive subducting plates of oceanic lithosphere became lodged beneath a proto-craton in an under-plating

process, 3) accretion from island arcs or continental fragments rafting together to thicken into a craton.

Shields:

- A shield is that part of the continental crust in which these usually Precambrian basement rocks crop out extensively at the surface. Shields themselves can be very complex: they consist of vast areas of granitic or granodioritic gneisses, usually of tonalitic composition, and they also contain belts of sedimentary rocks, often surrounded by low-grade volcano-sedimentary sequences, or greenstone belts. These rocks are frequently metamorphosed greenschist, amphibolite, and granulite facies. It is estimated that over 50% of Earth's shields surface is made up of gneiss.

Conclusion

Thus Craton comprising shields both form major geological features of earth. They help in understanding the process of formation of rocks and their period of formation.

25. Examine the factors that lead to extremely arid conditions in the Atacama.

Approach - It expects students to examine different factors like Subtropical high, double rain shadow and Cold Ocean current leads to arid conditions in Atacama. You can also draw diagram/map to explain it further.

Introduction

Atacama Desert extends from the west coast of Chile and spills over the bordering nations of Argentina, Peru, and Bolivia. While it's not truly the driest place on the whole planet, it's the driest hot desert on Earth, receiving less than 0.6 inches of rain on average the whole year.

Body
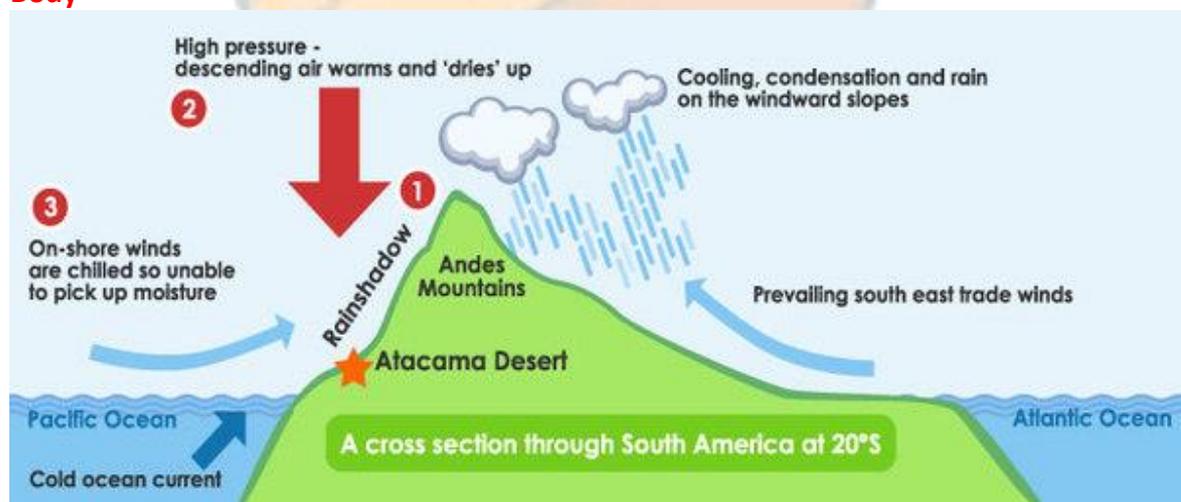
The Atacama Desert can attribute its astoundingly low precipitation to a combination of several "drying" factors: the subtropical high, a double rain shadow, and the cold ocean current running up the west coast of South America. These factors work together to make an amazing synthesis of dry conditions that form the unique climate of the Atacama.

Subtropical high:

- The first factor, the subtropical high, is a global wind and pressure belt that can be found around 30 degrees North or South, right around where the Atacama Desert is. This pressure belt stretches around the world at this latitude and suppresses the formation of clouds by making it difficult for air to rise. Naturally, this creates a zone of low precipitation. Many areas around the world under the subtropical high have lower rainfall levels, but none quite as low as the Atacama. That's because there are other influences at work here.

Double rain shadow:

- The second factor is the double rain shadow over the desert. A rain shadow is an area that receives less rainfall as a result of a nearby mountain chain. Oftentimes, a mountain will have a prevailing wind blowing into one side of it, and that receives a lot of rainfall because that wind pushes the moisture in the wind up the mountain, creating clouds and precipitation. Consequently, the

other side of the mountain often has less rain because there's much less moisture in the air. This phenomenon affects the Atacama Desert on two fronts: the Andes Mountains and the Chilean Coast Range. The desert is primarily on the leeward side of each mountain chain, which is where the rain shadow is for mountain ranges, further decreasing the amount of rain the desert gets.

Cold ocean current:

- The third major factor that keeps the Atacama Desert so dry is the cold ocean current that runs adjacent to the coast of South America. This cold current decreases the temperature of the surrounding air, making it unable to accumulate a good deal of moisture over the ocean (since cold air can't "hold" as much moisture as hot air). Of course, this means that the desert doesn't have much of a chance to receive moisture from the ocean next to it, making it even drier.

Conclusion

Atacama Desert is an important desert to study because it encompasses many important aspects of climate. Not only this, but the desert impacts the well-being of the people that live in or around it. Understanding how the climate of the area came to be is important to understand how climate works, how it changes the environment, and how it impacts people in its environment.
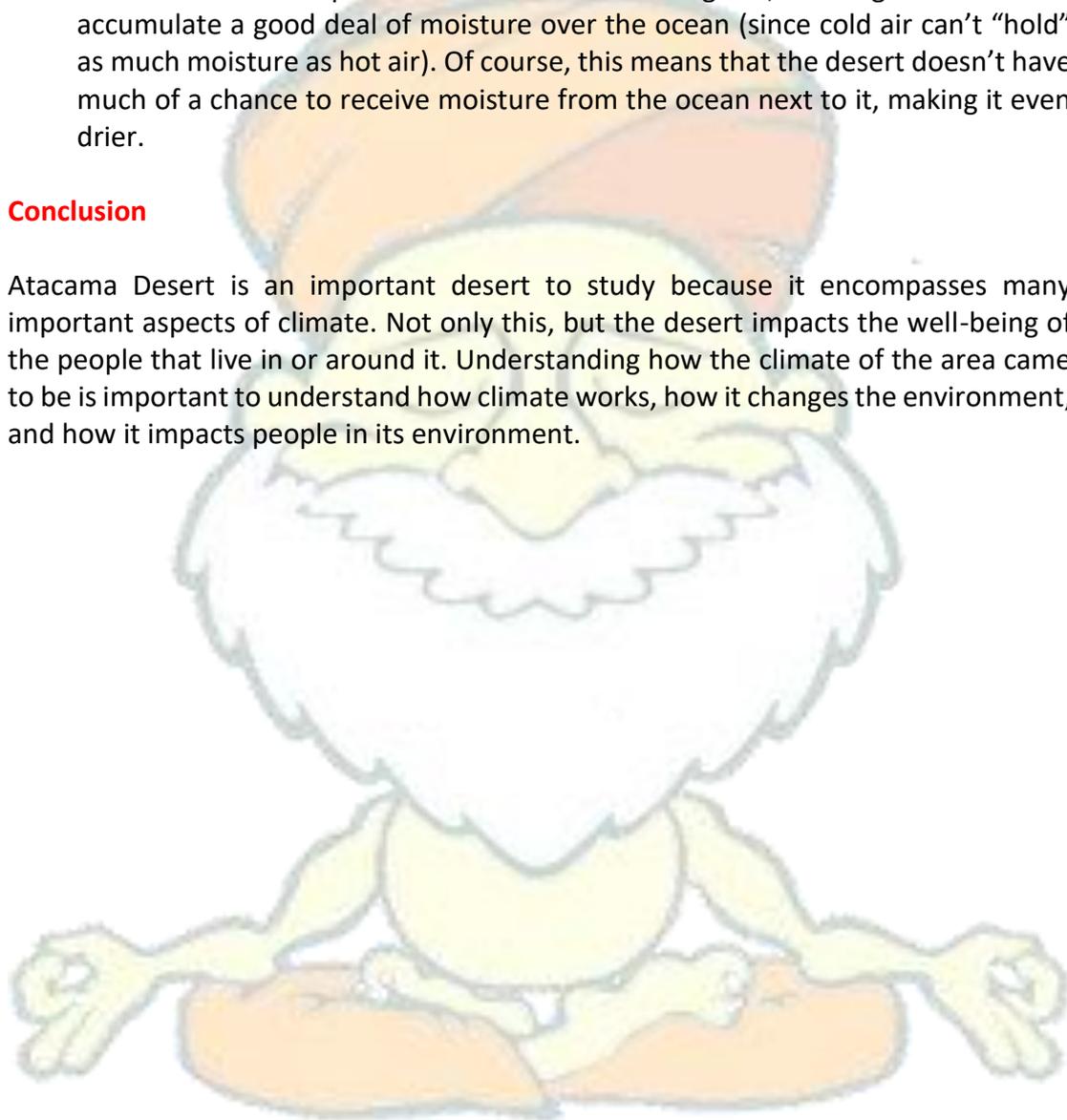
26. Why has the Aral Sea shrunk? Discuss.

Approach - As the directive here is discuss, you have to cover various angles related to the topic. In the introduction you explain the location of Aral Sea and then brief how it shrunk. In the main body part enlist the reasons and in brief give a way forward. Drawing a map to show the location of Aral Sea or showing the extent of shrinking will be a value addition.

Introduction

The Aral was an endorheic lake lying between Kazakhstan and Uzbekistan which began shrinking in the 1960s and had largely dried up by the 2010s. Today, the lake-which was called a sea due its sheer size and salinity-has reduced to a mere 25 per cent of its original size. The re-routing of Amu Darya River and Syr Darya river to give impetus to cotton production aggravated shrinking of the Aral Sea.

Body

In the 1960s, the depth of the lake was 68 metres. Today, it is less than 10 metres. A relatively shallow water level spread across a large surface area has led to faster evaporation. This has caused over 90 per cent loss in the volume of water in the last six decades. Following are the major reasons for the shrunk:

- By establishing a program to promote agriculture and especially that of cotton, Soviet government led by Khrouchtchev in the 1950s deliberately deprived the Aral Sea of its two main sources of water income, which almost immediately led to less water arriving to the sea.
- Layered problems: The Aral Sea is a terminal lake with no outlets. As it lies in a rain-shadow region, the rate of evaporation far outweighs the rate of precipitation as an average annual rainfall in the nearby regions is nearly 100mm.
- The need to strike a balance between the river feed, precipitation, evaporation and seepage has made it difficult to ensure its survival. Any change in any of these four factors affects the quantity and quality of water, rapidly.
- Therefore, the reason of ongoing disaster lies beyond the northern region of Kaza-khstan and the Ustyurt Plateau region that includes the critical mass of the Aral Sea. Following figure 1 shows the drying up of the Aral sea.
- There has been an increase in the abstraction of groundwater throughout the basins of the two rivers. The water is pumped out at the upstream of the Amu Darya River that feeds the Silk Route towns—Bukhara, Samarkand and Tashkent in Uzbekistan. The outflow from these towns does not balance the inflow.
- Increase in evaporation, coupled with reduced groundwater inflow and precipitation, has further led to salinisation and the foaming of water.

Figure 1: Drying up of the Aral sea

- The south-west edge of the Aral Sea has eroded, forming large canyons along the Ustyurt Plateau. These canyons were formed by a process of long-time erosion. The Ustyurt Plateau, which overlooks the western edge of the Aral Sea, is a clay and stony desert with an average elevation of 150 metres. In geological terms, it is called "Sarmatian limestones' with separated edges leading to steep slopes.
- The Aral Sea catastrophe exemplifies the Anthropogenic era. This human-made disaster is affecting the ecosystem for more than five decades now.
- Yet, the current development paradigm is conveniently ignoring the long-term repercussions and is choosing the option of altering the water bodies to suit bigger and profitable agendas. The current state of the Aral Sea needs to be understood and its lessons be applied whenever we think of altering the course of any waterbody.

In 1993, Central Asian countries-Kazakhstan, Kyrgyzstan, Tajikistan, Turk-menistan and Uzbekistan-established the International Fund for Saving the Aral Sea to rehabilitate the affected region ecologically. The mission was to save the people living in Aral Sea basin by improving their living conditions.

Conclusion

In 2005, the Kokaral Dam was built in a joint collaboration between the Kazakh government and the World Bank to restore the delta and the wetland region in Syr Darya River basin. However, these sporadic efforts are not enough to revive the basin spanning seven nations. A cross-country method needs to be put in place by owning collective responsibility. Because it may take many generations to revive the lost lake back to its original glory.

27. Why is the Tibetan plateau called the roof of the world? How does the Tibetan plateau affect the climate in the Indian subcontinent? Discuss.

Approach - It expects students to write about Tibetan plateau and how does Tibetan plateau affect the climate in the Indian subcontinent.

Introduction

Highest and largest plateau in the world and hence called the 'roof of the world'. Formed due to collision of the Indo-Australian and Eurasian tectonic plates. It covers most of the Autonomous Tibetan Region, Qinghai Province of Western China, and a part of Ladakh in Jammu and Kashmir.

Body

Tibetan plateaus affecting on climate pattern in India Subcontinent:
  * The Tibetan Plateau is an enormous block of highland acting as a formidable barrier. Due to its protruded height it receives 2-3°C more insolation than the neighbouring areas. The plateau affects the atmosphere in two ways: (a) as a mechanical barrier, and (b) as a high- level heat sources.
  * At the beginning of June the subtropical jet stream is completely withdrawn from India and occupies a position along 40° N (to the north of Tibetan Plateau).The plateau accentuates the northward displacement of the jet stream. Hence the burst of monsoon in June is prompted by the Himalayas and not by the thermally induced low pressure cell over Tibet. (Tibetan plateau is responsible for south-west monsoons. But it is the subtropical jet stream that facilitates sudden outburst of monsoons with its sudden northward migration)
  * In the middle of October the plateau proves to be the most important factor in causing the advance of the jet south of the Himalayas or bifurcating it into two parts.
  * The winter Tibetan Plateau cools rapidly and produces a high pressure cell. (Cyclonic condition over Tibet ceases and an anticyclonic condition is established). The high pressure cell over Tibet strengthens N-E monsoons.
  * Tibet gets heated in summer and is 2°C to 3°C warmer than the air over the adjoining regions. Because the Tibet Plateau is a source of heat for the atmosphere, it generates an area of rising air (convergence)(intense low pressure cell).
  * During its ascent the air spreads outwards in upper troposphere (divergence) and gradually sinks (subsidence) over the equatorial part of the Indian Ocean.
  * It finally approaches the west coast of India as a return current from a south-westerly direction and is termed as equatorial westerlies. It picks up moisture from the Indian Ocean and causes rainfall in India.
  * The snow-monsoon tele-connection works by altering this temperature gradient. There is dominant effect of the Himalaya and Tibetan plateau snow on monsoon is because of albedo, the reflectivity of snow. Increased snow cover over the Himalaya and Tibetan plateau reflects more solar radiation,

resulting in less than normal warming of the land surface there. Consequently, the temperature gradient decreases and monsoon winds weaken. This means they bring less moisture to India and don't penetrate as far north.

- With a much lower latitude, the ice in Tibet reflects at least four times more radiation energy per unit area into space than ice at higher latitudes. Solar heating in late spring heats the Indian subcontinent, making it warmer than the Indian Ocean. It also warms the Tibetan plateau that acts as an elevated heat source. This drives southwest monsoon winds towards the Indian landmass.

Conclusion

The importance of Tibet to the world's geopolitical events is much understated. Often relegated to as the China issue, it holds enormous geopolitical and environmental significance, especially in context of Asia. As a geographical region, Tibet is a rich bed of minerals, water bodies and energy resources. It has often been referred to as the roof top of the world given that there are 10 river systems originating here, and is also considered the maker of Asian Monsoons. Therefore it needs to study well for sustainable environment.
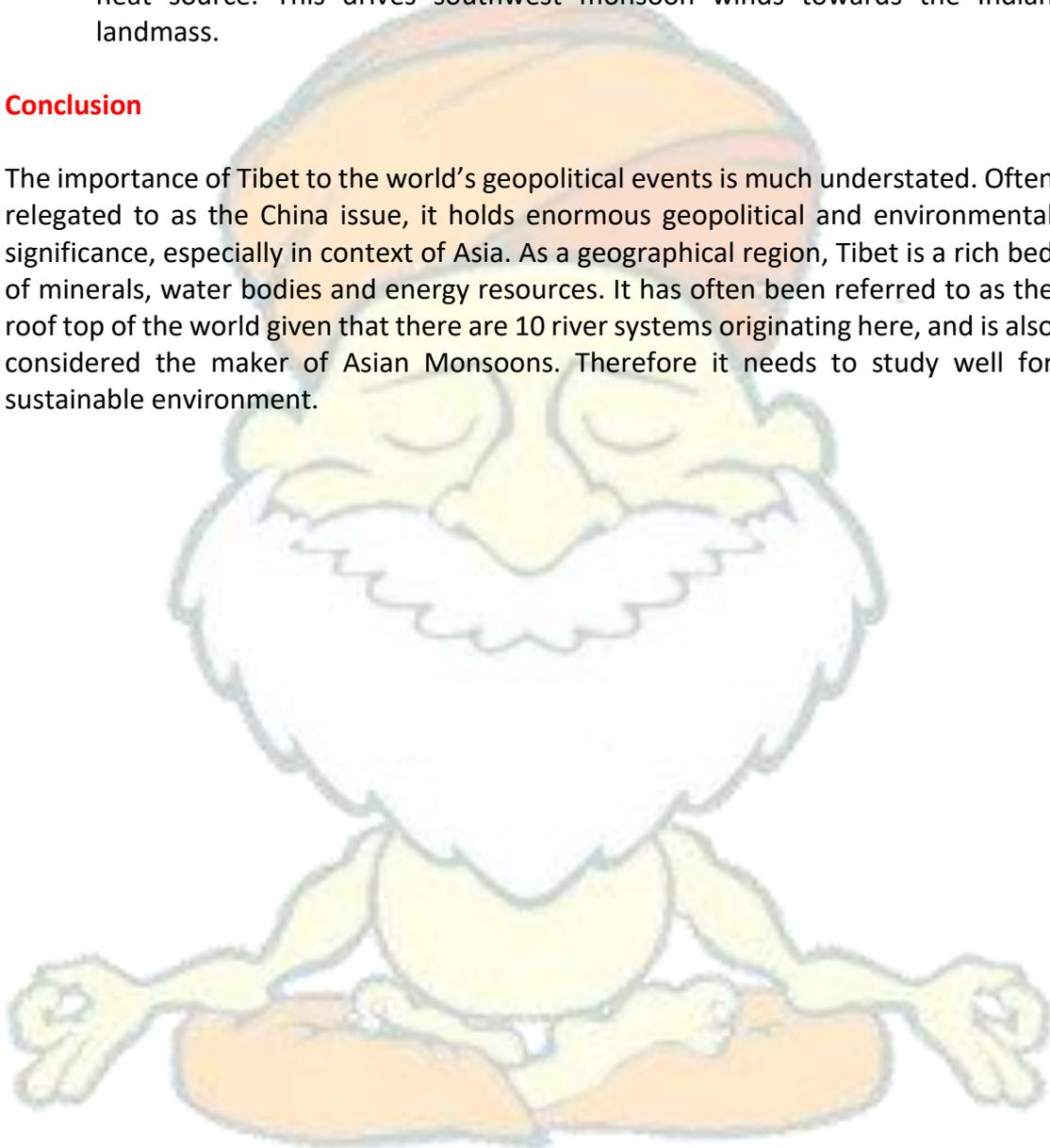
28. Discuss the factors that led to the formation of the Deccan traps.

Approach - It expects students to write about Deccan traps and factors leading to the formation of Deccan traps.

Introduction

Deccan Trap is a thick sequence of late cretaceous basaltic lava flows. Due to erosion this basaltic lava soil has been eroded step wise which is often termed as Deccan trap. This Deccan trap is widely prevalent in Deccan plateau, covering Saurashtra, Maharashtra, Karnataka parts of Tamil Nadu and Andhra Pradesh. Its thickness is not uniform rather it is somewhere deep and somewhere shallow depending on the surface whether flat or sloppy.

Body

Factors that led to formation of the Deccan traps:
- Mantle plume: On the continents, mantle plumes have been responsible for extensive accumulations of flood basalts such as Deccan traps. Mantle plumes (few hundred kilometres in diameter) rise slowly towards the upper mantle. When a plume head encounters the base of the lithosphere, it flattens out and undergoes widespread decompression melting to form large volumes of basalt magma. The basaltic magma may then erupt onto the surface through a series of fissures giving rise to large igneous provinces. When created, these regions often occupy several thousand square kilometres.
- Plate tectonic: Most scientists believe that the Deccan Traps poured out as the Indian plate, on its northward journey after the Gondwana breakup, passed over the Reunion hotspot, a still active volcanic island located in the south-west Indian Ocean. Coeval with (or probably as a result of) this event, there was also a continental rift-drift between India and the Seychelles Islands. Indeed, flood basalts of similar age also occur on the Seychelles.
- Reunion Hotspot: The Reunion hotspot is a volcanic hotspot which currently lies under the Island of Reunion in the Indian Ocean. A huge eruption of this hotspot 66 million years ago is thought to have laid down the Deccan Traps and opened a rift which separated India from the Seychelles Plateau.
- Highly fluid lava: The lava when erupted was in a highly liquid form, which is indicated by the long distances over which the individual flows could spread. This fact also suggests that the lava might have been super-heated to reach that state of mobility.
- Linear fissures: Eruptions of the lava took place along linear fissures, forming fissure-type of eruption and not from any central cone-type volcanoes. This is explained by numerous flows and their remarkably consistent horizontal (or nearly so) attitude.
- Sub aerial environment: They were erupted in a sub-aerial environment (and not subaqueous, that is under water). This is suggested by their relation with the older rocks.

- Intersecting dykes: A large number of dykes that have been found occurring intersecting many lava flows might be quite younger to those flows, but some such dykes might have also been the feeder dykes for the volcanic eruptions.
- Seafloor spreading: Seafloor spreading at the boundary between the Indian and African Plates subsequently pushed India north over the plume, which now lies under Réunion Island in the Indian Ocean, southwest of India.

Conclusion

Deccan trap is one of the important formation in Indian stratigraphy. The lava erupted all along the fission crack in the surface of the earth intermittently. It is the store house for many minerals and black soil important for Indian agriculture therefore studying it can help in better understanding of Indian geological set up.

General Studies - 2

29. What are the challenges of governance in India's multifaceted federal polity? Illustrate.

Approach - It expects students to write about role of governance and various challenges of governance in India multifaceted federal polity with illustrations.

Introduction

Governance can be defined as 'the process of decision-making and the process by which decisions are implemented.' Governance refers to the decision-making and administration involved in any federal level, i.e., national, regional, local, etc. Government is a key actor in governance.

Body

Various challenges of governance in India's multifaceted federal policy:
1. Centralised Planning: Planning with consultation is important feature of governance. Union Government enjoys unbridled authority over national and regional planning in India. Centralised planning, through the Planning Commission, now NITI Aayog appointed by the Centre, considerable preponderance in legislative power for the Union, the financial dependence of the states on the Centre's mercy. The States only fill the blank spaces meant for in the text for planning. There is no special planning commission for the states in India.
2. Unequal Representation of Units: With a view to preventing the evil of predominant influence of larger units over smaller units in a federation. Effective participation of smaller groups and units are crucial for governance. In India, there is no such provision of an equal representation of states in the Rajya Sabah, the Second Chamber and nor the states have any substantial say over the amendments done to the Constitution from time to time.
3. Lacks fiscal autonomy: Autonomy being the important facet of governance. The current Goods and Services Tax measure is feared by many states to be against fiscal federalism in India. It has amalgamated the various taxes into a single tax, procurement of which will then be divided among states in a prescribed ratio. Many states in India demand for more financial autonomy in India.
4. Regionalism: Demands on grounds of regional aspirations are usually never silent methods of request, rather they tend to take major violent forms; disrupting the governance environment of the nation as a whole. The nation thus faces the challenge of internal security in the form of insurgency and this causes upheavals in the basic notion of Indian federation. For example West Bengal threatened India's Teesta river waters treaty with Bangladesh because of its possible potential costs for West Bengal.
5. Governor's Office: The most paramount executive power at governor's disposal is that he can recommend the imposition of constitutional emergency

in a state. State of Arunachal Pradesh saw the imposition of President's rule in its territory despite there being an already elected government in the same. Supreme Court overruled the Governor's decision as unconstitutional. But, what came in the light amidst all this chaos was how the over supportive relationship with the Central government and the Governor of the State can impose serious threats to the quasi-federal style of Indian Governance.

6. Lack of equity and inclusiveness: Good governance assures an equitable society. Differences economic standards and relative economic and fiscal incompatibilities among the constituent states also pose a threat to a federation. Demand for a financial equality of a region creates problems in a federation. In India, some states are declared as poor and on the principle of equalization, are getting grants- in-aid.

7. Inadequate Efficiency and empowerment: Governments at lower levels can only function efficiently if they are empowered to do so. This is particularly relevant for the Panchayati Raj Institutions (PRIs), which currently suffer from inadequate devolution of funds as well as functionaries to carry out the governance constitutionally assigned to them.

Way forward –
- Good Governance Index are to provide quantifiable data to compare the state of governance in all states and Union Territories, enable states and Union Territories to formulate and implement suitable strategies for improving governance and shift to result oriented approaches and administration.
- NITI Aayog plan for cooperative federalism.
- Measure such as 14th Finance Commission increased the tax devolution of the divisible pool to states from 32% to 42% for years 2015 to 2020. It provides more freedom to states to initiate schemes based on local factors.

Conclusion

The effective functioning of governance is the prime concern in the federal polity of the India. The citizens are ready to pay the price for good services offered by the state, but what is required is a transparent, accountable and intelligible governance system absolutely free from bias and prejudices. The government should continue to work on the ideals of SabkaSaath, Sabka Vikas and SabkaVishwas which will lead to inclusive federal polity.

30. How does transparency affect the efficiency in governance and public administration? Examine.

Approach - It is strait forward question where it expects aspirants to write about how transparency in governance and public administration impacted efficiency.

Introduction

Transparency refers to unfettered access by the public to timely and reliable information on decisions and performance in the public sector. It helps to strengthen the foundations of democracy. It is used to imply openness and accountability.

Body

Transparency symbolizes a mechanism of promoting good governance and public trust in a democratic and modern public administration. Transparency contribute four kinds of outcomes in governance and public administration as follows:

Better delivery of services –

- Citizen report cards have considerable impact on local service delivery in some settings.
- Community monitoring of services, when combined with other factors contribute to more responsive delivery of services, such as increased teacher attendance in schools.
- Social audits contribute to exposure of corruption and enhanced effectiveness in programme implementation.
- Participatory budgeting initiatives can – but do not necessarily contribute to multiple outcomes, including improved public services.
- Budget monitoring initiatives contribute to enhanced resources and efficiency in expenditure utilisation.
- Public Expenditure Tracking Surveys, when combined with public information campaigns, contribute to reduced leakages and thereby to improved delivery of services.

Better budget utilisation –

- Public Expenditure Tracking Surveys, when made public and linked to public information campaigns, contribute to reducing leakages in delivery of service-sector budgets locally.
- Complaint mechanisms about service provision contribute to reduction of corruption, by linking citizens directly to managers who can then hold managers to account.
- The Right to Information legislation has been found through 'Peoples' Assessments' to contribute to perceptions of satisfaction in a range of areas, including decline in corruption and curtailing wasteful public expenditure, exposing misuse of power and influence, and redressing grievances.

Greater state responsiveness –

- Community score cards monitoring service delivery contribute to better user satisfaction.
- Freedom of Information contribute to improved government decision-making, public understanding, and increased trust between government and public.
- Freedom of Information requests contribute to responsiveness of public officials, though not always, and highly dependent on status of person submitting request and civil-society pressure.

Building spaces for citizen engagement –
- Information provision about education-related entitlements has been found by one study to have little impact by itself on the level of engagement with school systems by citizens claiming accountability. In another study, when tied to a community-based information campaign, positive impacts were found.
- Participatory budgeting initiatives can – but do not necessarily –contribute to multiple outcomes, including new civic associations and strengthened democratic processes.
- Freedom of Information contribute to improve public understanding, enhanced public participation, and increased trust.
- The Right to Information campaign led to new legislation and widely mobilised constituencies to use information for developmental purposes.

Conclusion

Transparency is always for good and in the case of public administration it will make the officials more responsible. The change provides the power in the hands of public. It will eliminate the corrupt rule of the powerful bureaucrats. It will allow the democratic government to have a stable foundation for its people. The free flow of information will wipe out the complex problems existing in the system.
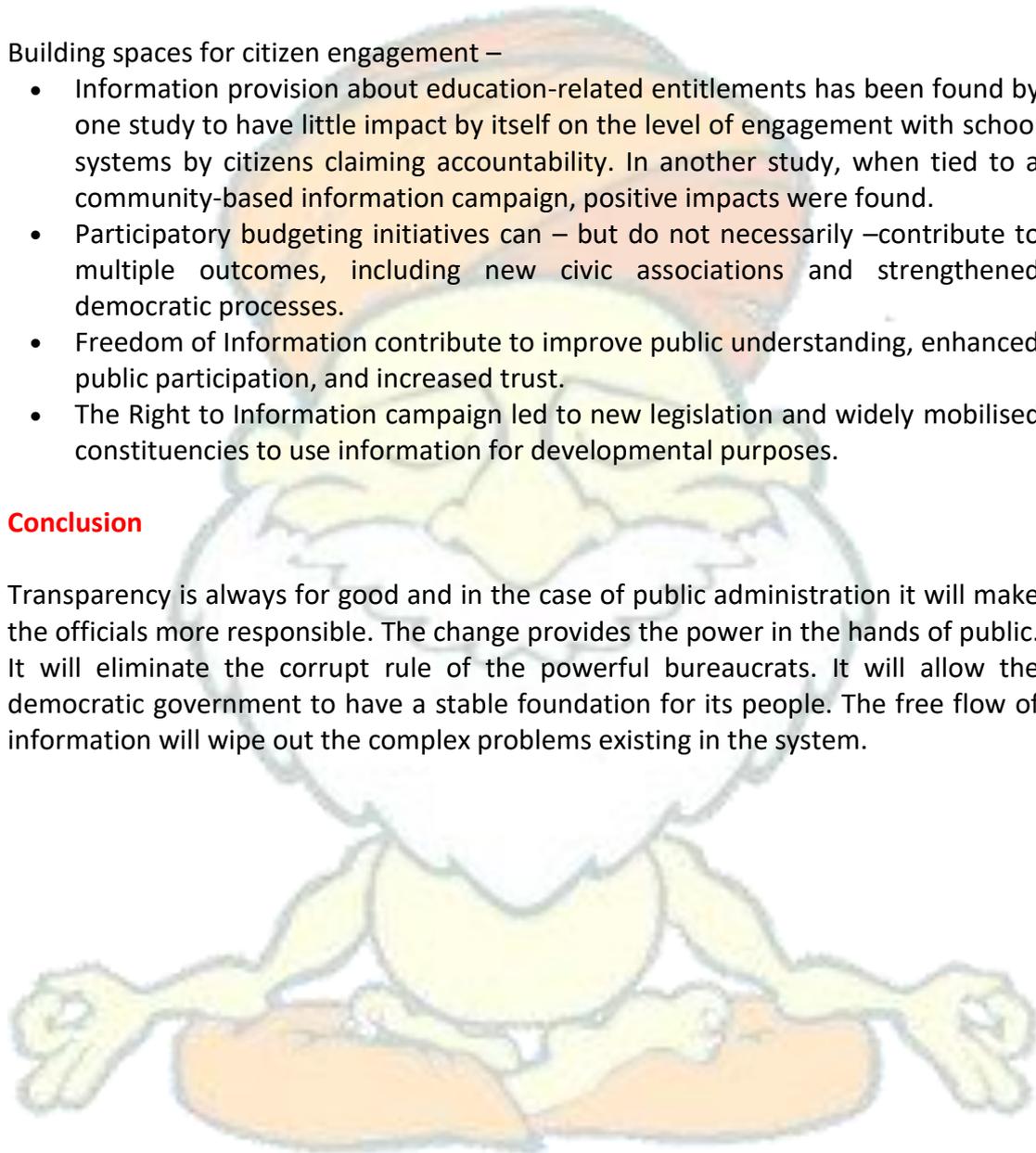
31. Examine the ways in which data and digital technologies are transforming governance in India?

Approach - It expects students to write about – transformation happen in governance due to use of data and digital technologies. To substantiate your points, mention examples and data/facts.

Introduction

Government and public service bodies were the late entrants into the digital world; slow and hesitant at the start they have now embraced digital with gusto. What started as online payment portals for electricity and phone bills has developed into a mission to provide digital access to all citizens.

Body

- In the last few years, governance in India across sectors has been redefined through data and digital technologies. Data and digital technologies is reshaping the way government is designing and implementing programmes. The use of technology has brought in better systems, greater efficiency and is beginning to have a profound impact on governance.
- India has combined the use of unique biometric identifiers and financial inclusion for effectiveness in social benefits and to reduce the vast number of illegitimate beneficiaries under welfare programmes.
- The Direct Benet Transfer (DBT) has been implemented across 437 schemes, and helped save Rs. 83,000 crores. Its implementation has led to 2.75 crore duplicate, fake or non-existent ration cards being deleted, and 3.85 crore duplicate and inactive consumers for liquid petroleum gas (LPG) subsidy being eliminated.
- The Public Financial Management System (PFMS) has led to the creation of a financial management platform for all plan schemes, a database of all recipient agencies, integration with core banking solution of banks, integration of state treasurers and tracking of fund ow to the lowest tier of implementation of plan schemes on real-time basis. PFMS has also led to just-in-time release of funds and efficient management in the use of funds, including ultimate utilisation.
- Digitisation has led to lower costs in collection of direct taxes. Almost 98.5% of all income-tax (I-T) returns have been led online. The I-T Department received 6.84 crore income-tax returns in 2017-18, a growth of 26%, and additionally, more than one crore new tax returns.
- Unified Payments Interface (UPI) and Bharat Bill Payment System (BBPS)have triggered a plethora of private sector-innovated apps, which have significantly eased citizens' bill payments towards services provided by GoI.
- BBPS has more than doubled the number of bills paid digitally from April 2017 when the pilot was launched. The value of bills paid on the platform has jumped by about 46% during this period.
- According to a KPMG report, the size of the bill payments market in India will reach. Rs.9.4 trillion by 2020.

- The rollout of the goods and services tax (GST) has resulted in a 50% increase in unique indirect taxpayers compared with the pre-GST system. This translates to a substantial 3.4 million new indirect taxpayers leading to a radical formalisation of the economy.
- Pro-Active Governance and Timely Implementation (PRAGATI) programme, Prime Minister Narendra Modi has used technology to cut across departmental silos and geographical boundaries to ensure speedy project implementation. He has dealt directly with senior central and state officials to monitor, review and evaluate progress of social sector schemes and infrastructure projects that were facing severe bottlenecks.
- A Microsoft-International Data Corporation (IDC) study, 'Unlocking the Economic Impact of Digital Transformation in Asia Pacific', predicts that digital transformation will add $154 billion to India's GDP by 2021, increasing the growth rate by 1% annually. In 2017, about 4% of GDP was derived from digital products and services created directly through the use of technologies like Cloud, Internet of Things (IoT) and artificial intelligence (AI).
- The Ayushman Bharat scheme digitally link primary and community health centres with district hospitals. Along with the Rs 5 lakh health insurance, which cover 50 crore Indians, it ensures healthcare through a paperless, cashless, portable scheme. The health stack linked to Aadhaar will be transformational.

Conclusion

For years, India has been a complex nation, making it difficult for the common man to access government services. The rapid adoption of digital technology across sectors is making things easy and eliminating all forms of human intervention. This has a major impact on the efficiency and effectiveness of governance.

32. Are citizen charters an effective tool to improve governance? Critically comment.

Approach - It expects students to write about citizen charters and how citizen charter is effective tool to improve governance

Introduction

The concept of a citizen's charter was initiated by former British Prime Minister John Major in the year 1991 intended to improve quality of public service. In India, the concept of citizen's charter was first adopted at a 'Conference of Chief Ministers of various States and Union Territories' held in May 1997 in the national capital.

Body

Citizen charter - The Citizen's Charter is a voluntary and written document that spells out the service provider's efforts taken to focus on their commitment towards fulfilling the needs of the citizens/customers.

Citizen's Charter Components –
- Organisation's vision and mission statements.
- A business carried out and other such details of the organisation.
- Explain who are citizens and clients.
- Statement of services including quality, time-frame, etc. offered to citizens and how to get those services.
- Grievance redressal mechanisms.
- Expectations from citizens/clients.
- Additional commitments like the amount of compensation in case of service delivery failure.

Citizen charter an effective tool to improve governance –
1. It augments the quality of services delivered by incorporating an internal and external monitoring entity.
2. It enhances good governance. It improves the effectiveness of organizations by having measurable standards.
3. Being citizen-centric, it creates a professional and customer-oriented environment for the delivery of services.
4. Citizen Charter increases participation of common man in efficient working of an organisation by making the citizens aware of the aims and goals of the organization.
5. Citizen Charter set standards of service, allowing high expectations from an organisation, pushing them to work diligently.
6. It reduces cost, prevents delay and red tapism and thus promote good governance. It encourages access and promote choice and thus, treat all fairly.

The Citizen charter, not an effective instrument in adding value to the governance because –

1. Poor design & content: Most organisations do not have adequate capabilities to draft meaningful & succinct citizen's charter drafted by government agencies that are not designed well. Critical information that end-users need to hold agencies accountable are simply missing from a large number of the charter.
2. Lack of public awareness: while a large number of public service providers have implemented citizen's charter only a small percentage of end-users are aware of the commitments made in citizen charter.
3. Inadequate groundwork: Government agencies often formulate citizens charter without undertaking adequate groundwork in terms of assessing & reforming its processes to deliver the promises made in the charter.
4. Charters was rarely updated: charters reviewed for this report rarely showed signs of being updated even though some documents dating back from the inception of the citizen charter programme nearly a decade ago.
5. End-users & NGOs are not consulted: when charters are drafted civil society organisations and end-users are generally not consulted with charter are being formulated.
6. Resistance to change: The new practices demand significant changes in the behaviour& attitude of the agency & its staff towards the citizen. At times, vested interests work for stalling the citizen's charter altogether or in making it toothless.

The Right of Citizens for Time Bound Delivery of Goods and Services and Redressal of their Grievances Bill, 2011 (Citizens Charter) seeks to create a mechanism to ensure timely delivery of goods and services to citizens. It requires every public authority to publish a CC within six months of the commencement of the Act and levies a penalty of up to Rs 50,000 for failure to render services.

Way forward –
- Include Civil Society in the process: to assist in improvement in the contents of the Charter, its adherence as well as educating the citizens about the importance of this vital mechanism.
- Hold officers accountable for results: fix specific responsibility in cases where there is a default in adhering to the CC.
- Drawing from best practice models such as the Sevottam Model (a Service Delivery Excellence Model) can help CC in becoming more citizen centric.

Conclusion

A Citizens' Charter cannot be an end in itself, it is rather a means to an end - a tool to ensure that the citizen is always at the heart of any service delivery mechanism. Thus it is playing a prominent part in ensuring "minimum government & maximum governance", changing the nature of charters from non-justiciable to justiciable & adopting penalty measures that will make it more efficient & citizen friendly.

33. Should 'code of conduct' or 'code of ethics be made legally enforceable for civil servants? Critically examine.

Approach - It expects aspirants to write about – in first part write about code of conduct and code of ethics – in second part write about how making code of conduct and code of ethics legally enforceable would be beneficial – in third part write about limitations of Code of conduct and Code of ethics – in fourth part write way forward.

Introduction

Both Code of Ethics and a Code of Conduct are similar as they are used in an attempt to encourage specific forms of behaviour by employees. Ethics guidelines attempt to provide guidance about values and choices to influence decision making. Conduct regulations assert that some specific actions are appropriate, others inappropriate.

Body

CODE OF ETHICS	CODE OF CONDUCT
It include core ethical values, principles and ideals of the organisation.	It is a directional document containing specific practices and behaviour that are followed or restricted under the organisation.
Code of ethics is a set of principles which influence the judgement.	Code of conduct is a set of guidelines that influence employee's actions.
Code of ethics are wider in nature as compared to code of conduct.	Code of conduct are narrow.

Making code of conduct and code of ethics legally enforceable would be beneficial because:
1. Code of ethics acts as a moral compass during decision making.
2. Huge Prevalence of corruption and Lack of probity in public life can be reduced.
3. Officials taking prejudiced decisions or favouring a ideology while discharging official duties will affect the socio-economic justice as envisaged by our Constitution.
4. It increases the accountability and transparency of the officers in their work.
5. Helps to curb the politician- bureaucrat nexus which leads to favouritism, crony-capitalism, and conflicts of interest.
6. Code of ethics would enable employees to make independent judgments about the most appropriate course of action.
7. A particular rule in the Code of Ethics might state that all employees will obey the law.
8. Code of conduct would enable employees to work in compliance with rules and actions are guided by the codes.

9. A Code of Conduct might list several specific laws relevant to specific areas of organisational operations, which employees need to obey.

However, the limitations of Code of conduct and Code of ethics are –
- A forced Code of conduct and Code of ethics will have limited utility as there is a need for improvement of morals, bring in a behavioural change in the officials and politicians
- Non-compliance of code of conduct derived from Code of Ethics can add to litigations and burden the already judiciary.
- Not possible to define everything in a code as the scope is too vast leading to ambiguous situations.

Way forward –
- The 2nd Administrative Reforms Commission (ARC) had proposed the inclusion of a Public Service Code in the draft Public Service Bill, 2007.
- The commission outlines the desirable qualities that make the civil services efficient. They include impartiality, integrity, dedication to public service, political neutrality, adherence to the highest standards of probity, objectivity, empathy for the weaker section of the public.
- It highlighted that efforts made by individuals in leadership positions in organization to inculcate these values in within the organization can make a difference.
- The Public Service code would facilitate the employees to discharge their official duties with competence and accountability, care and diligence, honesty, without discrimination and in accordance with law
- The statutory backing through Civil Services bill to the Code of Ethics would guide the civil servants towards behaviours, choices and actions that benefit the community.

Conclusion

In a democracy, all persons holding authority derive it from the people. All public functionaries are trustees of the people. Thus, a code of ethics and code of donduct must be present, however the legal enforcement is a topic which must be well deliberated before implementation.

34. Critically evaluate the performance of the Right to Information (RTI) in improving governance in India.

Approach - It expects students to write about – in first part write about performance of the Right to Information (RTI) in improving governance in India – in second part write about challenges with respect to RTI – in third part write about measures needed to strengthen RTI.

Introduction

The path-breaking Right to Information Act came into effect in 2005 with the objective to ensure accountability and transparency in governance. It has been heralded as the most significant reform in public administration in India since Independence.

Body

RTI has the very active and vital role in the good governance as follows:
1. Accountability- Making departments, ministries accountable for each action. E.g.: accountability for any delay and seeking the reason
2. Responsibility: RTI ensures responsible government by keeping it under the toes.
3. Transparency: RTI ensures transparent process in information dissemination, eliminating information Asymmetry etc.
4. Equity: It strives towards eliminating any kind of Institutional Elitism. All people regardless of class gets opportunity to seek information.
5. Efficiency and effectiveness: RTI procedures ensures timely dissemination of information with suo-moto declaration by department or ministry.
6. Participation of people in democratic process, a bottom up approach. It helps people in making informed choice.
7. Trust built-up: RTI strengthens the relationship between Principal {Citizen} and Agent {government}.
8. RTI helps the government in self-introspection to improve the governance process.

Challenges with respect to RTI –
- Attacks on Activists: There have been quite a few cases where people were killed. Unless the whistle blower protection act is implemented by notifying the rules, things will not change on ground.
- Frivolous RTI have been used by politicians to settle score and waste time.
- Implementation of Section 4: Most studies confirm that more than 50% of the applications filed under the RTI act ask for information that should have been disclosed under Section 4. Like it is emphasized by a sub-committee of Information Commissioners, section 4 implementation is going to be a crucial piece in the success of the RTI act.

Measures needed to strengthen RTI –

- Reduce pendency: To begin with, the government could take steps to reduce pending appeals. In June 2019, about 31,000 appeals were pending, over 9,000 of those pending for over a year.
- CIC as a constitutional body: The currently statutory body must be made a constitutional body to uphold its sanctity.
- Political parties under RTI: All political parties claim to serve the public but are unanimous in their reluctance to share information with citizens. They must be put under ambit of RTI.

Conclusion

The preamble of the Act itself provides that "Democracy requires an informed citizenry and transparency of information which are vital to its functioning and also to contain corruption and to hold governments and their instrumentalities accountable to the governed". The transformation from mere governance to good governance is possible only if the citizens of the country have right and access to information of and participation in the governance. The good governance is the governance in which people are served by their representatives not ruled by their representatives.
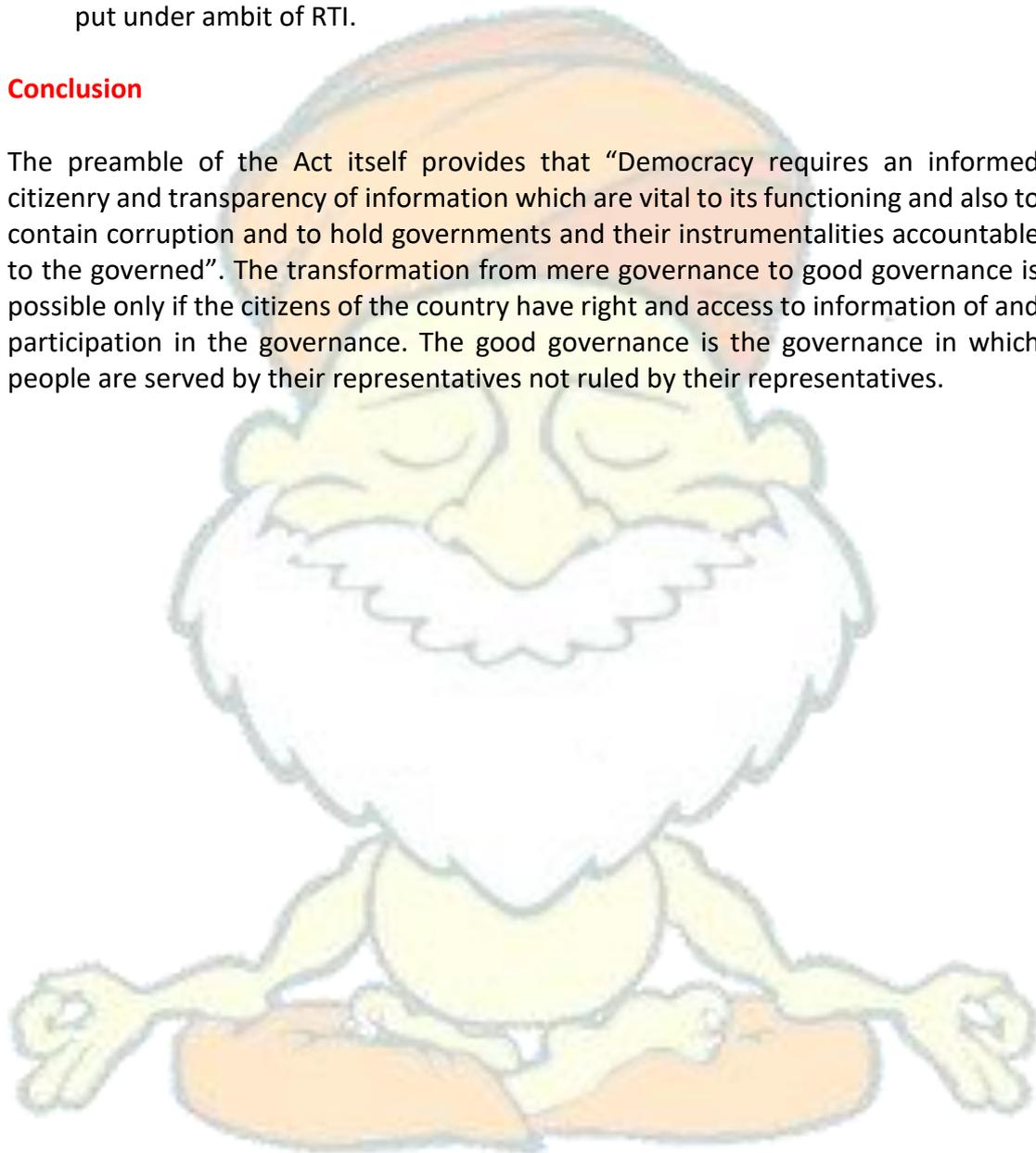
35. What are the recent trends in Indo-Bangladesh relations? Examine. What is the strategic significance of Bangladesh for India? Discuss.

Approach - It expects students to write about recent trend inIndia Bangladesh relations. Also highlight on strategic significance of Bangladesh for India.

Introduction

India was the first country to recognize Bangladesh as a separate and independent state and established diplomatic relations with the country immediately after its independence in December 1971. The relationship between India and Bangladesh is anchored in history, culture, language and shared values of secularism, democracy, and countless other commonalities between the two countries. It is based on sovereignty, equality, trust, understanding and win-win partnership that goes far beyond a strategic partnership.

Body

Recent trends in Indo Bangladesh relations:
1. Coastal surveillance: Both sides noted the progress made in finalization of a Memorandum of Understanding (MoU) on Establishment of Coastal Surveillance Radar System in Bangladesh. The coastal surveillance system will pave way for Indo-Bangladesh White Shipping Agreement in future. This will be useful amid growing terror threats via seas and growing presence of China in the Bay of Bengal region.
2. Line of credit: Since 2010, India approved three Lines of Credit to Bangladesh of $7.362 billion to finance development projects. But, because of bureaucratic red tapism, just $442 million have been disbursed until December 2018.
3. River water cooperation: Exchange of data and information to prepare a framework of interim sharing agreements for six rivers — Manu, Muhuri, Khowai and Gomati rivers of Tripura and Dharla river of Bangladesh and Dudhkumar river of West Bengal. Use of Bangladesh's Feniriver for drinking water supply in Tripura.
4. Teesta water agreement: Failed river water sharing agreements between India and Bangladesh despite many efforts. Chief among them is the Teesta agreement which was inked in 2011 but has not moved forward because of tensions between the Central and West Bengal governments.
5. Cooperation over pandemic related moves: Over the past months, Bangladesh has supported India's call for a regional emergency fund for fighting Covid-19 and declared a contribution of $1.5 million. India has also provided medical aid to Bangladesh.
6. Push to agreement on trans-shipment: The first trial run for trans-shipment of Indian cargo through Bangladesh to Northeast states under a pact on the use of Chittagong and Mongla ports took place recently.
7. Soft power: India also grants 15 to 20 lakh visas every year to Bangladesh nationals for medical treatment, tourism, work, and just entertainment.

8. Economic and development partnership: Bangladesh is India's biggest trade partner in South Asia with bilateral trade growing steadily over the last decade - India's exports to Bangladesh in 2018-19 stood at $9.21 billion, and imports from Bangladesh at $1.04 billion. Import of bulk Liquefied Petroleum Gas (LPG) from Bangladesh. Inauguration of Vivekananda Bhaban (student's hostel) at Ramakrishna Mission, Dhaka. Inauguration of Bangladesh-India Professional Skill Development Institute (BIPSDI) at the Institution of Diploma Engineers Bangladesh (IDEB), Khulna, Bangladesh.

Strategic significance of Bangladesh to India –

- India and Bangladesh share 4096.7 km. of border, which is the longest land boundary that India shares with any of its neighbours.
- Lying some 600 miles north of the Andaman Islands in the Bay of Bengal, with the major port of Chittagong and another, Cox's Bazaar, almost bordering its neighbour Myanmar, the country is an important littoral on our eastern seaboard.
- Bangladesh is India's biggest trade partner in South Asia. India's exports to Bangladesh for financial year 2018-19 (April-March) stood at US $ 9.21 bn and imports from Bangladesh for the same period stood at US $ 1.22 bn.
- Bangladesh's economy is now one-and-a-half times as large as that of West Bengal better integration between the two would provide a huge boost for eastern India. So would provide better connectivity between India's landlocked Northeast and Bangladesh.
- India has benefited from its security ties with Bangladesh, whose crackdown against anti-India outfits has helped the Indian government maintain peace in the eastern and northeast states.
- Increasing importance of Bangladesh in geopolitics of Indo-Pacific due to economic success of Bangladesh is drawing attention from a range of countries in East Asia, including China, Japan, South Korea, and Singapore. Dhaka is bound to intensify in the new geopolitics of the Indo-Pacific.
- India will inaugurate a new railway line with Bangladesh to save its 'Chicken's Neck' from China.
- India is also looking at fast-tracking the Bangladesh-Bhutan-India Nepal (BBIN) initiative which will boost connectivity among the South Asian neighbours through rail and road.

Way ahead -
- Lower hanging fruits: The sides can address the less conflictual issues, as it will be difficult to address the Teesta project before the West Bengal elections due next year.
- Implement its assurances in a time-bound manner: The greater attention is required to development projects in Bangladesh under the Indian Lines of Credit.
- Collaboration in the development of a Covid-19 vaccine: Including its trial, and looks forward to early, affordable availability of the vaccine when ready.

Conclusion

Both Bangladesh and India have great opportunities to resolve all the outstanding issues. India as a regional super power needs to take initiative and Bangladesh requires cooperating with India for fixing outstanding issues. Both the counties have to think for the economic ties instead of valuing the domestic politics. Central political objectives must supersede the regional or the state objectives for continuing and establishing the future relations.

36. Examine India's recent efforts to counter the threat of terrorism originating from Pakistan.

Approach - It expects students to write about – in first part write about terrorism issue arising from Pakistan – in second part write about steps taken by India to counter threat of terrorism – in third part write way forward.

Introduction

Bilateral relations of India and Pakistan have been under the shadow of misunderstanding, tensions and wars since 1947. To counter Pakistan, India has embarked upon a bi-dimensional strategy towards Pakistan. First, it has intensified its campaign to diplomatically isolate at various global forums. Secondly, it has inclined to use hard force when faced with terrorism.

Body

Pakistan and state-sponsored terrorism:
1. Pakistan has been accused by neighbouring countries India, Afghanistan and Iran and other nations, such as the United States the United Kingdom, and France of involvement in terrorist activities in the region and beyond.
2. Money is transferred to terror organization via Pakistan army.
3. Pakistan's tribal region along its border with Afghanistan has been described as a safe haven for terrorists by western media and the United States Defense Secretary. According to an analysis published, Pakistan was, "with the possible exception of Iran, perhaps the world's most active sponsor of terrorist groups... aiding these groups that pose a direct threat to the United States.
4. Pakistan's active participation has caused thousands of deaths in the region; all these years Pakistan has been supportive to several terrorist groups despite several stern warnings from the international community
5. The government of Pakistan has been accused of aiding terrorist organisations operating on their soil who have attacked neighbouring India.
6. Pakistan denies all allegations, stating that these acts are committed by non-state actors
7. Former Pakistan President Pervez Musharraf has admitted that Pakistan supported and trained terrorist groups like Lashkar-e-Taiba (LeT) in 1990s to carry out militancy in Kashmir from 1979 Pakistan was in favour of religious militancy
8. Many organizations change names and set up other organization to frame that Pakistan is looking into it.

India taken following steps to counter threat of terrorism originating from Pakistan:
- Government of India has created National Investigation Agency (NIA) in 2008 after Mumbai attacks which acts as a federal agency to combat terror.
- Multi Agency Centre (MAC) revamped after 26/11 attacks, acts as a multi-agency intelligence coordination mechanism for counter terrorism.
- Combating Financing of Terrorism Cell (CFT- Cell) is also created to deal with the policy matters on combating terrorist financing and Fake Indian Currency.

- India is also a member of FATF (Financial Action Task Force) whose aim is to establish international standards for combating money laundering and terrorist financing.
- Recently FATF puts Pakistan on 'grey-list' over global terror finance.
- The government has created observation posts, Border fencing, flood lighting, deployment of modern and hi-tech surveillance equipment.
- Comprehensive Integrated Border Management System (CIBMS) has replaced manual surveillance/patrolling of the international borders by electronic surveillance to enhance detection and interception capabilities.
- India has been supportive of all efforts, particularly in the UN to combat terrorism and has played a leading role in shaping international opinion and urging the international community to prioritize the fight against terror.
- India since 1996 is trying to push a global intergovernmental convention i.e. Comprehensive Convention on International Terrorism (CCIT) to tackle terrorism. It can provide a legal framework to enhance prosecution and extradition of terrorists.
- Continuous dialogues with neighbouring countries have been initiated from time to time for motivating them for a strict action against terrorists breeding in their respective territories.

Way Forward –
- There is a need to reassess our policies on number of issues pertaining to the management of India's international borders such as intelligence apparatus, internal security and border management.
- Technical solutions are necessary to augment and complement the traditional methods of border guarding.
- They not only enhance the surveillance and detection capabilities of the border guarding forces but also improve the impact of the border guarding personnel against infiltration and trans-border crimes.
- India should move in the direction of specialisation of military to fight cross-border terrorism.
- Military should also look at alternative means to strike at the terror camps across the LoC and LAC through mechanisms like Precision Engagement Capability.
- A judicious mix of properly trained manpower and affordable and tested technology is likely to yield better results.
- War against terrorism is a low intensity conflict or localized war and cannot be waged without the full and unstinted support of the society and can be lost easily if the morale and resolve of the society to fight against terrorism falters.

Conclusion

Since the remaining roots of militancy are now in Pakistan and PoK, and Pakistan is not inclined to bring to justice the leaders of terrorist organisations like the Lashkar-e-Taiba and the Jaish-e-Mohammed, terrorists they call 'strategic assets', they must be neutralised through strong deterrent and diplomatic and Isolation operations.

37. What are the major irritants in Indo-Nepal relations? What are their fallouts? Examine.

Approach - It expects aspirants to write about – in first part write about issues between India and Nepal – in second part write about fallout due to deteriorating relation between India and Nepal – in third part write way forward.

Introduction

Nepal is an important neighbour of India and occupies special significance in its foreign policy because of the geographic, historical, cultural and economic linkages/ties that span centuries. India and Nepal share similar ties in terms of Hinduism and Buddhism with Buddha's birthplace Lumbini located in present day Nepal.

Body

Issues and recent deterioration of India-Nepal ties:

1. Border issues: Nepal and India have some contentious issues relating to the border, including the two major areas of dispute at Susta and Kalapani (India-China-Nepal tri-junction). Countries agreed to start talks at the foreign secretary-level in order to resolve the problem however, only a single talk has taken place in 2015.

2. Internal Security: Open border between India and Nepal leads to illegal migration and human trafficking threatening Indian security. Indo Nepal border is used as launch pad by Maoist, terrorist and drug traffickers.

3. Nepal's new constitution and its aftermath: A new constitution was promulgated in Nepal in 2015.It gave extensive political privileges to the ruling hill tribes and discriminated against the people living in plains including Madhesis. It also made obtaining citizenship by Madhesis very difficult. This issue has emerged as a contentious issue between India and Nepal that was seen in form of economic blockade including blockade of gas supply, fuel etc. by India.

4. Big Brother attitude: There is a widespread perception in Nepal that India does not respect the country's sovereignty and that it often intervenes in Nepal's domestic affairs. India has been perceived to be playing a role of big brother in the region.

5. Peace and friendship treaty: The India-Nepal treaty of 1950 has been criticised by the Nepali political elite as an unequal one. Treaty obliged Nepal to inform India and seek its consent for the purchases of military hardware from third countries. Nepal wants to change this provision.

6. Nepal's growing proximity to China: In recent times China's presence has increased in Nepal that has heightened India's security concerns. China plans to extend the Tibet railway to Kathmandu across the border in the next few years. Nepal signed the Belt and Road Initiative (BRI) Framework agreement with China last year. China is trying to contest Indian interests by cultivating local interest groups that could advance China's interests in Nepal.

7. Demonetisation: Demonetisation has badly affected Nepali nationals because those notes were legal tender in Nepal too. Nepal has time and again requested

that the Indian government make arrangements for the exchange of those notes held by Nepali nationals and its central bank.

Fallout due to deteriorating relation between India and Nepal:
- In the past, Chinese interest in Nepal was to ensure that Nepalese territory is not used by Tibetans for the breeding of discontent.
- However, in recent times, China has made inroads into Nepal in infrastructure, education and health sectors. Also, Nepal wants to take advantage of the BRI project built by China.
- India feels that the Chinese inroads into Nepal are necessarily to counterbalance the Indian influence in Nepal. However, Nepal has asserted that its relationship with China is purely economic and will not be hurting the Indian strategic interests in any way.
- Also, India is of the view that the rising Nepal and China cooperation would undermine Nepal's distinction of buffer state between India and China.
- Kathmandu has continued its long-standing efforts to spread Nepal's options beyond India.
- Multilateral development banks are by far the biggest lenders and players in the country's development efforts. And in fact, one of Nepal's largest aid donors is the European Union.
- India and China are not the only players for big projects either. A long-delayed project to pipe water into Kathmandu was with an Italian company.
- Major investments in the telecom sector are coming from Malaysia, and the largest international carrier in Nepal is Qatar Airways.
- The outward movement of students, along with the growth of institutions of higher learning at home, has meant that youngest people in Nepal, including emerging contemporary leaders in politics, business or academics, have not studied in India.
- This lack of common collegiate roots removes a natural bond of previous generations that had provided for better understanding and even empathy.

Way Forward –
- Given the importance of ties with Nepal, often romanticised as one of "roti-beti" (food and marriage), India must not delay dealing with the matter, and at a time when it already has a faceoff with China in Ladakh and Sikkim.
- Since the free movement of people is permitted across the border, Nepal enjoys immense strategic relevance from India's national security point of view, as terrorists often use Nepal to enter India. Therefore, stable and friendly relations with Nepal is one of prerequisites which India can't afford to overlook.
- India should also try to convey to Nepal's leadership about the congenial and friendly environment that 6 to 8 million Nepali citizens living in India enjoy. Therefore, any thoughtless erosion of this centuries old togetherness may prove difficult for both countries.
- The existing bilateral treaties between India and Nepal have not taken the shifting of Himalayan rivers into consideration. A primary reason for this is the lack of an approach where ecological concerns and needs of rivers are often

discussed. Therefore, India and Nepal should try to resolve the boundary dispute by taking into account all shared environmental characteristics.

Conclusion

Centuries of social, cultural, political, strategic, and economic ties can only remain strong if they can remain relevant to changing times. The governments of India and Nepal must reset the narrative, modernize their policies, and get out of the way so that the ties between people thrives again.

38. India's influential diaspora is a big strategic asset for India. Do you agree? Comment.

Approach - It expects students to write about Indian diaspora and highlight on whether Indian diaspora is big strategic asset for India.

Introduction

According to Global Migration Report 2020, India continues to be the largest country of origin of international migrants with a 17.5 million-strong diaspora across the world, and it received the highest remittance of $78.6 billion (this amounts to a whopping 3.4% of India's GDP) from Indians living abroad.

Body

Indian diaspora:
- The Indian migration began in large numbers during the British rule as indentured labourers to former colonies like Fiji, Kenya and Malaysia. It continued in the post-independence period with Indians from different social strata moving to countries like the United Kingdom, the United States, and Gulf countries.
- In India, diaspora is commonly understood to include Non-Resident Indians (NRIs), Persons of Indian Origin (PIOs) and Overseas Citizens of India (OCI), of which PIO and OCI card holders were merged under one category — OCI — in 2015.

Indian diaspora as a biggest strategic asset for India:
- Global labour source: With one of the largest pools of relatively low wage semi-skilled and skilled labour, India can become a critical centre of global labour sources. The past few decades has seen an upsurge of migration from India to the Gulf and, to North America. Given these emerging realities, India take advantage of these future trends to not only maximise the welfare of Indians outside the country, but also those within the country Can international migration and the Diaspora be a strategic asset for the country instead of just depleting its best and brightest.
- Influential Positions: From Google CEO SundarPichai to Nobel laurete scientist HarGobind Khorana and Microsoft CEO Sathya Nadella to world's one among the leading music conductors Zubin Mehta, the list of NRIs and their contribution to the world goes endlessly. The President of Singapore, Governor-General of New Zealand and prime ministers of Mauritius and Trinidad and Tobago were all of Indian descent.
- As a Pressure groups: The influential Indian diaspora affects not just the popular attitude, but also government policies in countries where they live, to the benefit of India. India benefits tremendously through these people in luring large multinational companies as well as entrepreneurial ventures. Example: lobbying for the US-India Civilian Nuclear Agreement Bill in 2008

- Agents of change: Diaspora acts as 'agents of change' facilitating and enhancing investment, accelerating industrial development, and boosting international trade and tourism. Another tangible long-term advantage in nurturing ties with an active Diaspora is an accelerated technological sector.
- Soft Power: The spread of Yoga, Ayurveda, Indian spiritualism, Bollywood, Indian cuisine across the world has made India famous. It has even led to revival of many lost relationships with many countries.
- Humanitarian Assistance:There are many instances where diaspora has stood up for their Indian kins in times of disaster.Example: during the recent Kerala floods, immense help in the form of men, material and money from diaspora was given. Indian diaspora residing in China's Shanghai has contributed Rs. 32.13 lakh to the Chief Minister's distress relief fund for Kerala floods.
- Political power: Many people of Indian origin hold top political positions in many countries, in the US itself they are now a significant part of Republicans and Democrats, as well as the government. The three ministers Rishi Sunak, Alok Sharma, and PritiPatel have held top roles in the UK government currently.

Government initiatives to strengthen the Indian diaspora:
- There is a Memorandum of Understanding (MOU) between the Ministry of External Affairs (MEA) and the Ministry of Skill Development and Entrepreneurship (MSDE) for implementation of the Pravasi Kaushal Vikas Yojana (PKVY).
- Know India Program' (KIP) is a flagship initiative for Diaspora engagement which familiarizes Indian-origin youth (18-30 years) with their Indian roots and contemporary India.

Challenges Faced by Indian Diaspora:
- West Asian Crisis: The volatility in West Asia, together with the fall in oil prices, has caused fears of a massive return of Indian nationals, curtailing remittances and making demands on the job market.
- Returning Diaspora: India must also realise that diaspora in West Asia is semi-skilled and mainly engaged in the infrastructure sector. After the infrastructure boom will get over India should be ready for the eventuality of Indian workers returning. Returning to due COVID 19 pandemic lockdown.

Way forward –
- Deepening links within existing Diaspora: India needs to court two important, but untapped, segments of the existing Dia-spora: the young, second generation of overseas Indians; and those approaching retirement.
- Diversify: Currently, Indias migration is concentrated in English-speaking countries for obvious reasons. The EU, Japan, Latin America and Russia should also be targeted over the next few decades. Also, there is greater scope for jobs at all skill levels in global transportation, health and home care. This requires major investments in specific educational services.

- Increase investment engagement: Diaspora should be treated at par with other Indian citizens, including the right to work, both in the private and public sectors, and the right to buy and sell property to attract talented persons into the public sector.

Conclusion

The Sun never sets in the Indian Diaspora. With the versatile role of Diaspora, India could fulfil its cherished dream of being a super power and it could make much head way in its international and foreign affairs. The Indian diaspora is the bridge between their nation and India where they can grow simultaneously for betterment of their citizens. The diaspora can provide the requisite strategic impulse, which makes it all the more important to unlock their potential.
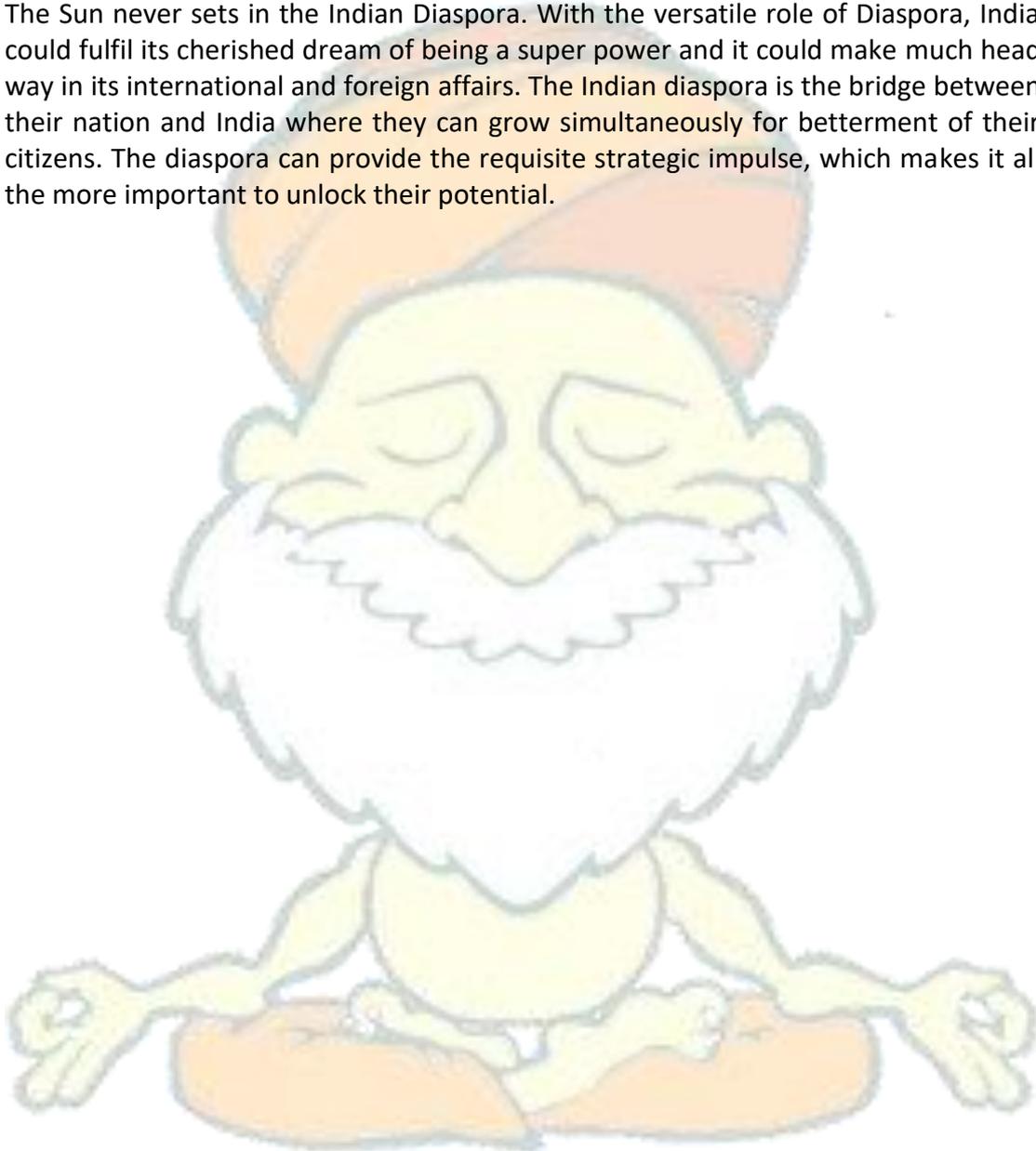
39. Indo-Japan relations have achieved greater strategic heights in recent years. Do you agree? Examine the background.

Approach - It expects aspirants to write about – in first part write about strategic ties between India-Japan – in second part write about areas of concern between two countries.

Introduction

"We see Japan as a natural partner in our journey of becoming a major centre of manufacturing, investments & knowledge industries" – Indian prime minister. India and Japan relation has been time tested and are major partners of development as well as defence in the Asian/indo-pacific region.

Body

India-Japan strategic ties:
1. Quad grouping: Both countries have a rivalry with China and to counter its behaviour in the Indo-Pacific region the two countries formed the Quad which includes the USA and Australia too.
2. 2+2 dialogue: Japan is only the second country (after the United States) with which India has such a dialogue format. The India-Japan 2+2 dialogue is an endorsement of the special strategic partnership between New Delhi and Tokyo.
3. Japan is the most important partner in Indo-Pacific region. After the joint army (Dharma Guardian), navy (Malabar) and air force exercises (SHINYUU Maitri-18), the two nations are looking to allow their respective naval forces to use each other's facilities.
4. Both countries have a rivalry with China and to counter its behaviour in the Indo-Pacific region the two countries formed the Quad.
5. India and Japan share robust ties with cooperation in areas of defence, science and cooperation and trade.
6. In 2014, India and Japan upgraded their relationship to 'Special Strategic and Global Partnership'.
7. The India-Japan Comprehensive Economic Partnership Agreement (CEPA) that came into force in August 2011 covers trade in goods, services, movement of natural persons, investments, Intellectual Property Rights, custom procedures and other trade related issues.

The areas of concern between India and Japan –
- Focused on countering China
  - Both countries have border and hegemonic issues with China. So their policy stance hinges generally on China, rather than growing comprehensively.
- Security ties

- o In matters of security realm, Indo-Japanese relationship has remained below potential, and that Japan does not accord due importance to India in its security calculus.
- o Japan has offered neither military hardware nor technology to India. There seems to be a difference in perceptions about China;
  - Japan, while highlighting its own security concerns in the East and South China Seas, is seen to play down the multiple threats that India faces from China.
- Trade between the two countries
  - o Today, India-Japan trade languishes at around $15 billion, while Japan-China trade is around $300 billion.

Conclusion

In a world where protectionism is becoming the new normal and tit-for-tat escalation is on the rise, Japan carves out a different path. As a reluctant globalist turned free trade champion, it is evident that Japan's trade policy agenda will be an important tool to provide economic stability, growth and development in the foreseeable future. At a critical juncture when India is leaping to further greatness coinciding with the 75th anniversary of her Independence in 2022, Japan and India have so many potential areas to tap jointly.
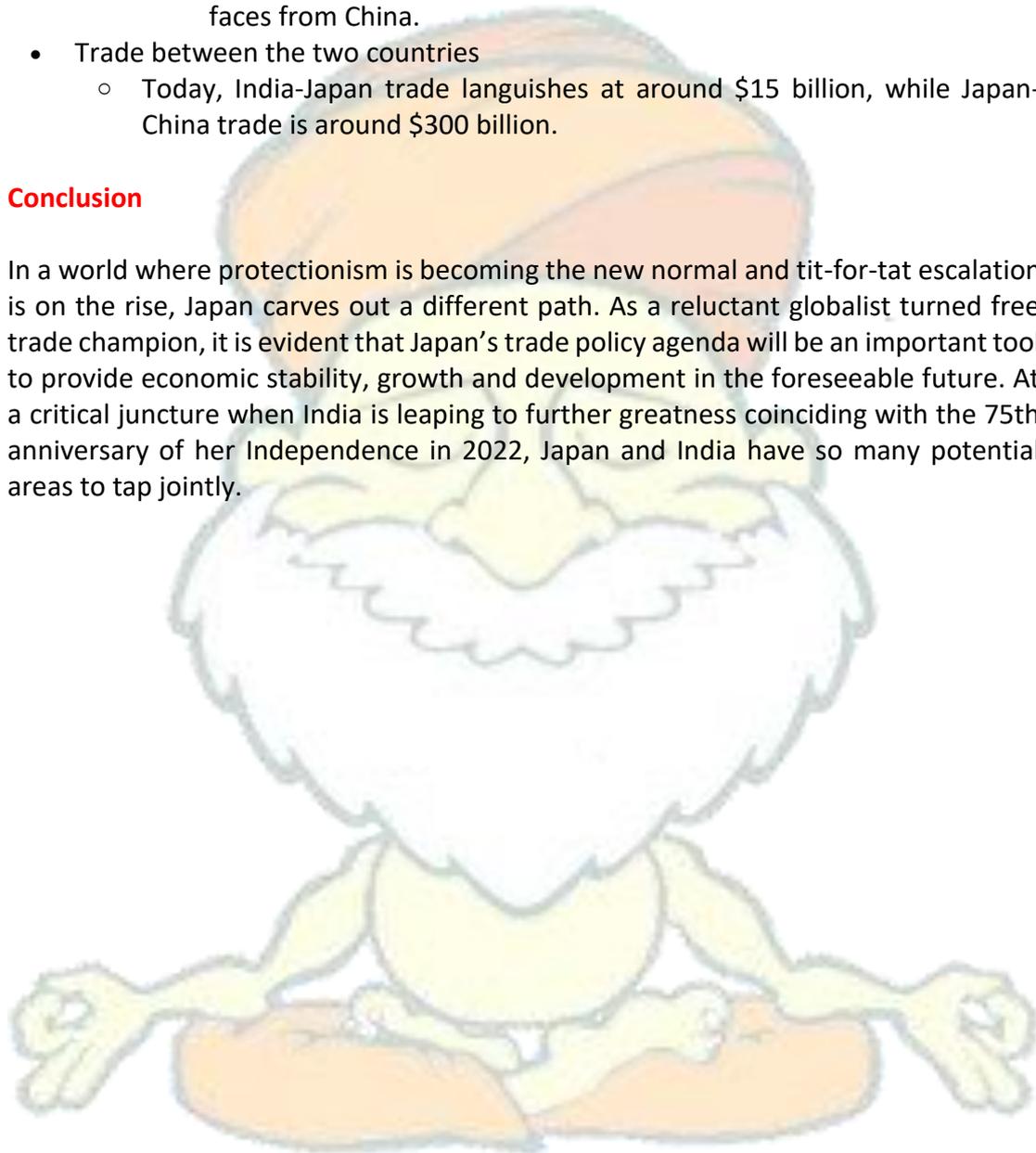
40. What are India's interests in ASEAN? In this regard, what are current impediments and opportunities? Examine.

Approach - It expects aspirant to write about – in first part write about Significance of ASEAN for India – in second part write about challenges related to India-ASEAN – in third part write about what further measures required.

Introduction

South-east Asia is a diverse and complex region where every major culture and civilisation of the world finds a place. Since 1992, ASEAN-India partnership has evolved from sectoral dialogue to strategic partnership.

Body

ASEAN Significance for India:
- Economic Significance
  - 3 Cs–Culture, Connectivity and Commerce– will shape India's ties with the ASEAN bloc.
  - Connecting India's North-eastern states with ASEAN.
  - India is part of ASEAN led RCEP which aims to create the world's largest free trade area with more than a third of the global GDP and commerce.
  - For the first time, bilateral trade between ASEAN and India has crossed US$ 80 billion mark.
  - Singapore has become India's investment and trading hub in the East.
- Security Significance
  - ASEAN occupies a central place in the security architecture of the Indo-Pacific region
  - Maritime cooperation in terms of connectivity, safety and security has gained high attention.
  - India and ASEAN can collaborate to combat terror financing, cyber security threats, tax evasions and many more.
  - India needs ASEAN support in achieving a rules-based regional security architecture.
- Geo-Strategic Significance
  - Partnership with ASEAN nations might help India counter the growing presence of Beijing.
  - ASEAN is seen as the most successful regional organisation next only to the EU
  - To develop connectivity through water, ASEAN and India are working on the KaladanMultiModal Transit Transport Project.
  - ASEAN-India cooperation in maritime domain is one of the key focus areas for growth and development of the Indo-Pacific region.

Challenges related to India-ASEAN:
- SMEs are a vital aspect of both Indian as well as the ASEAN economy, contributing nearly 45% to the Indian manufacturing.

- However, a range of factors hamper FDI inflows and SMEs collaboration between India and ASEAN countries.
- Some of them include:
  - challenges in establishing a supply chain
  - poor infrastructure
  - bad maritime and air connectivity
  - bureaucratic costs involved in complex tax and duty structures
  - licensing, and other business activities
- Complexity - All the countries of the region have differing levels of socio-economic development, posing a challenge.
- The Indian SMEs have to adjust with a new set of supply-chain strategies to each country's varying regulatory requirements.
- Technology - The SME sector in India is hugely dependent on foreign technologies because of lack of in-house R&D.
- China - The CLVT countries (Cambodia, Laos, Vietnam and Thailand) are emerging as manufacturing hotspots for China.
- China is increasingly outsourcing its production to countries along the Belt and Road project, mainly ASEAN members.
- Given the low levels of manufacturing, these countries stand to gain from industrial capacity cooperation with China.

Following steps should be taken to resolve issues:

- Technological upgrading is pivotal to enabling the SMEs to be more competitive in the global market.
- India's logistics sector and the supply-chain environment should be developed to a world-class level.
- The ongoing projects and arrangements for infrastructure development and connectivity should be carried on without delays.
- They include:
  - India-Myanmar-Thailand Trilateral Highway
  - Bangladesh, Bhutan, India and Nepal (BBIN) Motor Vehicles Agreement, 2016
  - Kaladan Multimodal Transit Transport Project (linking the Kolkata with Myanmar's Sittwe port)
- LDCs of ASEAN bloc, like Laos, Vietnam, Cambodia and Myanmar, are the beneficiaries of generalised system of preferences in US and EU.
- Indian manufacturers setting up business units here are bound to get the benefits while exporting to the US and EU markets.
- India must use the upcoming commemorative summit to project it as a lucrative investment destination for the ASEAN countries.

Conclusion

India's geostrategic interests in the Indo-Pacific region depend on India's bilateral and multilateral engagements with the countries in the region. Maintaining cordiality with ASEAN as an organisation and with the individual Southeast Asian countries

General Studies – 3

41. What are the commercial prospects of IoT in India? What are the challenges in its adoption? Discuss.

Approach - As the directive here is discuss it is necessary to consider various angles and provide a solution to challenges. In the introduction you can start by explaining what IoT is. In the first half of main body part give commercial prospective applications of IoT in India. In the next half give challenges. A brief way forward with conclusion will fetch you more marks.

Introduction

Internet of Things (IoT) is the interconnection of digital devices, electronic appliances, human, machines, and other objects with one another across a wireless networks. It is the next step in evolution of internet and has the potential to improve public utility services thereby improve their efficiency.

Body

Commercial prospects of IoT in India:
- As per Nasscom, the Indian IoT market is expected to reach $15 billion by 2020 and constitute 5 % of the global market.
- Investing in IoT will boost India's economy on par with global leaders. Many of global counterparts have already begun reaping the rewards of investing in IoT-based infrastructure. It will bring in investments, boost job creation and improve Indian public infrastructure.
- With a network of interconnected devices, the economy becomes digital, the healthcare network and services will get interconnected. For instance, voice-enabled systems to remind people to take their medication in time.
- It has tremendous potential to improve commercial prospects for the care/service of vulnerable sections of society. For instance, Japan is using humanoid smart robots as elder care robots.
- In the field of agriculture, it can be used to improve overall productivity by having enhanced weather forecasting, soil nutrient content, pest infestation, etc.
- Besides in Industry, IoT can be used to reduce human error, increase efficiency, and improve productivity, etc.
- Commercial prospects of IoT in the transportation sector has humongous potential. It has commercial prospects to revolutionise the transportation sector. For instance, IoT can be used on toll booths, traffic management, driverless cars, etc.
- Also, Indian government has outlined a plan to leverage IoT as part of the Digital India mission and the National Digital Communications Policy has come out with a machine-to-machine (M2M) roadmap, with an aim to put

regulators, industry agencies that develop standards, users and manufacturers on the same page.

Challenges in adoption of IoT:

- Complexity: The designing, developing, and maintaining and enabling the large technology to IoT system is quite complicated.
- Evolution of IoT faces the threat of data security. The Data Protection framework submitted by the Justice Srikrishna Committee had provisions for personal data protection.
- Job loss threat: Automation in Industries will naturally bring in job losses. It will lead to replacement of humans with machines.
- Lack of Transparency: As per IoT Security Foundation report, many of the IoT brands did not want to share vulnerabilities in their application/service with the public.
- Adaptation only with Artificial Intelligence: Processing the tremendous amount of real-time IoT data is possible only through artificial intelligence or AI algorithms. If AI systems power essential functions of smart cities, preventing hackers and miscreants from accessing it and manipulating its data still remains a challenge.
- Specifically with respect to India, its data security concerns are widened as Justice BN Srikrishna commission recommended Aadhaar Act 2016 should be amended to ensure the autonomy of the UIDAI and to "bolster data protection".
- Justice BN Srikrishna commission also expressed concerns citing RTI act. It also recommended that RTI Act 2003 should be amended so, that there is no obligation to reveal personal information which was not related to "public activity or interest".

Although IoT technology has tremendous potential to change the world, with greater advantage comes a potential risk to privacy. Hence, following steps are needed to be taken up:

- Across the world, legislators, device manufacturers, and law enforcement agencies should come together to figure out how to benefit from IoT while mitigating risks.
- The government also permitted 100% FDI in the telecom sector. This should also aid the development of IoT in India.
- The Department of Electronics and Information Technology (DeiTY) also published a draft policy for IoT in India. Which needs to be modified as per requirement of the time.

Conclusion

IoT technology has the potential to facilitate the 'convergence of real and virtual world'. An integrated, concerted and collaborative policy approach is necessary to fully utilise the potential of IoT. It will not only boost growth and development of India but it will also ensure better facilitation of products and services to the Indian citizens thereby easing their lives.

42. What are the challenges posed by deep fakes? What can be the possible strategy to counter it? Suggest.

Approach - It expects students to write about deep fakes and its challenges, also suggest possible strategy to counter it.

Introduction

The word deepfake combines the terms "deep learning" and "fake," and is a form of artificial intelligence. In simplistic terms, deepfakes are falsified videos made by means of deep learning. Deep learning is "a subset of AI," and refers to arrangements of algorithms that can learn and make intelligent decisions on their own. This technology can be used to make people believe something is real when it is not.

Body

Challenges posed by deepfakes:
1. Damage to Personal Reputation: Deepfake can depict a person indulging in antisocial behaviours and saying vile things. These can have severe implications on their reputation, sabotaging their professional and personal life. Even if the victim could debunk the deep fake, it may come too late to remedy the initial harm. Further, Deepfakes can be deployed to extract money, confidential information, or exact favours from individuals.
2. Disrupting Electioneering - A high-quality deepfake can inject compelling false information that can cast a shadow of illegitimacy over the voting process and election results. Leaders can also use them to increase populism and consolidate power. Deepfakes can become a very effective tool to sow the seeds of polarisation, amplifying division in society, and suppressing dissent.
3. Undermining Democracy - A deepfake can also aid in altering the democratic discourse and undermine trust in institutions and impair diplomacy. False information about institutions, public policy, and politicians powered by a deepfake can be exploited to spin the story and manipulate belief.
4. Targeting Women - The malicious use of a deepfake can be seen in pornography, inflicting emotional, reputational, and in some cases, violence towards the individual.
5. Pornographic deep fakes can threaten, intimidate, and inflict psychological harm and reduce women to sexual objects. Deepfake pornography majorly targets women.
6. New Front of Warfare - A deepfake could act as a powerful tool by a nation-state to undermine public safety and create uncertainty and chaos in the target country.
7. Nation-state actors with geopolitical aspirations, ideological believers, violent extremists, and economically motivated enterprises can manipulate media narratives using deepfakes. It can be used by insurgent groups and terrorist organisations, to represent their adversaries as making inflammatory speeches or engaging in provocative actions to stir up anti-state sentiments among people.

8. Catfish accounts - Catfishing refers to the practice of setting up fictitious online profiles most often for the purpose of luring another into a fraudulent romantic relationship.
9. Spreading distrust - Distrust through victimisation, extortion business, factual relativism, communal chaos, hate speeches

Possible strategy to tackle deepfakes -
- Detect and amplify: We also need easy-to-use and accessible technology solutions to detect deepfakes, authenticate media, and amplify authoritative sources.
- Need for Regulation: Meaningful regulations with a collaborative discussion with the technology industry, civil society, and policymakers can facilitate disincentivizing the creation and distribution of malicious deep fakes.
- Technological Interventions: There is also a need for easy-to-use and accessible technology solutions to detect deep fakes, authenticate media, and amplify authoritative sources.
- Enhancing Media Literacy: Media literacy for consumers and journalists is the most effective tool to combat disinformation and deep fakes. Improving media literacy is a precursor to addressing the challenges presented by deepfakes. As consumers of media, they must have the ability to decipher, understand, translate, and use the information. Even a short intervention with media understanding, learning the motivations and context, can lessen the damage.

Conclusion

To counter the menace of deepfakes, we all must take the responsibility to be a critical consumer of media on the Internet, think and pause before we share on social media, and be part of the solution to this infodemic. To defend the truth and secure freedom of expression, there is a need for a multi-stakeholder and multi-modal approach. Collaborative actions and collective techniques across legislative regulations, platform policies, technology intervention, and media literacy can provide effective and ethical countermeasures to mitigate the threat of malicious deep fakes.

43. What is your assessment of India's recent commitment to global efforts for combating climate change? Comment.

Approach - It expects you to write about climate change and assess the India recent commitment to global efforts for combating climate change.

Introduction

Climate change is the global phenomenon of climate transformation characterised by the changes in the usual climate of the planet (regarding temperature, precipitation, and wind) that are especially caused by human activities. As a result of unbalancing the weather of Earth, the sustainability of the planet's ecosystems is under threat, as well as the future of humankind and the stability of the global economy.

Body

India's recent commitments to global efforts for combating climate change:
1. Coalition in resilient future: India is also keen on fostering international cooperation to fight climate change. Prime Minister highlighted that India along with France set up the International Solar Alliance (ISA). ISA promotes and facilitates cooperation on solar among developing countries.
2. Infrastructure to prevent disaster: The Coalition for Disaster Resilient Infrastructure is an international organisation in the making. The coalition will work towards a common goal of establishing infrastructure which is resilient to pressures of climate change and environmental disasters. India has pledged INR 4.8 billion (Around USD 70 million) to the CDRI.
3. Paris agreement: Ratifying the Paris Agreement in 2016, India's pledge lays out a comprehensive approach to limit climate impacts while fostering economic growth. India is an emerging economic powerhouse. It is also the world's third-largest energy consumer and greenhouse gas (GHG) emitter where Indian efforts to fast track Paris commitments will clearly help in speeding global efforts due its size.
4. Sustainable Mobility: Increasing the fleet of electric vehicles and its charging infrastructure in India with FAME II will be key to improve air quality in cities, enhance energy security by reduced dependence on imported crude, and is also a key solution to fight climate change.
5. Innovative technologies: India is partnering 22 member countries and the European Union in the 'Mission Innovation' on clean energy, and is co-lead in smart grid, off-grid and sustainable biofuels innovation challenges.
6. Taking leadership: India is on track to meet its Copenhagen commitments. Such an effort will help India take leadership role in tackling climate change across the globe and thus ensuring fast-tracking of global efforts.
7. Renewable energy commitments: UN's Climate Week in New York this past September, India's Prime Minister committed to a target of 450 gigawatts (GW) of renewable energy installations, likely by 2030equivalent to five times more than India's current installed renewable capacity (82.6 GW) and bigger than the size of India's electricity grid size in 2019 (362 GW).

Assessment of India's commitments to combat climate change:

- Per capita, India's emission from fossil fuels (in 2017) is by far the lowest among major economies at 1.83 MT carbon dioxide (CO_2). Despite its low per capita emissions, India has made significant commitments in its Intended Nationally Determined Contribution (NDC). However, to meet our Paris commitments and fully implement our NDCs in a timely manner, India requires Conclusion enhanced new and additional financial, technological and capacity building support, which has been missing on the global front.
- The Green India Mission, which seeks to work towards the target is woefully underfunded and has been regularly missing its annual targets. This has rendered the fulfilment of the 2030 pledge hard if not altogether unlikely.
- India's third NDC commitment is to create an additional carbon sink of 2.5 to 3 billion tons of carbon dioxide equivalent through additional forest and tree cover by 2030. However, the progress has been limited and the country has more work to do on this target.
- In its second Biennial Update Report submitted to the UNFCCC in 2019, India claimed to have reduced the emission intensity of its economy by 21 per cent by 2014. But it didn't specify emissions data for 2005 or the GDP data series used to arrive at the conclusion.
- Among the Group of 20 (G-20) countries, which are some of the biggest GHG emitters, only India and the UK rank among high performers. In fact, eight of the G-20 countries rank among low performers. This clearly shows that individual performance can't bring about much change in global discourse.
- The Climate Action Tracker website has rated India's climate efforts as "2-degree compatible" — that can contribute to limiting warming by the end of the century to 2° Celsius; making India the only major economy to be so highly rated. This showcases the global significance of Indian efforts.

Conclusion

Climate change strategy needs to focus on supporting design of policies and action plans, promoting early adaptation as well as long-term strategies like directing investment towards low carbon technologies and practices and finally integrating climate change broadly into development assistance at the global, regional and national levels.

44. Examine the problem of groundwater contamination in India's agrarian states. What are the possible ways to address this challenge? Discuss.

Approach - It expects students to write about ground water contamination problem in India's agrarian states. And also highlight few possible way to address the challenge of ground water contamination problem.

Introduction

Groundwater contamination occurs when man-made products such as gasoline, oil, road salts and chemicals get into the groundwater and cause it to become unsafe and unfit for human use. Materials from the land's surface can move through the soil and end up in the groundwater. For example, pesticides and fertilisers can find their way into groundwater supplies over time as seen in India's many agrarian states.

Body

Problem of Ground water contamination in Indian agrarian states:
1. DDT, BHC, carbamate, Endosulfan, etc. are the most common pesticides used in India. But, the vulnerability of groundwater to pesticide and fertiliser pollution is governed by soil texture, pattern of fertiliser and pesticide use, their degradation products, and total organic matter in the soil.
2. A recent study conducted by the Water Resources Ministry and a comparative analysis of the data done by The Tribune, reveals that while Haryana is on the top with regard to overall contamination of underground water, Punjab has the highest quantity of Nitrate, Cadmium and Chromium (heavy metals) among the region's states.
3. Indiscriminate extraction of groundwater for irrigation purposes has led to inland salinity problem in parts of Punjab, Haryana. Uranium contamination has aggravated by groundwater-table decline. Decline in groundwater table induces oxidation conditions. As a result, uranium enrichment in shallow groundwater is enhanced.
4. A recent survey undertaken by Centre for Science and Environment from eight places in Gujarat, Andhra Pradesh and Haryana reported traces of heavy metals such as lead, cadmium, zinc and mercury. Shallow aquifer in Ludhiana city, the only source of its drinking water, is polluted by a stream which receives effluents from 1300 industries.
5. Arsenic contamination is by far the biggest mass poisoning case in the world putting 20 million people from West Bengal.
6. There are no estimates of the public health consequences of groundwater pollution as it involves methodological complexities and logistical problems. Pesticide are toxic or carcinogenic. Generally, pesticides damage the liver and nervous system. Tumour formation in liver has also been reported.

Issues in Tackling Groundwater Contamination and Pollution in agrarian states:
- Lack of data and information: The step towards evolving measures to prevent and cure groundwater quality deterioration is generating reliable and accurate

information through water quality monitoring (WQM) to understand the actual source/cause, type and level of contamination. However, there are a few observation stations in the country that cover all the essential parameters for water quality and hence the data obtained are not decisive on the water quality status.

- Costly water technologies: WQM involve expensive and sophisticated equipment's that are difficult to operate and maintain and require substantial expertise in collecting, analysing and managing data. Since water technology is still not advanced in India, it is very likely that the available data is less reliable.
- Inadequate methods: The existing methodology for WQM is inadequate to identify the various sources of pollution. Integration of data on water quality with data on water supplies, which is very important from the point of view of assessing water availability for meeting various social, economic and environmental objectives, is hardly done.
- Varying results: In the absence of any stringent norms on water quality testing, results can change across agencies depending on sampling procedure, time of testing, and testing instruments and procedure.

Possible ways to address this ground water contamination challenges:

1. Bioremediation: Bioremediation of an aquifer contaminated with organic compounds can be accomplished by the biodegradation of those contaminants and result in the complete mineralization of constituents to carbon dioxide, water, inorganic salts, and cell mass, in the case of aerobic metabolism; or to methane, carbon dioxide.

2. Recharging water table: Artificial recharge could push seawater-freshwater interface seawards. These techniques can also be used to reduce the levels of fluoride, arsenic or salinity in aquifer waters on the principle of dilution.

3. In situ treatment: In Indian context, it is not economically viable to clean aquifers. In the case of arsenic, methods for in situ treatment have already been in used. In situ- valent, iron permeable reactive barriers (PRBs) are used in situ to remove chromium and several chlorinated solvents in groundwater and are tested successful for removing arsenic.

4. Reverse Osmosis (RO): It is a process to get rid of all the impurities in drinking water including deadly ions and organisms and pesticide/fertiliser residues. RO systems are suitable for removing several of the toxic substances present in water in dissolved form, including fluoride, fertiliser and pesticide residues, and heavy metals.

5. A coagulation system: Household arsenic treatment method is the ferric chloride coagulation system. This involves precipitation of arsenic by adding a packet of coagulant in 25 litres of tube well water, and subsequent filtration of the water through a sand filter.

6. Community Aquifer Management: A more practical consideration was to use groundwater associations as agents in monitoring and enforcement of government policies and laws. The idea of groundwater organisations has a wide appeal; it was advocated to India by a British Geological Survey study.

7. Research in water resource: Information Systems and Resource Planning through establishing appropriate systems for groundwater monitoring on a regular basis and undertaking systematic and scientific research on the occurrence, use and ways of augmenting and managing the resource
8. Water user associations (WUAs): By emphasising on local-level institutions like the WUAs, the Atal Bhujal Yojana has signalled the Jal Shakti ministry's inclination towards such persuasive solutions.

Conclusion

The livelihoods of the millions of people that rely on groundwater for drinking water and agriculture are currently at risk and this situation will worsen if unsustainable practices remain. The alluvial Indo-Gangetic plains in north-west India are particularly highly contaminated, especially in the agriculturally intensive "breadbasket" areas in Punjab and Haryana. For the long run, policies need to be focused on building scientific capabilities of line agencies concerned with WQM, water supplies, and pollution control; and restructuring them to perform WQM and enforcement of pollution control norms effectively and to enable them implement environmental management projects.
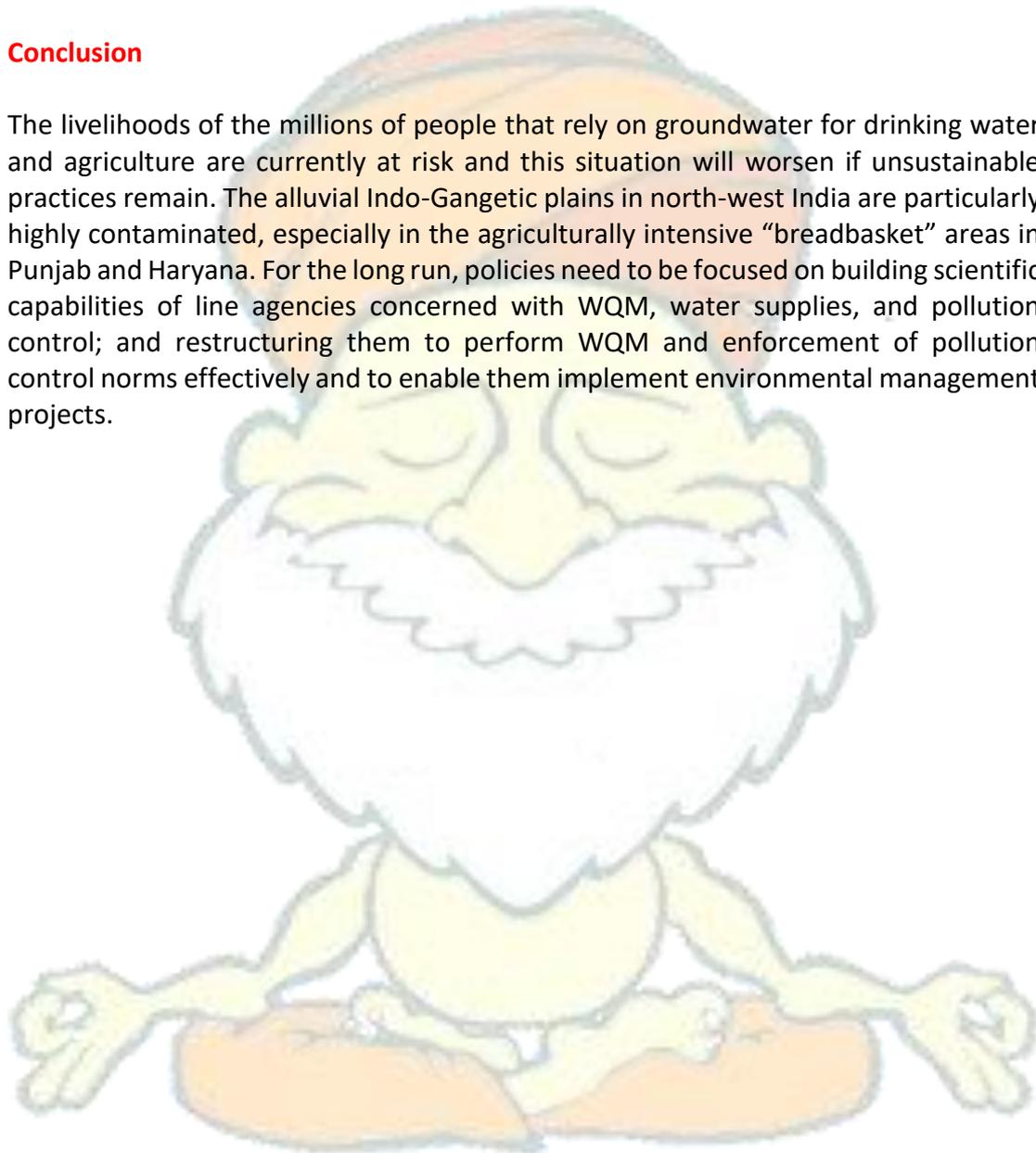
45. What are the key principles and objectives of environmental impact assessment (EIA)? Illustrate with the help of suitable examples.

Approach - It is straightforward question where it expects students to write about - in first part write about main Principles of Environment Impact Assessment (EIA) - in second part write about various objectives of Environmental Impact Assessment.

Introduction

Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse. Environment Impact Assessment in India is statutorily backed by the Environment Protection Act, 1986 which contains various provisions on EIA methodology and process.

Body

Main Principles of Environment Impact Assessment (EIA):
There are eight guiding principles that govern the entire EIA process: The principles of EIA:

- Participation: The process should provide appropriate opportunities to inform and involve the interested and affected publics, and their inputs and concerns should be addressed explicitly in the documentation and decision making. Appropriate/timely access for interested parties is important.
- Transparency: The process should have clear, easily understood requirements for EIA content, ensure public access to the information, identify the factors that are taken into account in decision making and acknowledge limitations and difficulties. Open and accessible assessment decisions are important in EIA.
- Efficient: The Process should impose the minimum cost burdens in terms of time and finance on proponents and participants consistent with meeting accepted requirements and objectives of EIA.
- Accountability: The decision maker should inform decision making and result in appropriate levels of environmental protection and community well-being. Decision makers should be responsible for their actions and decisions.
- Credibility: The process should be carried out with professionalism, rigour, fairness, objectivity, impartiality and balance and be subject to independent checks and verification.
- Cost-effective: The process should achieve the objectives of EIA within the limits of available information, time, resources and methodology.
- Integrated: The process should address the interrelationships of social, economic and biophysical aspects.
- Practicality: The process should result in information and outputs which assist with problem solving and are acceptable to and able to be implemented by proponents. Information/outputs readily usable in decision making and planning is important.

Objectives of Environmental Impact Assessment:
- To make sure that environmental considerations are explicitly addressed and incorporated into the development decision making process.
- To forestall and avoid, reduce or offset the adverse significant biophysical, social and other relevant effects of development proposals.
- To shield the productivity and capacity of natural systems and the ecological processes which maintain their functions.
- To encourage development that is sustainable and optimizes resource use and management opportunities.

Examples:
- For river valley project like Narmada river valley project
- EIA of mineral mines in Odisha

Conclusion

There is a need to strengthen the implementation of EIA, Independent EIA Authority is required for fair and objective decisions. There is also a need for centralised data bank for storing information and the transparency must be maintained in dissemination of all information related to projects from notification to clearance to local communities and general public.
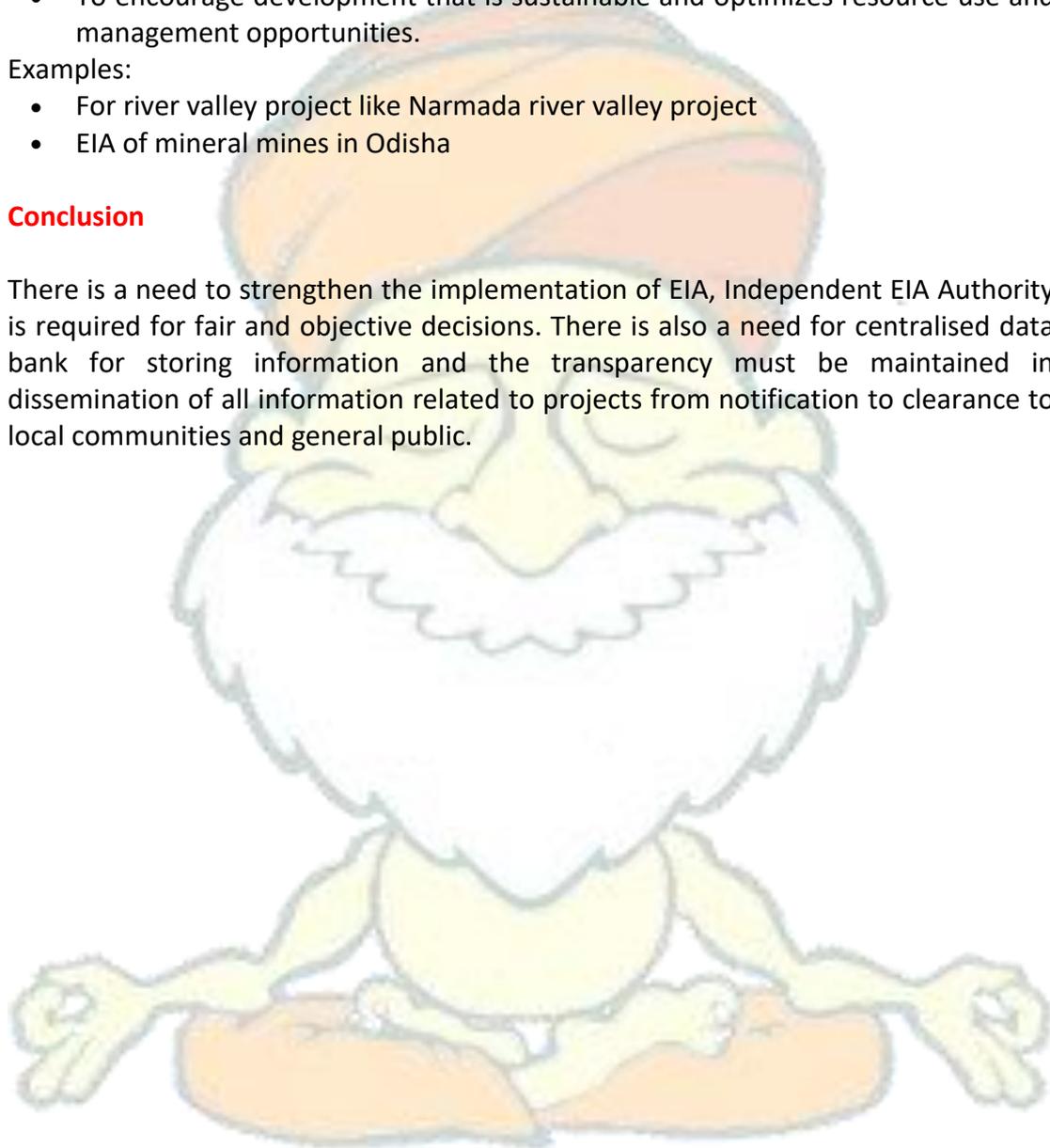
46. Is lack of development the real cause for the spread of left wing extremism (LWE)? Critically comment.

Approach - It expects you to write about LWE and critically analyse whether lack of development is the real cause for spread of left wing extremism.

Introduction

Left-wing extremism, also known by various other names such as Naxalism and Maoism, is a form of armed insurgency against the State motivated by leftist ideologies. LWE organizations are the groups that try to bring change through violent revolution. They are against democratic institutions and use violence to subvert the democratic processes at ground level. These groups prevent the developmental processes in the least developed regions of the country & try to misguide the people by keeping them ignorant of current happenings.

Body

Lack of development the real cause for spread of left wing extremism –
- Issues arising out of mal-governance or non-governance: Dissatisfaction with improper and often mal-governance created anger among the suffering population. The Naxalites exploit the situation for their own political gain by giving the affected persons some semblance of relief or response. Thereby they tend to legitimise in the eyes of the masses their own legal or even illegal activities.
- Social oppression: The fight against the social oppression that the Dalits and the lower among the OBCs have been regularly subjected to is perhaps the most significant among the issues used by the Naxalite movement. Apart from the concrete issues undertaken by the Naxalites against social oppression, the fact that the cadre and also most of local leaders of the Naxalite organisations consist of poor villagers of castes looked upon as lowly has endowed the oppressed with much strength.
- Livelihood: The Minimum Wages Act remains an act on paper in much of rural India. Agricultural labour is governed by the Act but the minimum wage rates under the Act are not implemented, except where the prosperity of the farmers and the demand for labour makes it unavoidable. By giving fair minimum wage with dispute settlement of people's court they expand their social influence.
- Displacement and forced evictions: Internal displacement caused by irrigation / mining / industrial projects, resulting in landlessness and hunger, is a major cause of distress among the poor, especially the Adivasi's. The law and administration provides less succour to displaced people, and in fact often treats them with hostility since such internally displaced forest-dwellers tend to settle down again in some forest region, which is prohibited by the law. The Naxalite movement has come to the aid of such victims of enforced migration in the teeth of the law.

- Land related factors: Naxalite movement has succeeded in helping the landless to occupy a substantial extent of government land whether for homesteads or for cultivation. In the case of forest land, occupation by the Adivasi's with the encouragement and assistance of the Naxalites, has taken place on an extensive scale in Andhra Pradesh, Chhattisgarh, the Vidarbha region of Maharashtra, Orissa and Jharkhand. In fact much of it is not fresh occupation but reassertion of traditional usufructory rights declared by the law to be illegal.

Development of LWE Affected Areas with few schemes being implemented by the government for LWE affected areas are:

- Special Central Assistance (SCA)- for filling critical gaps in public infrastructure and services of emergent nature.
- Road Connectivity Project- for construction of 5,412 km roads.
- Skill Development- for construction of 47 ITIs (01 ITI per district) and 68 Skill Development Centres (02 SDCs per district) by 2018-19.
- Education Initiatives- for building new Kendriya Vidyalayas (KVs) & Jawahar Navodaya Vidyalayas (JNVs) where they are not present. It is also planned to open more schools under the Eklavya model.
- Installation of Mobile Towers- for endless telecom connectivity.
- Financial inclusion- for ensuring the presence of banking facilities within 5 km to all citizens residing in LWE affected areas.

Not onlydevelopment but other issues can help in reducing the spread of LWE:
Political mobilisation:

- Creating conditions for political engagement, bringing locals into the politicalmainstream as partners and decision-makers. Political parties have an important role here – they must conduct local membership drives and provide opportunities to local leadership in state politics.
- Political engagement also requires that tribals have more secure property rights and a greater say in local decisions, especially those relating to their land and livelihoods.
- A number of recent legislations have made a start – Panchayat Extension to Scheduled Areas Act (PESA) and the Forest Right Act for example.

Security level intervention:

- Two things will further strengthen the state's security response, which includeFirst, we need greater representation of local people in the police andparamilitary forces; this is essential to bridge the trust deficit.
- Second, we need a better understanding of local social and tribal networks andneed to make the local tribal leadership our allies.
- To fill the critical infrastructure gaps that are not covered under existinggovernment schemes, the Centre created the Special Infrastructure Scheme. These include requirements of mobility for the police and security forces by upgrading existing roads and rail tracks in inaccessible areas, and providing secure camping grounds and helipads at strategic locations in remote and interior areas.

- The current government has launched other initiatives, amongst them the SAMADHAN which was announced by the minister of Home Affairs in May 2017. The acronym stands for the following: S – Smart Leadership, A – Aggressive Strategy, M – Motivation and Training, A – Actionable Intelligence, D -Dashboard Based KPIs (Key Performance Indicators), and KRAs (Key Result Areas), H- Harnessing Technology, A – Action plan for each theatre and N- No access to Financing.

Respect for rule of law:

- Governmental agencies must not be allowed to transgress law even in dealing with critical situations caused by insurgency or terrorism.
- If an extraordinary situation cannot be dealt with by the existing laws, new laws may be enacted so that law enforcement agencies are not provoked or tempted to resort to extra-legal or illegal methods. Police and all other governmental forces must adhere to some basic codes of conduct.

Effective implementation of protective legislation:

- It is necessary to build up an impregnable protective shield of the State, against multi-faceted exploitation of these communities. This should be done by effective implementation of the existing constitutional provisions, protection of civil rights and SC/ST (Prevention of Atrocities) Act laws and programmes in place for this purpose.

2nd ARC recommendations to overcome red corridor challenges:

- For effective implementation of the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Rights) Act, 2006, multidisciplinary Oversight Committees may be constituted to ensure that the implementation does not adversely affect the local ecosystems.
- Special efforts are needed to monitor the implementation of constitutional and statutory safeguards, development schemes and land reforms initiatives for containing discontent among sections vulnerable to violent left extremism.
- Performance of the States in amending their Panchayati Raj Acts(PESA) and implementing these provisions may be monitored and incentivised by the Union Ministry of Panchayati Raj.
- Special anti-extortion and anti-money laundering cell should be established by the State police/State Government. To break the nexus between illegal mining/forest contractors and transporters and extremists which provides the financial support for the extremist movement.

Conclusion

Though the number of incidents of LWE violence has come down in the recent past, continued efforts and focus are needed in eliminating such groups. States also need to adopt a focused time-bound approach to completely eliminate LWE groups and ensure all-round development of the affected regions.For the holistic last-mile development of "New India", it is necessary to get rid of the menace of such radicalized groups, & the synergized efforts of the Centre and the States are crucial in achieving the same.

47. What is the difference between extremism and fundamentalism? Explain. Examine the threat perception associated with these terms.

Approach - It expects students to write about extremism and fundamentalism and there difference. Also examine the threat perfection related to both.

Introduction

The rise of fundamentalism and extremism, in diverse forms, represent major threats to human rights worldwide and are growing challenges that must be faced with urgency, using a human rights approach.

Body

Fundamentalism and extremism:
- The term 'fundamentalism' today names a religio-political perspective found in most if not all major religions in the contemporary world. At the present time it is associated with various expressions of religious extremism and, most worryingly, with religiously-motivated terrorism.
- A fundamentalist is someone who believes in a specific interpretation of their holy text and strictly adheres to its tenets. A fundamentalist will believe that their bible represents the absolute truth in terms of matters moral as well as literal historical accuracy. Many fundamentalists are characterised as intolerant of those with views in opposition of their own or those with secular beliefs.
- An extremist is someone who takes their religious beliefs to a fanatical level causing them to act in ways that are not understood by the general public. An extremist may believe in using force, fear, or violence as means to bring about religious change. An extremist may take action in order to indoctrinate their beliefs that play on fear. Often religious extremism is seen in opposition to a person, people, or government that is acting against the fundamental beliefs of a religion. Especially in the Middle East, religious extremism can be closely tied to extreme nationalism.

India has moved to the seventh position from the previous years eighth in the annual Global Terrorism Index (GTI) 2019. The countries ahead of it are Afghanistan, Iraq, Nigeria, Syria, Pakistan and Somalia.

Threat perception associated with extremism and fundamentalism:
- Political Tension: Extremism has impacted domestic political structures in India in a negative way. It has lead to political instabilities across the nation. Political class trying to interfere in religious laws, codes, etc. All these acts, not only hurting feelings of particular people but also converting them into more orthodox. For example Shah Bano case.
- Social tension: Religious fundamentalism growth decreases tolerance level in society which result in communal clashes in many parts of the country and affects internal security. This hatred among religions can be taken as

advantage by the external terrorist organisations. This can increase vulnerability for terrorist activities in the country. This will destabilise social fabric which will lead to displacements, and migration.

- Demographic loss: Extremism has misguided the youth of the region on the basis of false ideologies for destructive activities by brainwashing them. This has not only endanger demography but also lead to loss of demographic dividend in the region.
- Education: Lack of quality education leading to blindly follow rules and regulations and beliefs propounded by religious leaders. For example madrasa.
- Monolithic view: Monolith world views, their limiting of the enjoyment of women's human rights and restriction of the sexual and reproductive rights of all, and the desire to quash cultural opposition to their own agenda, including through stifling freedom of artistic expression and curtailing scientific freedom.
- Social media threat: Misinformation and disinformation spread in the media is becoming a serious social challenge. It is leading to the poisonous atmosphere on the web and causing riots and lynching on the road. In the age of the internet (WhatsApp, Facebook, Twitter,) it is a serious problem as rumours, morphed images, click-baits, motivated stories, unverified information, planted stories for various interests spread easily among 35 crore internet users in India.

Conclusion

Internal and external security are interlinked and cannot be viewed in isolation, especially considering the digital psycho-extremism emerging from a source which is hard to identify. They are destroying the nation's valuable human resource which needs to be checked at the earliest by initiating effective measures, not only at the level of securities but by effective participation of our leadership and society. In order to survive as a developing nation, preventing erosion of human resource, staying unaffected by negativity of those threatening internal security and participation of the society are also essential.

48. What are India's most severe challenges emanating from external state actors? Examine. What has been India's response to those? Discuss.

Approach - It is straight forward question where it expects students to write about - in first part write various challenges posed by external state actors for the Indian internal security - in second part write about measures taken by India to address the challenge.

Introduction

India has been facing challenges on the front of internal security since independence from various state and non-state actors. Politico-social and economic sphere of sovereign state has been controlled by the popular elected government. But peace and security can be disturbed by some external and non-state actor, through various means and ways.

Body

Challenges posed by external state actors for the Indian internal security:

- Insurgency: North-East suffers from violent movements based upon ethnic identities leading to clashes. China is alleged to support such acts e.g. ULFA members of Assam was given shelter by China.
- Terrorism: Pakistan has been a major exporter of terrorism to India. Non-state actors like terrorist groups (eg Lashkar-e-Taiba, Jaish-e-Mohammad) are a continuous threat.
- Naxalism: Left wing extremism affects states like Chhattisgarh, Jharkhand and West Bengal.
- Drug smuggling: Inter and Intra state trafficking takes place, through golden crescent and golden triangle routes. Drug from Pakistan, Afghanistan and Iran has affected Punjab.
- Human-trafficking: while child and women trafficking takes place via Bangladesh and Nepal.
- Counterfeit currency: Especially from Pakistan. It corrodes economy from inside, by facilitating black money and money laundering activities as well as funding terrorism, which itself creates a demand for fake currency, thereby creating a positive feedback loop.
- Communalism: Propagandas are run and funded by enemy country and other non-state actors to destabilize India by damaging the socio-religious fabric and ensure riots.
- Cyber Security: Recent cyber-attacks by Legion, ATM skimming are examples. Pakistani hackers often hack government websites.

Measures taken by India to address the challenge:
- Actively pursuing the agenda of comprehensive convention against terrorism to bring all the state actors on the same page in fight against terrorism.

- Using bilateral and multilateral forums like BRICS, SCO, G20, and BIMSTEC to build an alliance against terrorism.
- Strengthening of the borders by the implementation of recommendations of Madhukar Gupta committee report and formation of the border protection grids along the eastern front.
- Isolating Pakistan and adopting the technique of name and shame to force Pakistan to act against the non-state actors operating from its soil.

Conclusion

Both state and non-state factors from outside have created problems in our internal security framework. Hence while it is imperative to guard our borders and strengthen our diplomacy, on the other hand, we need to check the various non-state actors who come in hidden forms.

49. Is fake news the most potent threat to democracies today? Critically comment.

Approach - It expects you to write about fake news critically analyse whether fake news is the most potent threat to democracies today.

Introduction

Fake news is not a new phenomenon which is linked to the rise of social media, on the contrary from the times of ancient Greece, the governments and political actors have always invested in disinformation campaigns to build narratives of their choice. Fake news is news, stories or hoaxes created to deliberately misinform or deceive readers. Fake news, defined by the New York Times as "a made-up story with an intention to deceive".

Body

The Supreme Court has recently asked the Centre to explain its "mechanism" against fake news and bigotry on air, and to create one if it did not already exist.
Fake news as the most potent threat to democracies today:

1. The emerging threat of fake news could have an unprecedented impact on election cycle, raising serious questions about the integrity of democratic elections, policy-making and our society at large.

2. People's faith in social, print and electronic media reduces which could affect the benefits of these Media as well the spirit of democracy as media being the fourth estate of democracy. In its purest form, fake news is completely made up, manipulated to resemble credible journalism and attract maximum attention and, with it, advertising revenue.

3. Computational propaganda is the use of algorithms, automation, and human curation to purposefully distribute misleading information over social media networks. Computational propaganda involves learning from and mimicking real people so as to manipulate public opinion across a diverse range of platforms and device networks.

4. It affects social & communal harmony by spreading extremists' ideologies especially in sensitive areas like radicalisation of youths, inciting violence and hatred among the communities, swinging public opinions etc.

5. In Sri Lanka, online rumours have led Buddhists to target Muslims; in Nigeria, inflammatory images on Facebook have led young Berom men to pursue Fulani Muslims.

6. In countries already suffering from ethnic tensions, misinformation can exasperate tensions and generate violence. In perhaps the most well-known case, Facebook was used in Myanmar to incite violence against the Rohingya.

7. 2018 Photos of Police Using Water Cannon made Viral amid the Ongoing Farmers' Protest. These were used to intensify farmer's anger and create discontent against new laws.

8. New face of fake news as deep fakes – Disrupting Electioneering -A high-quality deep-fake can inject compelling false information that can cast a shadow of illegitimacy over the voting process and election results. Leaders can also use

them to increase populism and consolidate power. Deep-fakes can become a very effective tool to sow the seeds of polarisation, amplifying division in society, and suppressing dissent. Undermining Democracy - A deep-fake can also aid in altering the democratic discourse and undermine trust in institutions and impair diplomacy. False information about institutions, public policy, and politicians powered by a deep-fake can be exploited to spin the story and manipulate belief.

But at the same time, there are multiple other potent threats to democracies around the world today, some of which can be seen from the points below –

- **Polarization**: While some partisan polarization is healthy for democracy, one of the key drivers of democratic decay in new and established democracies is intense polarization, where political opponents begin to regard each other as existential enemies, allowing incumbents to justify abuses of democratic norms to restrain the opposition, and encouraging the opposition to use "any means necessary" to regain power.
- **Immigration and sustaining multi-ethnic democracies**: The challenge of sustaining multi-ethnic democracies is one of the most significant challenges facing democracies of all types today. The politics of redistribution has also been notoriously complicated by ethnic diversity, but the growing ethnic diversity of both new and old democracies, driven in part by immigration, have generated different forms of right-wing populist backlash and has exacerbated political polarization.
- **Globalization, economic inequality, and democratic discontent**: The threat economic inequality, often driven by global economic forces, poses to the survival and viability of democracy. Unequal economic resources diminishes the quality of democracy, through voting, institutional design, campaign spending, and media.
- **Populism**: In the past several years, there has been renewed attention to the upsurge of populist parties and movements from Latin America and North America to western and Eastern Europe. Many populist outsiders come to power speaking on behalf of "the people" but often doing so in ways that seem to challenge basic norms of liberal democracy.
- Further, existing institutions may be ill-suited for the challenges facing contemporary democracies.

Way forward –
- Increasing development assistance to new democracies, especially where there is popular frustration about the lack of economic benefits deriving from the establishment of a democracy.
- Government should have independent agency such as FactCresendo and Boomliveto verify the data being circulated in social and other media. The agency should be tasked with presenting real facts and figures.
- Developing "democracy erosion" indicators for international financial and trade institutions to target their assistance and stem the erosion.

- Social media websites should be made accountable of such activities so that it becomes their responsibility to have better control over the spread of fake news.
- The artificial intelligence technologies, particularly machine learning and natural language processing, might be leveraged to combat the fake news problem.
- Spurring regional organizations to adopt "democracy clauses" that would bar the membership of governments that have come to power through unconstitutional means; and exploring the possibility of making the interruption of democracy a crime under international law.

Conclusion

The state and its different enforcement apparatus have to remain ever vigilant in the online and virtual worlds to protect individuals and society from the lurking dangers of an Infodemic and fake news. This entails timely detection of content before it goes viral and causes widespread damage, taking it down with the help of social media platforms and intermediaries and tracing the sources of such mischief. Media outlets and the press also have an enhanced responsibility to make people aware and increase literacy about the menace of fake news and misinformation.
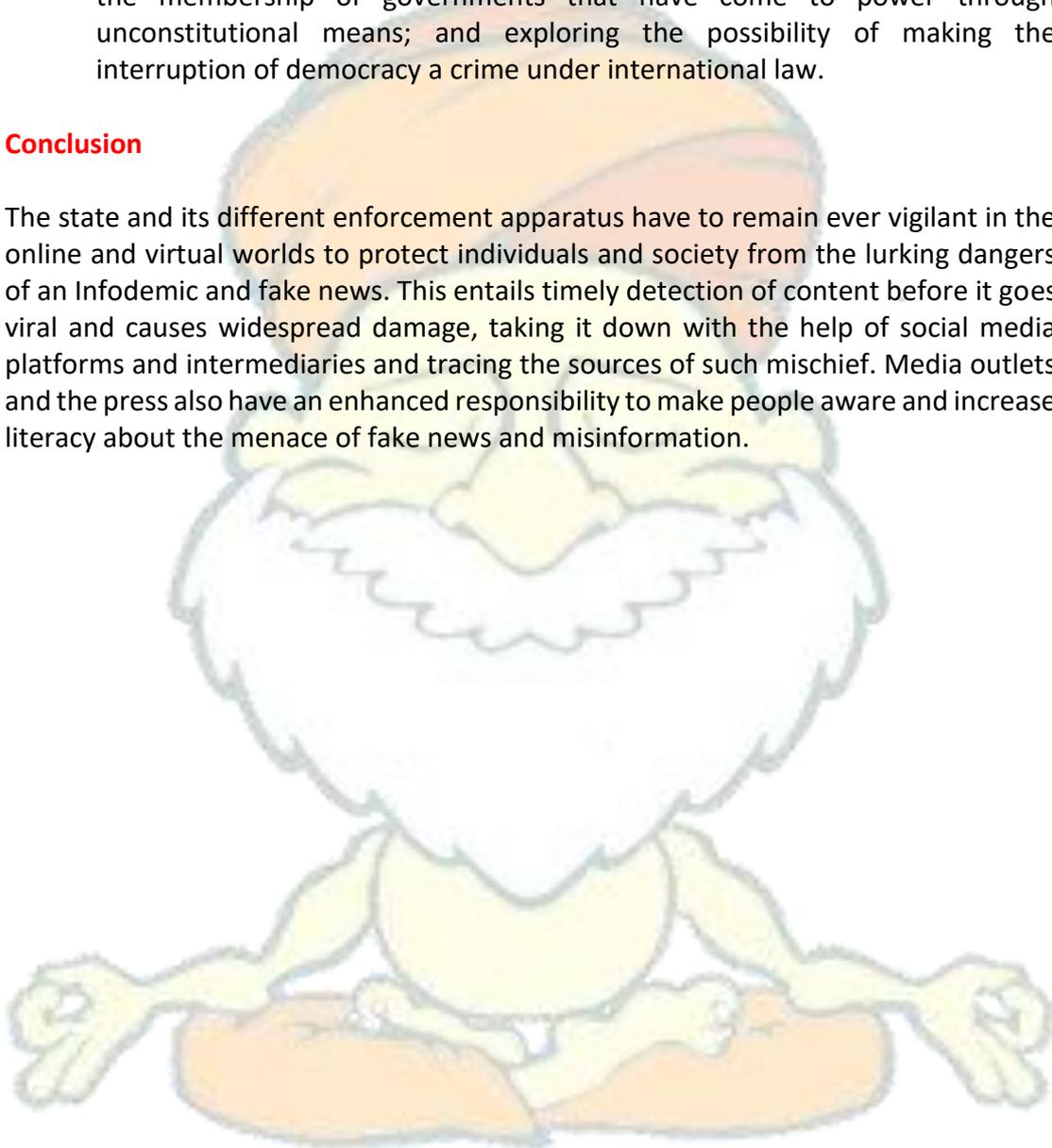
50. What role do social media platforms play in elections nowadays? Has it affected the democratic discourse? Examine.

Approach - It expects students to write about social media and its role of social media platforms in election also highlight how it is affecting the democratic discourse.

Introduction

Social media is computer-based technology that facilitates the sharing of ideas, thoughts, and information through the building of virtual networks and communities. By design, social media is internet-based and gives users quick electronic communication of content.

Body

The 2008 Presidential election in the United States is widely seen as the first time social media played a big part in politics. Candidate Barack Obama used of platforms such as Facebook helped him emerge as a winner.
Role of social media platforms in elections:

- Quick interactions: One of the positive effects that social media has on politics is the opportunity for voters to interact more easily with candidates and elected officials. Traditionally, if you wanted to meet a politician or candidate, you'd have to attend a live event. Not everyone is able to do this. With modern technology, it's now possible to attend virtual events where you can participate in live streaming events and interact with politicians and candidates.
- Constant and continuous news: One of the ways that social media has transformed politics is the sheer speed at which news, poll results and rumours are shared. Whereas in the pre-internet days, people had to wait for the next newspaper or TV news show to get the latest information, online news is a 24/7 phenomenon. While you can access news on many websites at any hour, most people spend more time on sites such as Facebook and Twitter than they do on serious news or political websites.
- Fake news: Political campaigns are now influenced by every story, whether true or not, that gets spread around social media. It's getting more and more difficult to separate actual news from fake news online. Social media makes this distinction especially confusing. The constant stream of memes, links and rumors about political leaders and candidates is a mixture of truth, lies, satire and speculation.
- Confirmation Bias: One of the hidden forces that operates on social media is confirmation bias. This is especially powerful when it comes to controversial topics, including politics. If you're like most people, the majority of your friends and followers on social media probably share your outlook.
- First time voters: As per different survey first time voter in Loksabha 2019 election were influenced by political messages on social media. Half of 15 crore

first time voter received the messages from political leaders in India on social media.

- Inclusiveness: Social media has made Indian politics more inclusive by allowing citizens, who were traditionally excluded from politics due to geography and demography, to gain direct entry into the political process.
- Opportunity to influence female audiences: Last but not the least, with the increase in female internet penetration, it becomes an active source of influence and education for the female voters which constitute close to 49% of potential voters. There are increasing expectations that more campaign staffers actively use Twitter and Facebook to promote the campaign and engage voters.

Social media affecting democratic discourses:
- The rise of polarising and divisive content has been a defining moment of modern politics, which is fed by fake news propagation through social media channels.
- Social media has enabled a style of populist politics, which on the negative side allows hate speech and extreme speech to thrive in digital spaces that are unregulated, particularly in regional languages.
- Freedom of speech does not grant the right to deceive. Freedom of speech provides that political advertising should not be strictly regulated. But freedom of speech is meant to ensure protection of diversity of opinion and the individual's right to express in a reasonable manner. Lies, deception and treachery are not covered under freedom of speech to influence voting behaviour. Manipulated content is incongruous with freedom of speech.
- The big problem with social networks is their business model. This business model has led to a "winner-takes-all" industry structure, creating natural monopolies and centralising the once-decentralised democratic internet.
- Online advertising allows, especially on social networks, personalised targeting based on multiple attributes that wasn't possible at the same level before. For example CambridgeAnalytica misuse of data for profiling, micro-targeting etc. These platforms make it possible to go from manufacturing consent to manipulating consent. A person is continuously fed with information to vote for a particular party.

Conclusion

Social media has changed the way people think, write and react but political pundits believe it has also influence the way people vote.Most of the political parties are aware of the pulse and the impulse of the public on social media timelines, which is why more and more politician are realising the importance of social media as an electoral tool.

51. Why is data privacy regarded sacrosanct in the 21st century? Examine from the point of view of security.

Approach - It expects students to write about - in introduction define data privacy or give any recent example of breach of data privacy - in main body part write reasons for data privacy is important in 21st century from security point of view.

Introduction

Data privacy, also called information privacy, is the aspect of information technology (IT) that deals with the ability an organization or individual has to determine what data in a computer system can be shared with third parties.

Body

India has recently banned 118 additional Chinese apps. As per reports, this ban comes under Section 69A of the Information Technology Act and is due to the illegal data collection practices followed by these apps. These apps were found to be collecting extensive information about their users without taking explicit permission. Collected information included but not limited to – data from users' clipboard, their GPS locations, and vital network related information such as IP, local IP, MAC addresses, WIFI access point names, etc. Some of the apps were even found setting up local proxy servers on users' devices to transcode media without permission.

Data privacy regarded as sacrosant in 21st century due to:
- When data that should be kept private gets in the wrong hands, bad things can happen.
- A data breach at a government agency can, for example, put top secret information in the hands of an enemy state.
- A breach at a corporation can put proprietary data in the hands of a competitor.
- A breach at a school could put students' Personally identifiable information (PII) in the hands of criminals who could commit identity theft.
- A breach at a hospital or doctor's office can put Protected Health Information in the hands of those who might misuse it.
- Economic threats such as frauds, attack on banking communication infrastructure, acquisition of critical data such as customer's credit/debit card data, Financial theft to destabilize the economy
- Information warfare
- Destabilizing critical infrastructure like Nuclear power plants, power grids, Dams, Share Market operations through cyber-attacks. g. Stuxnet's alleged involvement in destabilizing Iran's nuclear programme.
- Data theft through social media applications, infringement of privacy
- Penetrating value chain of production of communications network infrastructure and spying through this penetration
- Theft of critical medical history data of a nation's citizens
- Data alteration and data destruction on the website and impairing its operations
- Intellectual property right infringement through digital piracy

Conclusion

People all over the world have been concerned about data privacy for a while now, and they have good reasons for it. Data breaches, security threats, and cybercrime can lead to negative and even harmful consequences, so it's very important to comply with data privacy regulations.

52. Border surveillance capability is a critical component of border security. Do you agree? What is India's preparedness on this front? Discuss.

Approach - It expects you to write about border surveillance its critical role in border security and highlight on India's preparedness on such front.

Introduction

India's land border covers around 15,106 km sharing boundaries with Pakistan, Afghanistan, China, Nepal, Bhutan, Bangladesh and Myanmar. Varied terrains, climatic conditions and hostile neighbours make its borders complex and border management an important part of its security.

Body

Border surveillance capability is a critical component of border security:

1. Since the borders with six countries are having entirely different terrain and temperature profile the Indian Army needs for surveillance systems on these different border areas are also hugely varied. While the army would require the unmanned aerial vehicles for across the borders day-night monitoring in all the seasons, the ground level deployment of the night vision devices and other ground level intrusion detection systems are also very important.

2. The border surveillance deal with major border security challenges such as to prevent cross-border terrorism for example Pathankot attack, Uri attackand Pulwama attack.

3. Border surveillance is important for also preventing infiltration and exfiltration of armed militants and insurgents, narcotics and arms smuggling; illegal migration;and separatist movements aided by external powers.

4. Border surveillance helps in maintaining peace and stability by controlling the security concerns related to inter-region and intra-region issues.

5. Another important advantage of border surveillance is in proper and swift disaster management. Difficult and harsh terrains of Indian borders and relatively low development of bordering countries make it inevitable for India to prepared and self-sufficient to handle any kind of disasters.

6. To increase capability tender for purchase of six Border Surveillance Management Systems (BSMS) to cater to the needs of Indian Army's peace time requirements for countering the infiltration attempts from Pakistan. The border areas are already equipped with a strong surveillance mechanism which includes the three tier fencing, flood lighting, sensors, thermal imagers and manual patrolling.

7. The Army expects to enhance its anti-infiltration capabilities through the BSMS. With increasing challenges from across the border the army also needs to constantly improve upon its existing surveillance mechanism.

India's border surveillance preparedness:

- Space technology in Border Management:ISRO is set to launch a satellite exclusively for Home Ministry.The satellite will be used for improving

communication and navigation, managing security, operational planning and border management.These satellites will help the security forces to know any activity occurring on border with the help of satellite imagery.

- BOLD QIT: BOLD-QIT is a project to install technical systems under the Comprehensive Integrated Border Management System (CIBMS), which enables the BSF to equip Indo-Bangla borders with different kinds of sensorsin the unfenced riverine area of Brahmaputra and its tributaries. Now, the entire span of the river Brahmaputra has been covered with data network generated by Microwave communication, OFC Cables, DMR Communication, day and night surveillance Cameras and intrusion detection systems.

- Flood lighting: Lack of floodlights on the border allows the smugglers to perpetrate cattle smuggling their devious activities during night. In order to curb the attempt of infiltration and cross-border crimes along the Indo-Pakistan border, the government has sanctioned 2,030.44 km of floodlights along the international border in the states of Jammu & Kashmir, Punjab, Rajasthan and Gujarat.

- Laser Fencing: In many areas, BSF had decided to install laser fencing two years ago. There are 45 such vulnerable spots along the Indo-Pak border in Punjab and Jammu and Kashmir where it will be installed and eight infrared and laser beam intrusion detection systems have started functioning in the porous treacherous and riverine tracts along the international border in Punjab.

- Third-generation thermal imagers: It is technology used in the highly sophisticated border security system of Israel which includes high-quality long-range day cameras along with night observation systems employing third generation thermal imagers.

- LORROS: The Army has also deployed the LORROS (Long Range Reconnaissance and Observation System) which has some tactical advantage. This can cover an area of 4 by 4 kms and can give real time video imagery during day and night. It helps in easy detection, identification and recognition of targets.

- UAVs: The UAVs and other surveillance gadgets already under installations have significantly reduced the incidents taking place due to human error. The mini UAVs are also intended to carry out reconnaissance in Jammu and Kashmir for counter insurgency along with the LoC with Pakistan and the Line of Actual Control with China.

Conclusion

The traditional approach to border management, i.e. focussing only on border security, has become inadequate. India needs to not only ensure seamlessness but with the adoption of new technologies for border control and surveillance and the development of integrated systems for entering, exchange and storage of data, will facilitate the full proof border security without endangering security personnel and internal security of India.

53. Critically evaluate the evolving trend of India's counterterrorism response in recent years.

Approach - It expects students to write about counterterrorism and critically evaluate the evolving trend of India's counterterrorism response in recent years.

Introduction

Several countries in South Asia, including India, have been facing the challenge of terrorism and over the past few years there have been numerous acts of terror in the region. Many of these incidents are found to have complex international linkages and possible connections with transnational organised crime. Terrorism is an evolving phenomenon, with terrorist organisations continuously changing their modus operandi, thereby adding to the complexity and challenges faced by agencies.

Body

Counter-terrorism also known as anti-terrorism, incorporates the practice, military tactics, techniques, and strategy that government, military, law enforcement, business, and intelligence agencies use to combat or prevent terrorism.
Evolving trend in India's counterterrorism response:
- The November 2008 attacks, brought into clear focus the inability of the Indian security apparatus to anticipate and appropriately respond to major terrorist incidents.
- The National Intelligence Grid (NATGRID) has been constituted to create an appropriate database of security related information.
- The military which is primarily geared toward foreign threats, including terrorism also generates intelligence with relevance to domestic terrorism, and there is a centrally controlled National Security Guard (NSG) that specialises in hostage and terrorist attack situations.
- India has raised Regional Hubs of NSG battalions in important strategic locations, to meet any unforeseen challenges.
- The major domestic response to Mumbai has been an emphasis on streamlined coordination between agencies across state and federal lines, and the creation of a new National Investigation Agency (NIA). The aim of the NIA is to empower a federal agency to investigate major crimes such as terrorism and organized crime without having to be asked to do so by the states. There will be special courts that can rapidly hear terror-related cases.
- Financial Intelligence Unit-IND (FIU-IND) is the central national agency responsible for receiving, processing, analysing and disseminating information relating to suspect financial transactions.
- A special Combating Financing of Terrorism (CFT) Cell has been created in the Ministry of Home Affairs in 2011, to coordinate with the Central Intelligence/Enforcement Agencies and the State Law Enforcement Agencies for an integrated approach to tackle the problem of terror funding.

- U.S. Federal Bureau of Investigation and Indian security services in the wake of Mumbai, illustrating the dramatic improvement in Indo-U.S. relations. There has also been increased counter terrorism intelligence sharing with India, most of it obviously related to Afghanistan and Pakistan.
- Deepening cooperation to reaffirm the support for the central and coordinating role of the UN in combating international terrorism, the need for strict and full implementation of the relevant UN Security Council resolutions related to counter terrorism, comprehensive implementation of the UN Global Counter-Terrorism Strategy in a balanced way, and implementation of the provisions of the relevant international counter-terrorism conventions and protocols. Broadening counter-terrorism cooperation with the United Nations, as well as the G-20 and the for example push for black listing Pakistan in FATF.
- Counter the global threat of terrorism on the basis of the purposes and principles of the UN Charter, relevant UN Security Council resolutions and international counter-terrorism conventions and protocols, where applicable. For example Azhar Masood.
- Countering extremist narratives conducive to terrorism and the misuse of the Internet and social media for the purposes of terrorist recruitment, radicalisation and incitement and providing financial and material support for terrorists.
- Strengthening cooperation against the misuse of information and telecommunication technology for terrorist and other criminal purposes; create counter-narratives disrupting the propaganda of terrorist and extremist ideas conducive to terrorism.
- India will hosted the first counter-terrorism exercise for the 'Quad' countries at the NIA headquarters in national capital on November 2019. The 'CT-TTX' (counter-terrorism table-top exercise) is first such engagement among the Quad countries on regional and global issues of common interest and also in the domain of counter-terrorism and cooperation.
- The Centre has designated 18 key operatives and leaders of extremists groups as individual terrorists under the recently-amended Unlawful Activities Prevention Act (UAPA).

The biggest problem with India's counter-terrorism strategy lies in the fact that it does not have a stated policy. India's approach to fighting terrorism has often been shaped by the approach adopted by other countries such as Australia, Canada, and the US. Evaluation of India's counterterrorism response:

- India mostly seeks to adopt ideas and concepts from abroad and mould it within the Indian socio-economic context. As a result, there is a lack of clarity in India's approach to the issue. India's response to terrorism has been episodic to a significant degree.
- In many countries concurrent powers are given to the central government to intervene when a state fails to take security measures. Unfortunately, India does not have that system.
- Many times India's dossiers sent to the international community are not taken seriously because they lack evidentiary value, even though they may be of

great intelligence value. In a democratic society like India, there is no greater deterrence to terrorism than having full evidence based investigations and intelligence prediction. Thus, a good counter-terrorism matrix needs to be based on both intelligence- and investigation-based foundations.

- Within India's counter-terrorism matrix, there is a serious lack of understanding as well as capacity to deal with data. India also does not have the necessary infrastructure in place at the moment to be able to properly analyse the data. Unless and until the analysis of the intelligence gathered is institutionalised, it will not be possible to obtain relevant intelligence material.
- India's counter-terror efforts continue to be thwarted due to lack of international collaboration in respect of exchange of information and evidence or of extradition of the accused persons who are hiding outside India's territory.
- Terrorism is handled by different state police systems with no legal role by the central government under Schedule 7 of our Constitution. Similarly, the intelligence provided by the central government to the states is only of advisory nature.

Conclusion

Counter-terrorism is a national security issue and political parties must resist the attempts at politicizing them. Such policies only serve to sharpen public fears. Effective counter-terrorism requires a more comprehensive strategy. It requires a constant process of evaluation and adjustment. Also Socio-economic development is a priority so that vulnerable sections of society do not fall prey to the propaganda of terrorists promising them wealth and equity.

54. How do cross border linkages amongst terrorist and insurgent organisations create security threats? Examine.

Approach - It expects students to write about - in first part write about threats which emerges due to cross border linkages amongst terrorist and insurgent organisations - in second part write about measures taken by government to address the challenge.

Introduction

Since independence, India has been grappling with insurgencies and terrorist campaigns. Growing sense of ethnic and religious identities, forcible merger of princely states with the Indian Union, perceived sense of neglect and alienation, and pervasive underdevelopment are variously cited as reasons that have led to the clamour of separatism and the rise of insurgency.

Body

Following threats emerges due to cross border linkages amongst terrorist and insurgent organisations:
- Drug smuggling: Inter and Intra state trafficking takes place, through golden crescent and golden triangle routes. Drug from Pakistan, Afghanistan and Iran has affected Punjab.
- Human-trafficking: while child and women trafficking takes place via Bangladesh and Nepal.
- Counterfeit currency: Especially from Pakistan. It corrodes economy from inside, by facilitating black money and money laundering activities as well as funding terrorism, which itself creates a demand for fake currency, thereby creating a positive feedback loop.
- Radicalisation: Propagandas are run and funded by enemy country and other non-state actors to destabilize India by damaging the socio-religious fabric and ensure riots.
- North-East suffers from violent movements based upon ethnic identities leading to clashes. China is alleged to support such acts e.g. ULFA members of Assam was given shelter by China.
- Pakistan has been a major exporter of terrorism to India. Non-state actors like terrorist groups (eg Lashkar-e-Taiba, Jaish-e-Mohammad) are a continuous threat.
- Naxalism: Left wing extremism affects states like Chhattisgarh, Jharkhand and West Bengal.

Measures taken by government to address the challenge:
- Strengthening of the borders by the implementation of recommendations of Madhukar Gupta committee report and formation of the border protection grids along the eastern front.
- Legislation like PMLA Act, NIA Act
- Actively pursuing the agenda of comprehensive convention against terrorism to bring all the state actors on the same page in fight against terrorism.

Conclusion

To resolve this issue India needs comprehensive strategy. The strategy also needs to address long standing structural issues such as judicial and police reforms. Last but not the least, sectarian and collusive politics have been significant for causing and for the persistence of terrorist and insurgent movements. An effective strategy should be able to successfully eschew political manoeuvring and posturing.

General Studies – 4

55. The future depends on what we do in the present. Examine the relevance of this quote by Mahatma Gandhi in public life.

Approach - It expects students to explain quote given by Mahatma Gandhi by giving some examples. Show how it is relevant in today's public life.

Introduction

Public life is the aspects of social life which are happening in public, in the open, as opposed to more private social interaction within families, private clubs etc.

Body

- The above quote by Mahatma Gandhi is very relevant in today's situation in public life. Because decisions that we take today will have long-term effect on future generations.
- Saint Kabir has rightly said, " Kal Kare so aaj kar, aaj kare so ab, pal me parlay hoyegi, bahuri karega kab" (we don't know what the future holds for us, hence we must do the things now only). This couplet shows the importance of present and thus it is rightly said that what we do in present determines our future.
- Presently, people waste water and do not understand importance of saving water. Today, they do not undertake any activity like rooftop harvesting, drip irrigation etc. at a large scale, because of these actions in present time, the future of India as well as world seems bleak and that is scarcity.
- Unplanned and haphazard construction, encroachment of wetland etc. in present times will ultimately bring havocs in major cities around world. Picture of floods in Uttarakhand in June 2013, Mumbai Flood are still fresh in everybody's minds.
- King Ashoka also propagated dhamma so that people can do good work in present, so that their future will be good and sustainable.
- Renewable energy subsidies, formation of International Solar Agency, electrical vehicles, afforestation funds etc. successful implementation at present times will ensure India achieve its nationally determined target and SDG's, Paris Agreement in future.

Conclusion

One can never change its past but he can change future by working in present. So one should work hard for the global community wellbeing.

56. How does work culture impact organizational efficiency in governments? Illustrate.

Approach - As the directive here is illustrate it is necessary to support the arguments with examples. In the introduction in simple terms explain work culture. In the main body part explain the relation between work culture and organisational efficiency in governments. Support your arguments either with real life or hypothetical examples. Candidate can conclude by showing importance of work culture to improve organisational efficiency in brief.

Introduction

While doing work, every organisation believes in specific ways of interaction, behaviour and functioning which is called as work culture of an organisation. For instance, in government organization's it is mandatory to address everyone in the higher levels of hierarchy as Sir whereas in software firms it is encouraged to call other persons by their name.

Body

Work cultures impact on organisational efficiency:
- Work cultures impact on organisational efficiency is directly proportional. As good work culture contributes to better organisational efficiency, whereas bad work culture contributes to weak performance of organisational efficiency.
- Healthy work culture promotes transparency, innovation and discipline in an organisation. For instance, the kind of work culture followed through SAARTHI programme in Pune which facilitates better e-governance. It has increased the organisational efficiency of government.
- Debate, dissent and discussion are the important constituents of a healthy democracy. A good work culture promotes effective communication and helps in reducing conflicts among individuals/team during work. It thereby increases the efficiency of organisation. For instance, Team meetings are a way of promoting ideas and finding solutions. Hence, a district collector chairing a meeting with Tehsildars and promoting the culture of debate, dissent and discussion is bound to get good results.
- Self-organisation is the key to improve organisational efficiency of any organisation. For instance, Transparency, responsibility, unbiased are underpinnings of good work culture. These will enable individuals and teams to become self-organized which in turn improves quality and productivity.
- Good work culture promotes peer respect, recognition of hard work, and freedom to bring new ideas (innovation) it thereby increases the efficiency of organisation. For instance, Netflix doesn't makes it mandatory for their employees to maintain basic etiquettes of dressing. They not even made it mandatory to come in office at time. Still Netflix has expanded its viewership in multi-fold ways.

- To improve organisational efficiency a good vertical as well as horizontal communication is necessary. Improved communication reduces errors and increases the quality of the outcome. Thereby it increases organisational efficiency.
- Suppose work culture is bad, which shows partiality, favoritism, nepotism etc. as it was in earlier days for tender allocations at times, partiality in writing of ACRs sometimes it demotivates talented and hard-working people. Thereby it reduces organisational efficiency. For instance, recent Vyapam scam.
- A gender bias, caste bias, religion bias in an organisation is also a sign of bad work culture. These kind of biases not only hamper the organisational efficiency but also promote the social divide. For instance, recent incidences in government schools where women belonging to backward sections of society were not allowed to cook food for students.
- After realizing the importance of work culture, Government of India came up with innovative initiatives to promote good work culture.
- For instance, 'Perform or Perish' is the new Mantra of the government, which aims to eliminate the insensitive work culture promoted by 'Babu's' of India.
- External tools such as Right to Information Act, Postal Life insurance, change in conduct rules are initiated by the government.
- Constitution of Sevottam Awards for best practicing civil servants is one such an affirmative step.

Conclusion

It is general perception that government organisation have a bad work culture and healthy work culture is associated with private organisations. However, efforts like RTI, e-governance, strict laws etc. are improving the situation. Having a healthy work culture can change the perception in the eyes of public thereby improving the efficiency of government organisation.

57. How do digital technologies aid in the efficient utilisation of public funds? Examine.

Approach - It expects students to briefly explain how efficient utilization of public funds is important in introduction and how digital technologies aid in efficient utilization of public funds.

Introduction

Efficient utilisation of public funds is necessary for judicious use of financial resources to satisfy the needs of the present society in such a way that it doesn't compromise the capability of societies of future generations to meet their own needs. Digitalization is starting to reshape this informational core of the way tax and spending policies are designed and carried out. It offers tools not only to improve the effectiveness of existing policies but also to introduce entirely new ones.

Body

Four principles for efficient utilisation of the public fund:
- Transparency –accurate records that show where money is raised and spent.
- Assurance – figures and processes are checked by independent experts.
- Accountability –decision makers are clearly identified and subject to strict rules and review of performance and outcomes.
- Objectivity – policies are based on accurate information and rigorous analysis.

Digital technologies aids in the efficient utilisation of public funds -
1. Biometrics: Technology that monitors and records biometric characteristics, such as fingerprints and iris scans, allows more accurate and cheaper authentication of an individual's identity, ensuring that benefits reach only the intended recipients helping in efficient utilisation of public funds.
2. JAM Trinity for Direct Benefit Transfer (DBT): The combination of 32.94 crore Jandhan bank Accounts, 121 Crore mobile phones and digital identity through 122 crore Aadhaar is helping the poor receive the benefits directly into their bank account leading to a saving of Rs. 90,000 crore.
3. RuPay: In order to facilitate usage of newly-opened PMJDY bank accounts, customers were issued with RuPay debit cards to allow for ATM withdrawals and POS (point of sale) payments.
4. The Public Finance Management System (PFMS): PFMS was conceived as an online transaction system that not only helps the government manage its funds but at any point of time also provides a comprehensive view of the flow of funds across different wings of the government. The system enables the successful delivery of payment from government treasuries and program agencies directly into beneficiaries' accounts.
5. E-Way Bill: The e-Way Bill mechanism ensures goods are transported in accordance with GST laws and that taxes are paid for the supply of goods. Through the e-Way Bill, taxpayers, transporters, and tax officers all rely on a

unified system. The implementation of the e-Way Bill has helped boost GST revenue collections, abolished post-dated checks, and increased tax compliance.

6. Government e Marketplace (GeM): It facilitates online procurement of common use Goods & Services required by various Government Departments / Organisations / PSUs. It provides the tools of e-bidding, reverse e-auction and demand aggregation to facilitate the government users, achieve the best value for their money and manage public fund efficiently.

Challenges of digital technology -

- Privacy and Security: A critical obstacle is the privacy and security of an individual's personal data that he/she provides to obtain government services. With the implementation of e-government projects, some effective measures must be taken to protect the sensitive personal information of the people.
- Authentication: It is very important to know the right user of the services or it may be misused by private competitors. Meanwhile, the digital signature plays major role in providing authenticity.
- Interoperability: Interoperability is the ability of systems and organizations of different qualities to work together. The e-governance applications must have this characteristic so that the newly developed and existing applications can be implemented together.
- Accessibility in India, there is still gap arising between users and nonusers; it is because of language barrier, inadequate infrastructure in rural areas, etc.
- Infrastructure: It is essentially required for implementation of digital technology as much as possible in India. Electricity, internet and poor adaptability of technology will retard the progress of digital technology.
- Digital Divide: Digital divide inside any country refers to inequalities mainly among individuals and households. The digital divide can exist between those living in rural areas and those living in urban areas, between the educated and uneducated, between economic classes, and on a global scale between more and less industrially developed nations.
- Cost: In developing countries like India, cost is one of the most important obstacles in the path of implementation of digital technologies where major part of the population is living below poverty line. These costs must be low enough so that to guarantee a good cost/benefit ratio.

Conclusion

To reap the full dividends of the digital revolution, India must focus on solutions that address their most pressing priorities. India struggling to identify and help vulnerable populations may for instance benefit most from biometrics, information systems, electronic payment systems and mobile technology to reduce leakages and implement social programs. But all will need to take steps to avoid the pitfalls digital exclusion, cyberattacks, fraud, privacy infringement.

58. What are the different components of quality service delivery? Discuss. How do citizen charters help in this?

Approach - Students are expected to write about the different components of quality service delivery in first part, and discuss how citizen charters help in quality service delivery in second part.

Introduction

Quality service delivery ensures the service quality should match with the expectation of the stakeholder. It expects the commitment of organisations or public service providers to provide quality and high-standard services. Citizen's Charters were introduced in India in the 1990s which represents a systematic effort to focus on the commitment of the public organisation towards its Citizens in respect of Standard of Services, Information, Choice and Consultation, Accessibility and Grievance Redress.

Body

"Quality in a service or product is not what you put into it. It is what the client or customer gets out of it." – Peter Drucker.

Standard principles of quality service delivery:

1. Choice: To attain better standards in service delivery, service provider must work on the no of choices available to the customer at single place. The easier the access of services to the customer the better the implementation would be. Example – The mobile seva by Indian govt in which govt provides multiple services through mobile such as Banking, Passport, and Aadhaar etc.
2. Standards: The rapid change in the technology landscape, we see an emerging need for the Governments to review, rationalise and enhance the existing e-Services, besides creating a new breed of services with a high speed-to-market. It helps to maintain the standard of the services.
3. Value: Many times, the govt might correctly perceive the need of the citizens but it can only be work better if the service provided is in line with the expectations of the customer. Then the value of the service increases. Example: the PHC system reached in the remote area of the nation but timely availability of doctors is more important than the infrastructure.
4. Accountability: As in an aspect of governance, it has been central to discussions related to problems in the public sector as this is the relationship between the both side's individuals. Examples – Public service guaranty act of Madhya Pradesh, which gives citizens Legal right to public services.
5. Transparency: Transparency is the principle of allowing those affected by administrative decisions to know about results and about the process that led to decisions. Transparent governance means that government officials act openly, with citizens' knowledge of the decisions the officials are making.
6. Assurance: Assurance is one of the major parts in it which guaranty to the citizens that govt won't let them down in certain unexpected situations that

may occur and would be unavoidable. Example- PMKisan scheme gives assurance of Rs. 6000/- to the farmers.

7. Responsiveness: In order to make continuous improvement in the service response of the customer through feedback is much more important. Improvisation in the quality of the service can be done through the continuous feedback mechanism.

Importance of citizen charter –

- For Information and openness: A key attribute of citizen charter is the availability of relevant and concise information to the users at the right time and at the right place.
- To Choice and consultation: The Charter provide choice of services to users wherever practicable.
- For Courtesy and helpfulness: The Charter helps embed a culture of courteous and helpful service from public servants. In addition, small initiatives such as 'name badges', 'May I help you' counters etc. can go a long way in building customer confidence.
- For Grievance redressal and complaints handling: There is a strong link between the provision of quality service and effective handling of complaints. Firstly, by facilitating and responding to complaints, the causes for complaint can be reduced. Secondly, by identifying 'trends' in complaints, the service provider can resolve systemic and recurring problems.
- To improve customer service: Making administration accountable, transparent and citizen friendly it helps in adopt a stakeholder approach and save time of both Administration and the citizen.
- For example, Sevottam model for citizen charter was proposed by the second Administrative Reforms Commission for improving the Public Service Delivery and adopted by many government offices.

Challenges pertaining to quality public service delivery:

- Lack of public participation
- Red tapism
- Inadequate political will
- Policy paralysis
- Bureaucratic attitude

Conclusion

Quality service delivery is an important component of good governance. It requires a number of reforms such as efficient utilisation of public funds, decentralisation of power, plugging legislative loopholes, strengthening the public Institutions like CVC and RTI, enhancing administrative accountability and making society more democratic. These reforms could improve public service delivery more efficiently in the long run.

59. How can institutional reforms address the challenges of corruption?

Approach - It expects students to write about - in first part write about various Institutional factors behind corruption in India - in second part write how institutional reforms can address the challenges of corruption - while in third part you can write solution or way forward.

Introduction

Corruption refers to the act of misuse and abuse of power especially by those in the government for personal gains either pecuniary or a favour. It promotes illegality, unethicality, subjectivity, inequity, injustice, waste, inefficiency and inconsistency in administrative conduct and behaviour.

Body

Institutional factors behind corruption in India:
- Cumbersome administrative process leads to delay which encourages the growth of dishonest practices such as giving speed money to dishonest officials.
- The system of governance which lacks transparency; accountability; grievance redressed mechanisms.
- Weak institutions. Example: CBI suffers from lack of autonomy and is termed as 'Caged Parrot' by Supreme Court.
- Discretionary powers available to public servants.
- Lack of proper education and training of civil servants.
- Low salaries.
- Inadequate and insufficient supervision.
- Political patronage of officials.
- Poor public opinion.
- Unwillingness of people to complain against the corrupt.

Institutional reforms can address the challenges of corruption by:
- Accountability institutions and security agencies are highly politicized. Institutional reforms can have made a huge impact which could be results in the arrest of a large number of high-profile perpetrators. Such reforms can reduce bribery and corruption to a major extent.
- Introduction of technological tools during the institutional reforms. The services providers can be modernized and professionalized in many areas of priority to better serve the public needs and eliminate inefficiencies in the system.
- Several applications and websites can be launch to implement public policies and programs. These tools can highly contribute to e-governance; they will not only be helpful in planning and decision making but also assure coordination among different agencies, public and private organizations, local and international donors with no exception to international monitoring agencies.

- Accountability institutions and security agencies can be authorized with more power and resources to let them feel more confident in catching high profile outlaws. Local governments can be given power and resources to further transfer it down to the village level.
- These initiatives can be taken to ensure the real devolution at the grass-root levels to provide them more authority and funding. Authority patterns with shared power are necessary for mutual interests and sustainable governance. Through governance, authority and power can incorporated to develop confidence, transparency and accountability mechanisms.

2nd ARC recommendations –

- Strengthen PCA, 1988: Sanction for prosecution automatic for those caught red-handed expedite for other cases; recognize and punish collusive bribery.
- Liability of corrupt officials: they must make good the loss caused and, in addition, be liable for damages
- Protection of Whistle-blowers: criminalize harassment, victimization of, or retaliation against whistle-blowers.
- Appointment of independent ombudsman.
- E-governance.
- Strengthen Right to Information Act.

Conclusion

There is ample evidence to show that corruption has slowed down economic progress and poverty alleviation initiatives in India. It has adversely affected the national security system, too. The most affected by corruption are the poorest and the most vulnerable groups. We need sustained efforts to address this menace by strengthening institutions, laws, improving governance.
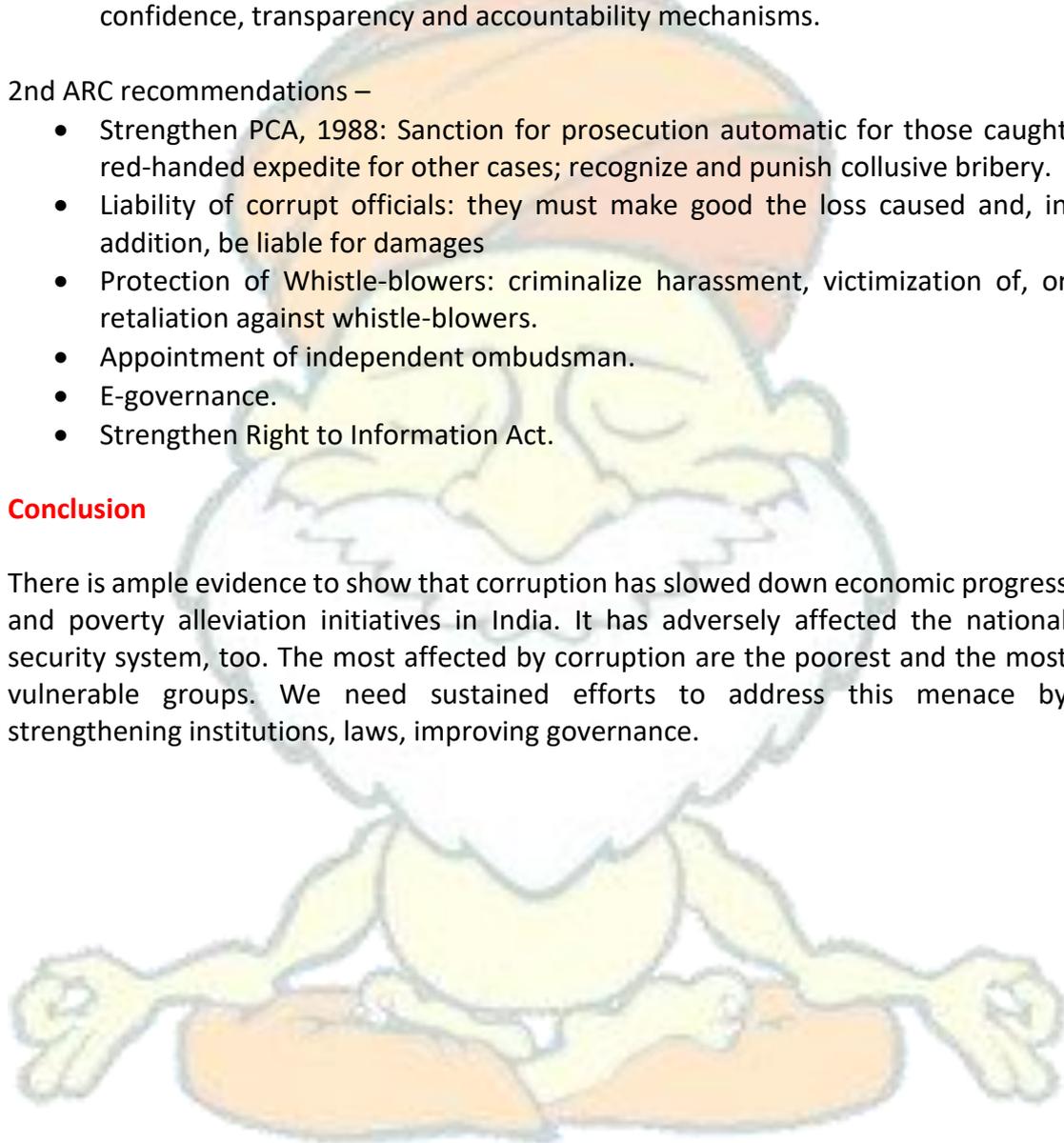
60. You are posted as the secretary of the education department in a state. The state government has just launched a scheme for awarding scholarships to meritorious students to pursue higher education abroad. The undergraduate students having exceptional academic record would be awarded hundred percent tuition fees and living expenses at a university abroad. You are heading a committee of bureaucrats and academicians that will shortlist the candidate's after scrutinizing their academic performance. While going through the list of candidates you realise that one of the candidates applying for the scholarship happens to be the daughter of your best friend. Her academic credentials are really good and there are high chances of her getting this scholarship.

Do you see a conflict of interest here? Discuss. Is there a way to address this conflict? If yes, what are the alternatives available? Examine.

Approach - To solve these kind of case studies, it is necessary to adopt a stakeholder's approach. As an ethical dilemma is presented where qualities of objectivity, non-partisanship of an officer are tested with her interpersonal relations. After adopting this approach candidate needs to enlist available options and then choose the best available option.

Introduction
Stakeholders in the case
- Me as a secretary of education department
- Other students applying for the scholarship
- Reputation of education department
- Society at large

Dilemmas:
- Duty towards job Vs. Interpersonal relations
- Merit Vs. Interpersonal relations
- Objectivity, Non-partisanship Vs. Partisanship
- Conflict of interest

While talking about conflict of interest John F Kennedy said 'the basis of effective government is public confidence and that confidence is endangered when ethical standards falter or appear to falter'. Conflict of interest refers to conflicts between one's professional responsibilities as a public servant or as a member of an organization and one's private interests as an individual. It is one of the most obvious ethical dilemma.

Body

In this case, there is a conflict of interest between neutrality, non-partisanship, objectivity (selecting only the deserving students) and Interpersonal relations (not selecting daughter of best friend, if the case maybe).

Options available before me:

Option 1- Rescue myself from committee
Pros

- Conflict of interest will be resolved.
- Objectivity in selecting candidates will be maintained.
- Department's reputation as being objective will be upheld.
- No impact on personal relationship if friend's daughter is not selected.

Cons

- Do not know the credentials and value system of successor.
- Might impact the working of committee as well as result in delays.
- Lead to escapism, as many situations will have some conflict of interest.

This option seems to be a good move as Jessica Savitch an American television presenter said never refuse an assignment except when there is conflict of interest, a potential of danger to you and your family, or you hold a potential biased attitude about a subject under the focus.

Option 2: Continue as head of the committee
Pros

- Selection might get completed within given timeframe.
- Duty towards job will be completed

Cons

- May blot department's image of being partial.
- Impact personal image in department, might be seen as partial.
- Impact on personal relation if daughter of the friend is not selected.

Option 3: Continue heading the committee. However, make the conflict known to the members ask them to be impartial and keep the selection process transparent.
Pros

- Upholds department's image as being neutral and transparent.
- Increase personal reputation of being impartial and objective.
- Students will not feel that the board is biased.
- Not impact the personal relations as well.

Conclusion

In this way, duty can be discharged without an impact on personal relations. As Buddha advises that SamyakMarg is the best way out of a dilemma, moreover the principle of golden mean also says that wisdom lies in choosing between two extremes. As every other situation can have same kind of conflict of interest and one must choose a middle path.

61. Abhishek, an IAS officer, is heading the IT Committee constituted for improving the services being provided by the State Transportation Department by leveraging information technology solutions. In the deliberations of the committee, it was concluded that a special purpose vehicle headed by an independent CEO, preferably from the private sector having experience in IT projects would best suit the needs of upgrading the services offered by the department. However, hitherto the department was headed and manned only by civil servants. The very idea of a CEO coming from the private sector and heading the most important division of the department is meeting stiff resistance from within the department.

How can Abhishek deal with this problem? Is this a typical problem with all the government departments? Critically analyse.

Approach - In this kind of case study rather than adapting a stakeholders approach it is necessary to adopt a solution oriented approach. You can introduce by briefing about the resistance to change or attitude of public servants towards change. In the main body part give clear and straightforward solutions to the problems/issues given in question.

Introduction

While describing the benefits of change Charles Kettering, an American inventor has said that "The world hates change, yet it is the only thing that has brought progress". Resistance to change is a natural reaction, especially in government sector. Change is uncomfortable and proposes new ways of thinking and doing in system. However, People don't fear change, though, they fear the unknown.

Body

The present case showcases the transportation department employee's resistance to change and accept the much needed alternative of involving private sector participation which has been suggested by IT committee headed by IAS officer Abhishek.
Approach to solve the problem:

- Stephen king an American Author said that 'Resistance to change is proportional to how much the future might be altered by any given act'. In this context telling the staff about the benefits of having a specialist as a head of team and convincing the staff of no major changes in the work culture of the department and ensuring that their job security is maintained even after the new CEO's arrival.

- Informing the employees about the reasons and process for intended changes. It will tend to reduce fear and increase duty towards job, positivity among employees. Here, the new person's role as an expert can be highlighted which will bring enthusiasm and energy within department.

- Facilitating effective communication, besides getting actively involved in the change efforts, can result in reducing stiffness in the department. In fact,

employee participation is the greatest factor in reducing tensions due to new recommendations.

- Ensuring transparency: Maintaining the transparency by circulating the committee recommendations within the department and conveying the urgent need to implement the said recommendations for overall improvement of the department as the department needs to be flexible with the demand of time.
- Generalist Vs. Expert: It is necessary to highlight the lack of available expertise in the domain of existing officer cadre and the need to bring in private participation for the same as India has a developed IT industry which would provide much needed expertise for the government department's functioning.
- Altering the rigid attitude: Convincing the employees that the technological assimilation and modern work culture in the department would be difficult to achieve if the same attitude and practices are continued without due appraisal and study on their effectiveness.
- Achieving the objective: Implementing the committee's recommendation after the above due deliberations would help in achieving the goal of attaining a public services department serving the public effectively.

Whether problem is typical with all the government departments:
- Such a phenomenon is usually adjoined as a typical problem to all government departments as such an entry undermines the career progression avenues of existing civil servants and also hampers the employment opportunities of young aspirants looking to enter the famed civil services for a fulfilling career thus leading to resistance against it.
- The exposure and sensitivity to the country's complex socio-political milieu and to the needs of the common man, which widespread field experience provides to government servants, may not be available in the private sector since the private sector does not have the same width and depth of exposure to this type of field experience.
- Existing government servants also fear the issue of conflict of interest when it comes to entrants from the private sector which could jeopardise the functioning of the government.
- At the same time, the experience of domain level experts in Planning Commission and NITI Aayog as well as former Governors of RBI (Bimal Jalan and Raguram Rajan), Sam Pitroda (Head of many technology missions), etc. shows that many government departments can be receptive to this change.
- Further, there is growing realisation that the administrative problems at the implementation level (district, tehsil, panchayat) require intervention of specialists with domain expertise and not generalist who head the department in the capacity of Secretary. For instance, Chaavi Rajawat who earlier worked in the private sector chose to contest elections in her village and became a Sarpanch. She became an actor of change in her village as she implemented rainwater harvesting schemes, led people centric governance etc.

- The private sector can help catalyse the career civil servants to specialise in their chosen field. This will infuse much needed competition at the senior levels of management in the bureaucracy which is non-existent at present.
- Many other aspects of the issue also need to be considered too where the reservation aspect becomes important as neglect on this aspect may raise multiple questions which are of legal, political and social nature. Which will also question the appointments on the ground of 'quid pro quo', nepotism or favouritism.

Conclusion

Private entry into government services is not a new idea but it has not been followed as an institutionalized practice earlier. It is expected that private entry in government will catalyze the rule bound bureaucracy to become the agents of change; a role which the founding fathers, like Sardar Patel and Jawaharlal Nehru, had envisaged for the civil services. This should be the ideal for Abhishek as an IAS while dealing with the present scenario i.e. to fulfil the ideals of founding fathers.
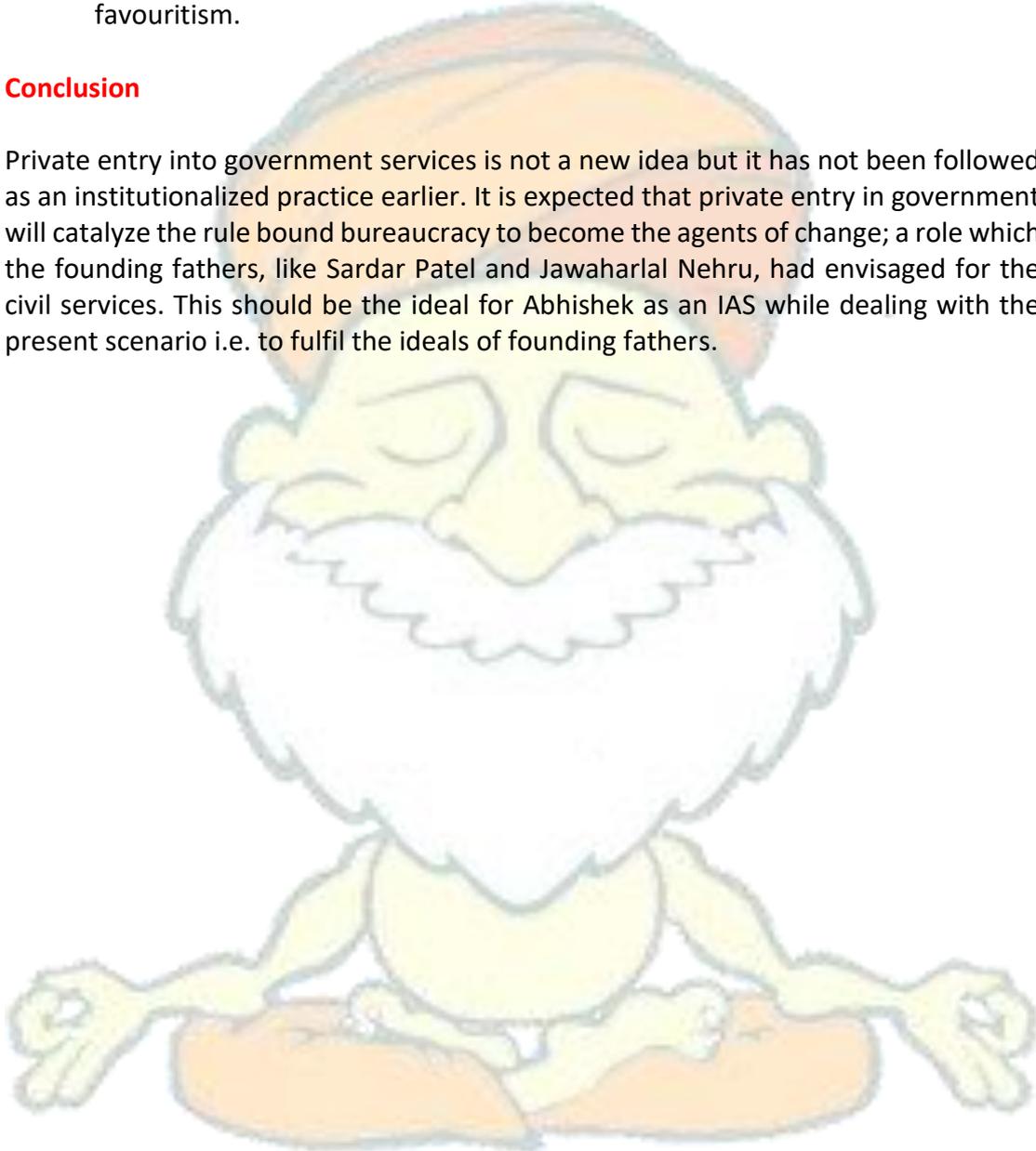
62. A flagship government project being headed by you has encountered a tricky problem. The project requires a cloud based server that would cost at least ten crores. The tendering process would take at least three months and the final procurement won't finalise before 6 months. The project is being monitored by the PMO and you are under a lot of pressure to deliver the project in a time bound manner. The only way to adhere to the timeline is to do away with the tendering process. But to do that, you will be required to create some fake documents to prove that the procurement is too urgent to wait for the tendering process and that doing away with the tendering process is necessary. Your colleagues and seniors tell you that such things are common and you should not hesitate in taking the alternate route.

What would you do in this case? Would you go ahead and create the fake documents? Substantiate your response.

Approach - It expects students to write about the given case and the ethical dilemma faced, mention the options available with their merits and demerits and mention a a course of action with explanation.

Introduction

The given case tests the ability of a person to stick to the right means even in difficult administrative circumstances. This poses a challenge between maintaining status quo and to bring a change with transparency in procurement policy.

Body

Values involved:
- Integrity
- Honesty
- Moral righteousness
- Courage
- Objectivity
- Professionalism
- Fairness

Stakeholders involved:
- PMO
- Seniors and colleagues
- Myself
- Beneficiary of projects
- Bidders- start-up's and companies

Ethical and moral dilemma involved:
- Organisational Goals v/s Personal Ethics
- Organisational benefit v/s organisational ethics

- Following Standard Operating Procedures (SOP)v/s unfair means
- Means v/s End

Options available:

1. Start work as per seniors and colleagues advice to create fake documents:

Merits:

- Completing the task in time bound period which will help maintain the organisation image.
- Following advice of seniors will also help in losing the pressure and stress related to task.
- This option allows me to fulfil my duty and following the seniors and administrative orders try to be in good books.

Demerits:

- But it violates the virtue of objective in professional duty.
- Setting wrong precedent for the future become habitual of others also and can transform into larger scams.
- Risk of further information leakage it can jeopardise such ICT projects in digital India programmes.
- It will go against principle and agenda of good governance with lack of transparency in governance and important government's projects.
- Bypassing professional ethics and an established procedure raises doubts on integrity.
- These may include vested interests of different colleague as the project covers 10 crore budget and can lead to corruption.

2. Going against advice of alternate route and making efforts for efficient SOP.

Merits:

- Upholding my personal moral conscience will make me more productive at work.
- In the long run ethical conduct always helps in achieving life's larger goals, such as mental peace, clear conscience, strength of character and brings harmony and balance in life.
- Using pressure in more objective direction and setting resilient accountability and setting example for all colleagues without fake documents task can be done in time bound period.
- It may imbibe confidence in work culture that we can finish task without unfair means.

Demerits:

- Can take more time with SOP and taking confidence of colleagues to do it in fair manner.
- Can hamper relation with the colleagues and senior in office and can strain the working environment.

Course of action with following steps:

1. E-Procurement system calling various budding start-up and encouraging them to complete it in time bound manner. It will turn paper based administration to web based administration will help bring procurement cost low by which we can provide incentives for finishing the task in time. It will provide across India bidding chance by which we pick most efficient company for task.

2. Using confidence building measures and trust with help of senior authorities at PMO with explaining the whole scenario and asking more time in the project so that new SOP can be created for e-Procurement in such scenarios.

3. Attitudinal change and moral suasion of colleagues to help in completing the task in time and bring change in department with opting the ICT technology and electronic tendering towards such situations which will also avert corruption and will help in efficient governance.

Conclusion

The main objective purpose behind introduction of electronic tendering/procurement was to improve the transparency of the tendering process, and to bring the benefits of Internet connectivity anytime anywhere access for those connected, and improved efficiency of transparency. The project also intended to cut down on the public sector's biggest tender processing costs of advertising, preparing, printing and disseminating tender documents, and then processing bids both in terms of money and time.
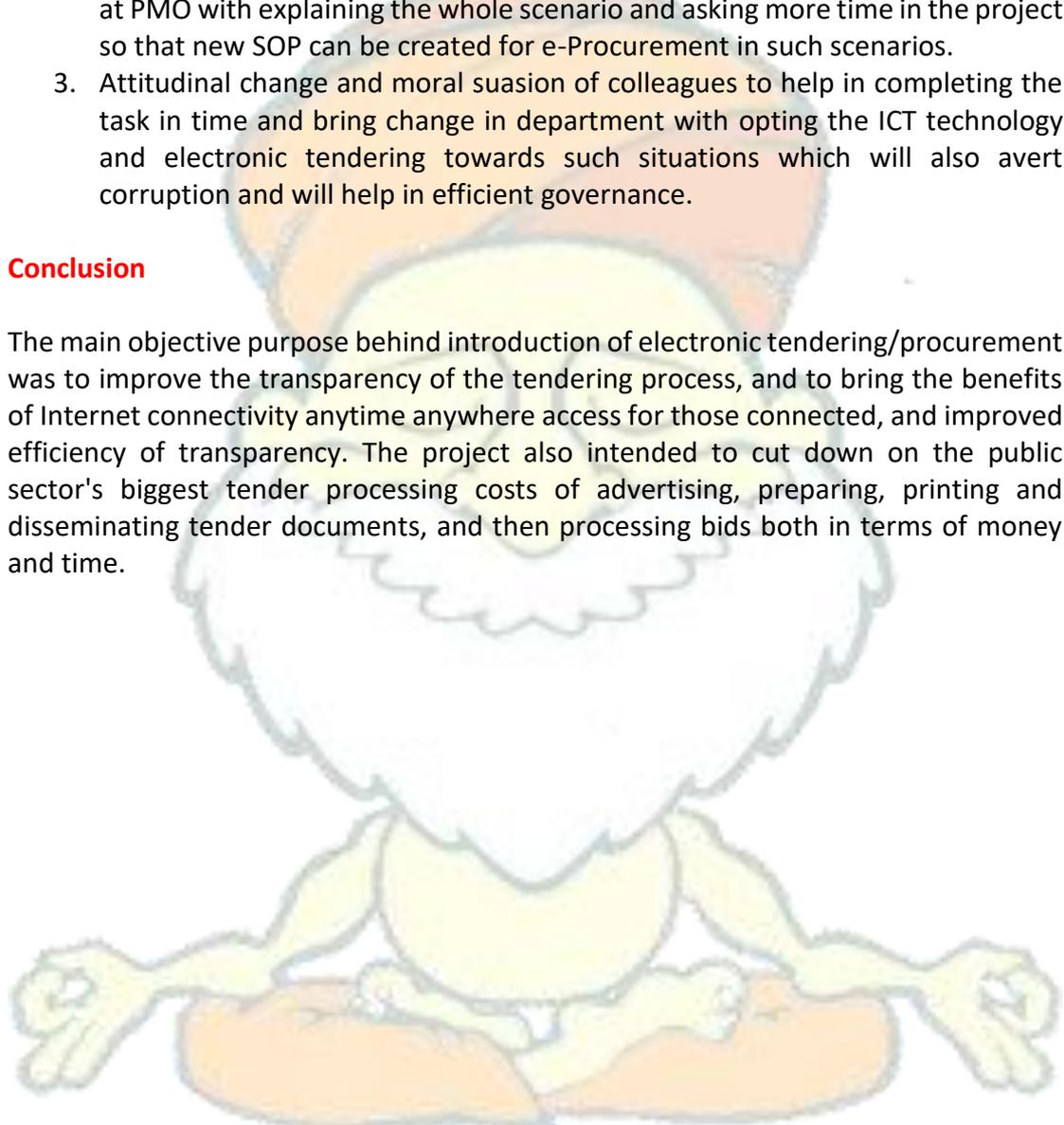
63. You are working in a big media house. The channels owned by the house have wide reach across the country. The new CEO of the media house is showing signs of allegiance towards the ruling party of a particular state. You are able to gauge his inclinations by the fact that there is hardly any news item being shown which criticise the action or inaction of the government. You are perturbed by this as you feel that free, independent and unbiased media is the lifeline of a vibrant democracy. Yet you are silent on this issue as your bread and butter is dependent on this job. You can't offend your boss after all. However, one day the limit is breached when the CEO calls you and directs you to stage a false sting operation against the opposition party's leader. You are also given monetary inducements to follow his directions. When you oppose, he tells you to either do the job or quit the company.

What options do you have in this situation? Which one will you follow? Why?

Approach - To solve these kind of case studies, it is necessary to adopt a stakeholder's approach. As an ethical dilemma is presented where qualities of professional ethics, integrity are tested with his/her interpersonal relations. After adopting this approach candidate needs to enlist available options and then choose the best available option.

Introduction

The above case presents a grim picture of one of the media house on one side and on the other side presents the cynical approach of those who ignore their corrupt practices in the process. This also raises concern of vulnerability, harassment, getting trapped in vicious cycle of falsehood.

Body

Stakeholders in this case:
- Media house (New CEO)
- Society at large
- Ruling party
- Opposition party
- Me as employee of firm

Dilemmas in this question:
- Professional ethics Vs. personal ethics
- Integrity Vs. partisanship
- Freedom of information Vs. corrupt nexus of political and media
- Independence of journalism Vs. partisan boss

Options available before me:
Option One: As per the direction from the CEO, will do the false sting operation against opposition party's leader and take monetary inducements as per the offer. If I follow this option these are following pros and cons are there:

Pros:
- I will get the monetary benefit and it is good for government and our company.
- I will save my job as I am completely depending on it for my bread and butter.
- I will satisfy my boss and this will help me in promoting my position as well as I will get more monetary benefits if I continue to follow my boss orders.
- I will be getting any future political favours, if needed.

Cons:
- This is completely against my personal ethics and it is against the journalism ethics as well, this will lead to dishonesty to my job, and I will be part of that media and political nexus.
- It will definitely hamper my conscience along with that I may save my job, but every day I will go through mental trauma for doing the things which are against my principles.
- These kinds of acts are like slippery slope once if we get used to it, we will lose our conscience and after some time, it feels like we are not doing wrong at all, which I am aware of, so I don't want to lose my character just for meagre material benefits.
- This is more about short term gain VS long term pain, by opting for this option, I will be doing negative ethics of my profession and this act is against the freedom of information.

Option Two: As the question clearly stated that the CEO has ordered to follow the orders or else I have to quit my job, and it is the question of bread and butter. If I opt for this option, there are following pros and cons are there:

Pros:
- I might leave my job to uphold personal ethics, and will be satisfied with the act I have done as I strongly feel that doing unethical things is the worst form of corruption.
- It will satisfy the ego of the CEO as well, and he will get his work done with other person smoothly as he understood that I am not the right person to do this job.

Cons:
- If I quit the job, that doesn't mean that the false sting operation won't happen, I have saved myself from doing wrong, however, now someone else will do that job which is against the freedom of information as it will promote the corrupt nexus between politics and media.
- This will lead to curb in the independence of journalism and also the CEO who has this biasedness, will dominate the field which is dangerous for the democratic values as well as accountability in the society.
- But the crisis will remain in the media and especially in my company, which I have first-hand experienced.

- Boss might think that he can pressurize anyone who doesn't listen to him, I will set the wrong precedence in the company itself.

Option Three: If I have experienced that biasedness, there must be other people who must have felt the same and as I am working in that media house before the CEO, I must have good knowledge about the people who will stand for the democracy and freedom of information and without any biasedness.

I will reach them and will try to escalate the issue to the board members and also will try to resolve through internal mechanism as there must be some mechanism to solve the crisis like these. I can be a whistle blower from the institute, and I can register a complaint to press clubs, board of directors regarding the CEO, etc., if I opt for this option, there will be following pros and cons:

Pros:
- This will restore the peoples' faith in the media as these days, most of the people lost their faith in the media, due to lots of scams as well as news itself shows that biasedness.
- This will not cost my job, as it will also raise the consciousness of the media, if something is going wrong in other companies, they might introspect and some people who are under pressure due to the bosses and their hierarchical heads can now come out and raise the issues going on within their companies.
- This way my integrity and also my personal ethics will be upheld, which also means personal and professional satisfaction for staying for the truth and honesty.
- By opting this option, I can curb the nexus between media corporates and politicians.
- This will help our company to remain neutral and also this will improve our company's image in the public.

Cons:
- Unnecessary rivalries in the company and also people who are supporting the CEO of that company.
- He might target me again and again for no reason, if board of directors and some of the staff have already known and they are getting some favours and monetary benefits.

In this situation my options will be:
- I will opt for the third option as it is my duty to restore the public faith in the media and also by doing this, sometimes it might cost my job.
- But that won't be a big issue, as I have already worked and I have the experience to get into another job role or other company, as these days most of the companies are looking for persons who are ethical as well as professional.
- The Public trust in media to hold government accountable is the most important function as a journalist.

- My efforts are to preserve that trust and adhere to the ethical norms of the media profession, which I might be able to do it.

Conclusion

Indira Gandhi once said, People tend to forget their duties but remember their right. Thus it is our duty to not let any wrong intentional people to influence media which is lifeline for our democracy.

64. Deepak is posted as the Deputy Commissioner of Police in a busy urban district of a Metropolitan city. The students of a reputed university are planning a massive protest rally against a bill passed by the Central Government. Although, the permission has been granted by the administration for peaceful assembly, Deepak has a strong and highly reliable Intel that some miscreants might disguise as students and cause violence in the rally. Deepak requests his superior and persuades him to put a stay on the rally. The students are enraged by this decision and launch a campaign on social media demanding the resignation of top police officials including Deepak's for having denied the permission for a democratic and peaceful protest. In a matter of hours, Deepak becomes the centre of online vitriol and thousands of memes. It hurts Deepak a lot. Even his family is highly perturbed by the series of events in Deepak's professional life.

How do you read this situation? Don't you think social media has made governance difficult? With social media having become an integral part of public life, is it even possible to get completely detached from the virtual world and do one's job? What qualities Deepak must possess to overcome this phase in his life? Should he respond to these personal attacks and mudslinging on the social media platforms or should he remain silent and just keep doing his job? Analyse.

Approach - It expects students to write about stakeholders involved and evaluate the ethical issues involved and address various issues asked in case study.

Introduction

The situation presents a very real ethical dilemma faced by many hard working and dedicated civil servants. The core issue in situation is managing freedom of expression also managing personal and professional lives which are intrinsically linked.

Body

Stakeholders involved:
- Deepak as DCP.
- Deepak's family disturbed by situation arising.
- Deepak's superior officials and top police officials.
- Central government with certain bill passed.
- Genuinely protesting students and others with public interest.
- Miscreants planning to cause violence.

Different values involved in case:
- Honesty
- Transparency
- Objectivity
- Anonymity
- Commitment to public welfare

The ethical moral issues involved in the case:
- Responsibility to act against a social menace.
- Public service values and maintaining integrity of the office prone to political influence.
- Consequences of actions and inactions which have the potential to change discourse.
- Courage of conviction.
- Freedom of Speech v/s Public Safety.

Social media making governance difficult:
- The rise of polarising and divisive content has been a defining moment in social media platforms. Which is fed by fake news propagation through social media channels.
- Social media has enabled a style of populist politics, which on the negative side allows extreme speech to thrive in digital spaces that are unregulated, particularly in regional languages. Therefore it's difficult for governance agencies mostly police force involved in such cases.
- But at same time Social media has made Indian politics and society more inclusive by allowing different people, who were traditionally excluded from politics and larger society due to geography and demography, to gain direct entry into the sociopolitical process.

Detaching from social media:
- Yes it's possible to be detached from social media. It will keep Deepak away from baseless criticism. Multiple studies have found a strong link between social media and an increased risk for depression, anxiety, self-harm, and even suicidal thoughts. Social media may promote negative experiences such as Inadequacy about your life or appearance.

Qualities to be possessed by Deepak to overcome such situations:
- Deepak must have fortitude to balance work and professional life. Respond situation with humility and grace, positivity can help in tackle the situation. He must have qualities in managing public pressure v/s carrying out one's duty.
- Taking decisions based on objectivity and ensuring freedom of expression as per constitutional values.
- Also strike a balance between the rights of the individual and the concerns of the state. With use of test of proportionality as per Supreme Court judgment in Anuradha basin case. Any restraint made on a fundamental freedom must be necessary and proportionate to the goal that it seeks to achieve.

Responding to personal attacks on social media:
- Social media attacks can terrify and paralyze us. Aggressors aim to silence, shame, humiliate, bully, intimidate, threaten, terrorize and virtually destroy their human target. They wield weapons like rumours, innuendo, lies, hate speech and violent imagery.

- From online forums to community groups, research and experience shows people are more willing to insult and use menacing language online than in person, especially when there's the protection of anonymity behind a computer
- Social media aggressors want to single you out, isolate you and cut you off from allies. Don't let them. Reach out to people you trust those who will listen, validate, respect and support you.
- Whatever you say will reward them and feed the attack. They did not target you because they wanted to reason with, understand or respect you. Their goal is to shame, condemn and terrorise you.
- They want you to live in fear and silence your voice. So we should refuse to engage or even acknowledge them.
- Following the DoPT social media guidelines must be priority.
- Not to remain silent students/public has right to know on which grounds permit of protest was stayed with basic reasonable facts which can be publicly shared must be given.

Conclusion

Social media has become an integral part of our modern daily lives. It can help us stay connected with our loved ones and larger public, but it can also be used to inflict pain, suffering and terror. Learning and creating ways to build online communities where people can protect one another is a vital step toward social justice and a better world for all of us.
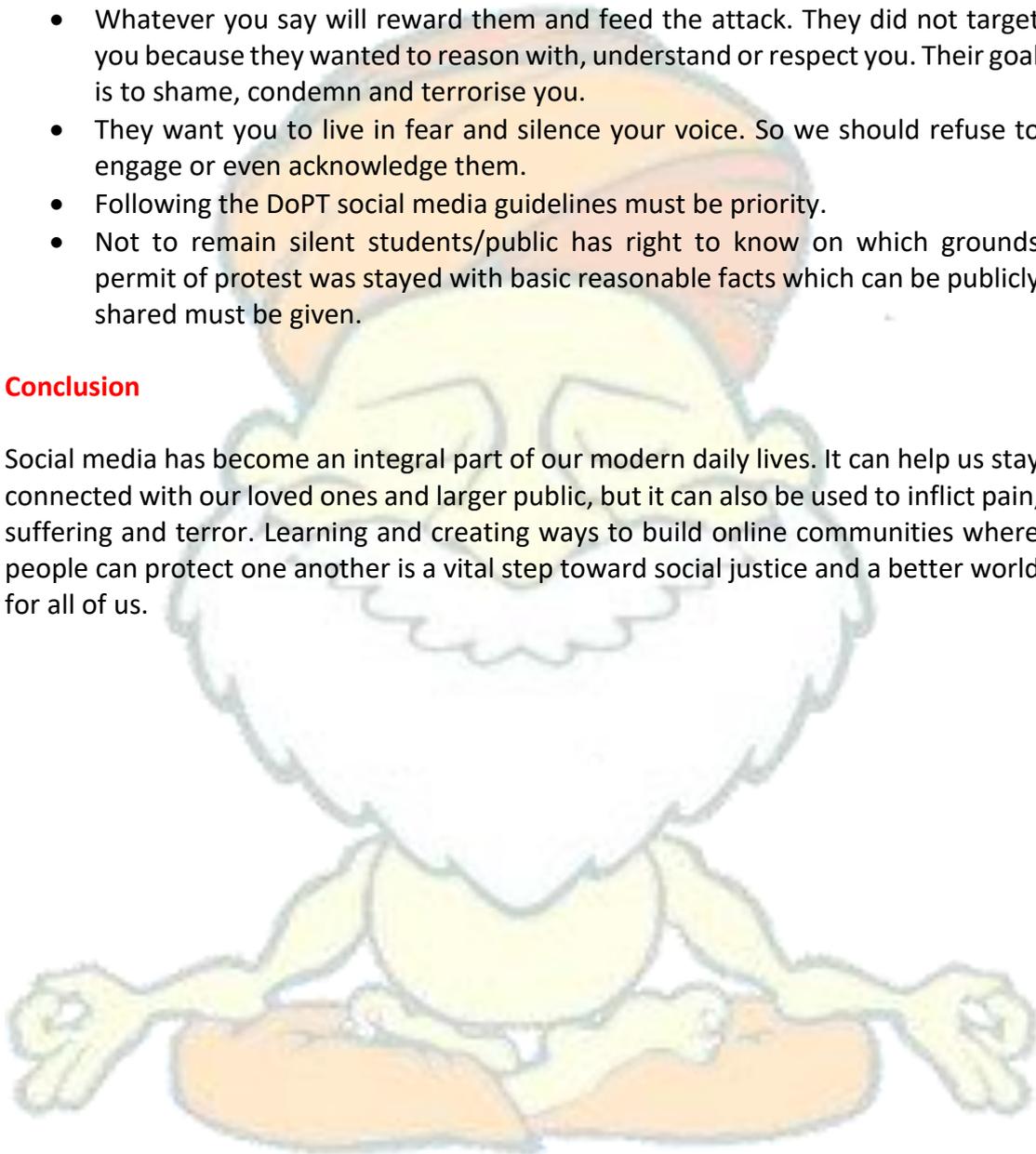
65. You have joined as the Director of Operations in a government department. After joining the office, you start getting signals from your colleagues and subordinates that your's is a plum posting. Your predecessors have made fortunes out of this post and you are lucky to have got this position without actually even having bribed the superiors. They also start sharing ideas on how to extract quick fortunes by misusing your powers. Being an honest officer, you squarely refuse the ideas and tell them you have no such intentions. Within a week, you are called by your reporting officer who ridicules you for being naive and stupid for having refused to earn good money. He tells you that he is fine with your honesty though and that you are free to choose your saintly path. However, you must keep your mouth shut and don't interfere with the processes already defined and established by your predecessors. He also threatens that you shall be shunted to a remote location if you don't follow his directions.

How would you respond to this situation? Don't you think being honest doesn't only mean non-participation in corrupt activities but also standing firm against them? But if the entire system is against you and forcing you to follow suit, what are the options available to you? Which one would you choose and why? Substantiate.

Approach - It expects students to consider about fundamental principles or criteria that integrate and rearrange the process of dealing with ethical dilemmas in public administration such democratic accountability of administration, the rule of law and the principle of legality, professional integrity and write about stakeholders and different ethical values involved.

Introduction

This case involves a dilemma between professional obligations of a public servant in-charge as director of operations in office and his personal values. With highlighting the different stakeholders you have to write about different issues asked in question.

Body

Ethical values pertaining to case:
- Probity and integrity
- Ethical neutrality
- Transparency
- Good governance
- Honesty
- Moral righteousness
- Dedication to Public Service

Stakeholders involved in the situation:
- Myself as Director of operations.
- Colleagues and subordinate in the office.
- Predecessors in the office.

- Reporting officer.
- Public and there larger interest.

Being honest and standing firm against corruption activities:
- Being trustworthy, loyal, fair, and sincere. An honest person is free of deceit, is truthful and sincere. Moreover, an honest person does not tell lies and always speaks the truth.In a nutshell, Honesty is being truthful and open. In these type of case officers need to have value of probity.
- Probity is act of strict adherence to highest principles and ideals (integrity, honesty) and avoiding corrupt or dishonest conduct. It exhorts for prioritisation of public interest in the actions of civil servants. This ensures to participate in matter and try to avert corrupt practices.
- Ensuring the system is incorruptible is the biggest objective of probity. Hence it will avoid the potential for misconduct, fraud and corruption.

Course of action:
Following advise of colleagues and subordinate:
- It will help in meeting expectations of colleagues and subordinate. Also avoiding dereliction of duty. It will ensures predecessors standards to be in place and will not disturb the chain of command.
- But being honest and fair it will go against moral and ethical values and can create crisis of conscience.
- Following such an order is not only against individual dignity but also against code of conduct of civil services.
- Not showing accountable behaviour.
- Showing escapist tendency by avoiding the situation.

Going against advice, not following colleagues and subordinate:
- It will ensure Deontological approach of Immanuel Kant suggests that it is immoral to take the bribe and one must adhere to his duty.
- It creates positive role models in the society and ensures behavioural regulation at personal level.
- Help in discharging the duties in an impartial, unbiased non-partisan and incorruptible manner.
- It will help in avoiding moral dissonance.
- Avoiding any conflict of interest.
- Opportunity to show administrative leadership.
- Showing impartial attitude of administration.
- Following such step would disrupt the relationship with colleagues and subordinate and nexus of corruption which was set by all and my predecessors. And may harm the working environment.

Asking for written orders on issues pertaining to corruption:
- Written order is a legal proof of involvement and clearly delineates the chain of command. Asking for a written order from my reporting officer might act as a deterrent insomuch as the senior might refuse to do so.

- However, communicating clearly the illegality of the act is important. The reporting officer might refrain from issuing such an order knowing the illegality of the act.
- Even after knowing the illegality if the act if the senior issues a written orders the onus is on me. The written order would protects me in terms of culpability as far as my initiative is concerned. I can cite on being questioned that I acted under orders. This might be technically correct however it is not ethically sound and amounts to abdication of responsibility.
- In effect following this option still makes the act illegal as well as unethical. It can be questioned in a court of law and the defence that you were acting under orders might not hold a ground there. Similarly, this option does not augur well for probity in governance.

Taking counsel and advice for proactive action from senior:
- Talking to the highest authority seems to be a logical corollary of duly considered action when communicating clearly to the senior fails. I must clearly and objectively explain the situation to him while seeking his counsel.
- This might result in the highest authorities censoring the reporting officer and supporting you in following the due process in consonance with the call of your duty. However, on the other side it might earn me the ire of my reporting officer and he might hold a grudge against me.
- Another flipside of this option depends on the approach of the highest authority. If he is also in conformity with the chain of corruption and the other colleagues then this step might prove to be counterproductive and add pressure on me. If such be the case then it does not resolve the larger concerns of prevailing law and order conditions as well.

Taking matter to vigilance department:
- The Central Vigilance Commission is mandated under the CVC Act, 2003, to enquire or cause an enquiry into complaints against public servants wherein allegations of corruption are involved. The Commission can cause an enquiry through the Chief Vigilance Officer of the organisation concerned or CBI or any other anti-corruption investigating agency under the Government of India.

I will Choose Whistle Blower Provision and inform the vigilance department:
- As such plum post was given to me without any bribery there must be government's intention to act against such nexus of corruption. And bring them to the due process of law. Lodging a complaint under Public Interest Disclosure and Protection of Informers Resolution (PIDPIR) in CVC.
- CVC is mandated not only to maintain the secrecy of the complainant's identity but also provide protection to the complainant against any physical threat, harassment or victimization.
- This will help to maintain the highest value probity and integrity in administration without harming self and working towards larger public interest.

Conclusion

Corruption has a disproportionate impact on the poor and most vulnerable, increasing costs and reducing access to services, including health, education and justice. Corruption erodes trust in government and undermines the social contract. This is cause for concern across the globe, but particularly in contexts of fragility and violence, as corruption fuels and perpetuates the inequalities and discontent that lead to fragility, violent extremism, and conflict. Hence it is imperative that all forms of corruption are rooted out for a "Atmanirbhar Bharat".

Current Affairs

66. What are the key features of the New Education Policy (NEP)? What are your thoughts on NEP? Discuss.

Approach - It expects students to write about - in first part write about features of the New Education Policy - in second part write about significance of NEP - in third part write issues which needs to address related to NEP - in end you can write way forward.

Introduction

The National Educational Policy has come a long way from its first formulation in 1968 followed by its modified versions of 1986 and 1992, and now the National Educational Policy 2020(the NEP 2020). On 29th July, 2020, Union Cabinet had given approval to new education policy for the 21st century. The cabinet had also approved a proposal to rename the Ministry of Human Resource Development as the Ministry of Education.

Body

Features of NEP:
- School Education:
  - Universalization of education from preschool to secondary level with 100% Gross Enrolment Ratio (GER) in school education by 2030.
  - To bring 2 crores out of school children back into the mainstream through an open schooling system.
  - The current 10+2 system to be replaced by a new 5+3+3+4 curricular structure corresponding to ages 3-8, 8-11, 11-14, and 14-18 years respectively.
  - It will bring the uncovered age group of 3-6 years under school curriculum, which has been recognized globally as the crucial stage for development of mental faculties of a child.
  - It will also have 12 years of schooling with three years of Anganwadi/ pre schooling.
  - Class 10 and 12 board examinations to be made easier, to test core competencies rather than memorised facts, with all students allowed to take the exam twice.
  - School governance is set to change, with a new accreditation framework and an independent authority to regulate both public and private schools.
  - Emphasis on Foundational Literacy and Numeracy, no rigid separation between academic streams, extracurricular, vocational streams in schools.
  - Vocational Education to start from Class 6 with Internships.
  - Teaching up to at least Grade 5 to be in mother tongue/regional language. No language will be imposed on any student.
  - Assessment reforms with 360-degree Holistic Progress Card, tracking Student Progress for achieving Learning Outcomes
  - A new and comprehensive National Curriculum Framework for Teacher Education (NCFTE) 2021, will be formulated by the National Council for

Teacher Education (NCTE) in consultation with National Council of Educational Research and Training (NCERT).

- By 2030, the minimum degree qualification for teaching will be a 4-year integrated B.Ed. degree.
- Higher Education:
    - Gross Enrolment Ratio in higher education to be raised to 50% by 2035. Also, 3.5 crore seats to be added in higher education.
    - The current Gross Enrolment Ratio (GER) in higher education is 26.3%.
    - Holistic Undergraduate education with a flexible curriculum can be of 3 or 4 years with multiple exit options and appropriate certification within this period.
    - M.Phil. courses will be discontinued and all the courses at undergraduate, postgraduate and PhD level will now be interdisciplinary.
    - Academic Bank of Credits to be established to facilitate Transfer of Credits.
    - Multidisciplinary Education and Research Universities (MERUs), at par with IITs, IIMs, to be set up as models of best multidisciplinary education of global standards in the country.
    - The National Research Foundation will be created as an apex body for fostering a strong research culture and building research capacity across higher education.
    - Higher Education Commission of India (HECI) will be set up as a single umbrella body for the entire higher education, excluding medical and legal education. Public and private higher education institutions will be governed by the same set of norms for regulation, accreditation and academic standards. Also, HECI will be having four independent verticals namely,
    - National Higher Education Regulatory Council (NHERC) for regulation,
    - General Education Council (GEC) for standard setting,
    - Higher Education Grants Council (HEGC) for funding,
    - National Accreditation Council (NAC) for accreditation.
    - Affiliation of colleges is to be phased out in 15 years and a stage-wise mechanism to be established for granting graded autonomy to colleges.
    - Over a period of time, every college is expected to develop into either an autonomous degree-granting College, or a constituent college of a university.

Significance of National Education Policy 2020:

- Recognising Importance of Formative years: In adopting a 5+3+3+4 model for school education starting at age 3, the policy recognises the primacy of the formative years from ages 3 to 8 in shaping the child's future.
- Departure from Silos Mentality: Another key aspect of school education in the new policy is the breaking of the strict division of arts, commerce and science streams in high school. This can lay the foundation for a multi-disciplinary approach in high education.
- The Confluence of Education and Skills: Another laudable aspect of the scheme is the introduction of vocational courses with an internship. This may nudge the

vulnerable sections of society to send their children to school. Also, it would help in realisation of the goal of Skill India Mission.

- Making Education More Inclusive: The NEP proposes the extension of the Right to Education (RTE) to all children up to the age of 18. Further, the policy seeks to leverage the huge potential of online pedagogy and learning methodologies for increasing gross enrolment in higher education.
- Light but Tight Oversight: According to the policy, in spite of periodic inspection, transparency, maintaining quality standards and a favourable public perception will become a 24X7 pursuit for the institutions, leading to all-round improvement in their standard. The policy also seeks to establish a super-regulator for education which will be responsible for standards-setting, funding, accreditation and regulation of higher education India.
- Allowing Foreign Universities: The document states universities from among the top 100 in the world will be able to set up campuses in India. This will lead to an infusion of international perspective and innovation, which will make the Indian education system more efficient and competitive.
- Ending Hindi vs English Debate: Most crucially, NEP, once and for all, buries the strident Hindi versus English language debate; instead, it emphasises on making mother tongue, local language or the regional language the medium of instruction at least till Grade 5, which is considered the best medium of teaching.

However, there are few issues which needs to address related to NEP 2020:
- Knowledge-Jobs Mismatch: There is a persistent mismatch between the knowledge & skills imparted and the jobs available. This has been one of the main challenges that have affected the Indian education system since Independence. NEP 2020 failed to check this, as it is silent on education related to emerging technological fields like artificial intelligence, cyberspace, nanotech, etc.
- The Requirement of Enormous Resources. An ambitious target of public spending at 6% of GDP has been set. Mobilising financial resources will be a big challenge, given the low tax-to-GDP ratio and competing claims on the national exchequer of healthcare, national security and other key sectors.

Way forward:
- Need for Cooperative Federalism: Since education is a concurrent subject (both the Centre and the state governments can make laws on it), the reforms proposed can only be implemented collaboratively by the Centre and the states. Thus, the Centre has the giant task of building a consensus on the many ambitious plans.
- Strive Towards Universalisation of Education: There is a need for the creation of 'inclusion funds' to help socially and educationally disadvantaged children pursue education. Also, there is a need to set up a regulatory process that can check profiteering from education in the form of unaccounted donations.
- Bridging Digital Divide: If technology is a force-multiplier, with unequal access it can also expand the gap between the haves and have nots. Thus, the state needs to address the striking disparities in access to digital tools for universalization of education.

- Inter-ministerial Coordination: There is an emphasis on vocational training, but to make it effective, there has to be close coordination between the education, skills and labour ministry.

Conclusion

A New Education Policy aims to facilitate an inclusive, participatory and holistic approach, which takes into consideration field experiences, empirical research, stakeholder feedback, as well as lessons learned from best practices. It is a progressive shift towards a more scientific approach to education. The prescribed structure will help to cater the ability of the child – stages of cognitive development as well as social and physical awareness. If implemented in its true vision, the new structure can bring India at par with the leading countries of the world.
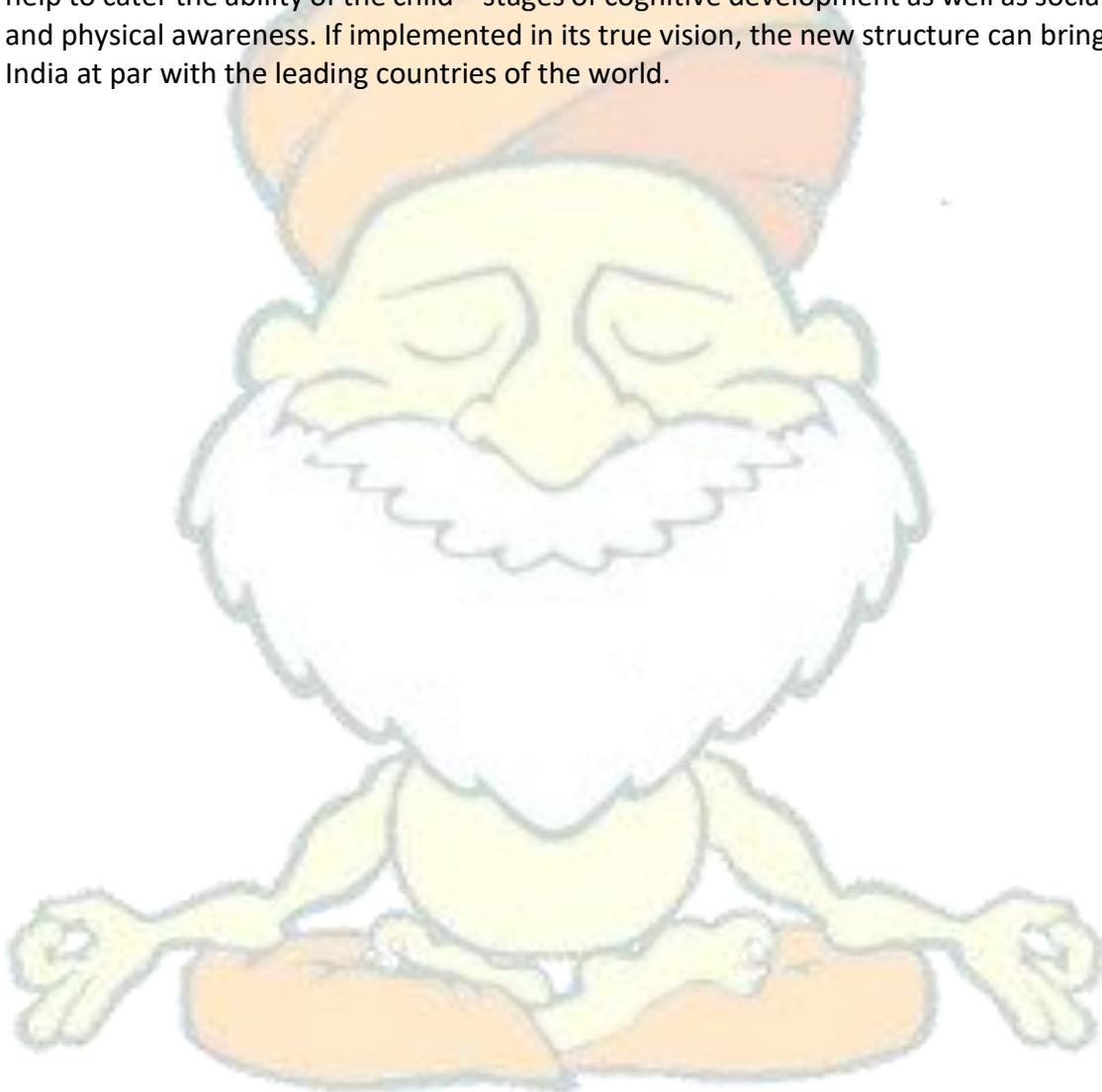
67. India suffers from the twin challenges of unemployment and skill gap. Do you agree? Examine the recent initiatives taken by the government to address those.

Approach - It expects students to write about Unemployment and skill gap and recent government initiatives to address it.

Introduction

A skills gap is the difference between skills that employers want or need, and skills their workforce offer. Skill and employability go hand on hand. Skill gap is the real cause of high unemployable population. The skill gap is not only leading to unemployment but several other social economic challenges in the country. India still has age old tradition of learning on job through informal networks and training.

Body

India suffering from twin challenges of unemployment and skill gap due to:
- Employability: As of now, only 5 per cent of the workforce have undergone any kind of vocational training, but even many of those are not employable, since the skills acquired have limited market application as per NASSCOM. According to NASSCOM, almost 40 per cent of the skilled workforce is not employable because the acquired education and training are of substandard quality.
- Education system: Furthermore, India's education system is primarily of a generalist nature and is not connected to the labour market. Academic and industrial requirements are not well synchronised.
- Skills Mismatch: India has a lopsided skills stock, it has caused problems due to the unregulated growth of technical institutions in the private sector and a lack of guidance for youth in choosing areas of training. As a result, an imbalance in the Indian labour market has created a surplus in some skills and shortages in others.
- Women Security and Social Restrictions: Women full engagement, however, remains restricted due to problems of personal security, biased attitudes of co-workers and social customs. Faced with ineffective protection, young female workers either select jobs for security considerations or prolong their education. Various studies have indicated marriage as a major cause of women workers withdrawing from the labour market and staying away from acquisition and upgrading skill.
- Job market changing with technology: Automation, machine learning and artificial intelligence, is drastically reducing the number of available jobs in the near future. New technology are rapidly evolving technology spaces where the comfort levels in using them needs to keep pace to stay professionally relevant which is lacking in Indian labour market.
- Shortage of Jobs: India's economic growth was more due to productivity than employment. In the wake of the limited creation of additional jobs, workers especially youth found themselves without jobs. The prevailing

situation forced them either to opt for unskilled or casual work in the informal sector or to enrol for further studies.

Recently, there has been increased activity in the acquiring of skills. Young people are attending various technical institutes in large numbers due to various government initiatives such as:

- Pradhan Mantri Kaushal Vikas Yojana (PMKVY): PMKVY is the flagship outcome-based skill training scheme of MSDE. Till 26 October 2018, 1.94 lakh candidates got a certificate and out of them, only 55% got employed across different sectors. This shows the low employability level under PMKVY. Participation from more and more industries should be sought for placement of the candidates trained under the scheme.

- National Apprentice Promotion Scheme: Scheme promote apprenticeship training and increase the engagement of apprentices from present 2.3 lakh to 50 lakh cumulatively by 2020. Training is considered to be most efficient ways to develop skilled manpower. It is providing the industry led practiced oriented model of formal training. In future it's expected to become a effective skill delivery mechanism of India.

- USSTAD scheme: The Scheme aims at upgrading Skills and Training of minority communities by preservation of traditional ancestral Arts and Crafts. Many training center under scheme not started yet and knowledge partner does not belong to minority community.

- Skill Development Initiative Scheme: Scheme aims to providing skill training to early school leavers & existing workers. The certifications provided under this scheme are nationally and internationally recognised. The enrolment in skill institutes remains low as compared to their enrolment capacity. This is due to low awareness level among youths about the skill development programmes.

- National career services: It was launched for establishing quick and efficient career related services across the country by revamping the existing nation-wide set-up of Employment Exchanges into IT-enabled Career Centres. Posting of vacancies on the portal continues to stay sluggish, even though the number of job seekers is rising.

- Seekho aur Kamao: The scheme aims at upgrading the skills of minority youth in various modern/traditional skills depending upon their qualification, present economic trends and market potential, which can earn them suitable employment or make them suitably skilled to go for self-employment.

- Hunar se Rozgar: The Govt. of India, Ministry of Tourism has launched a Training Programme, christened Hunar Se Rozgar Tak, to create employable skills in the interested youth who are in the age group of 18-25 years and who are minimum 8th pass.

- Himayat Scheme: It is a training-cum-placement programme for unemployed youth in Jammu and Kashmir. Youth will be provided short-term training for at least 3 months, in a range of skills for which there is good demand.

Other different measures need to take by government to tackle twin challenges of skill gaps and unemployment:

- Raising national standards of education.
- Offering accreditation to more educational institutions for national and global recognition.
- Skill survey.
- Partnering with developed nation to raise countries skill standards.
- Allowing various skill upgrading apps and online sites for certification.
- Offering industry specific online courses for existing workforce.
- Promoting the adoption for different technologies such as blockchain technology, AI etc.

Conclusion

The ever-increasing size of the youth workforce, both skilled and unskilled, in an environment of job scarcity means more young people are faced with limited employment opportunities, causing them to be either underemployed or unemployed. Taking cognisance of the importance of skill development for our national development and global competitiveness government has taken appropriate national skilling agenda. However realisation of this agenda requires active involvement and vigorous partnership among all the stake holders' viz., government, and suppliers of educational services, industry and civil society.
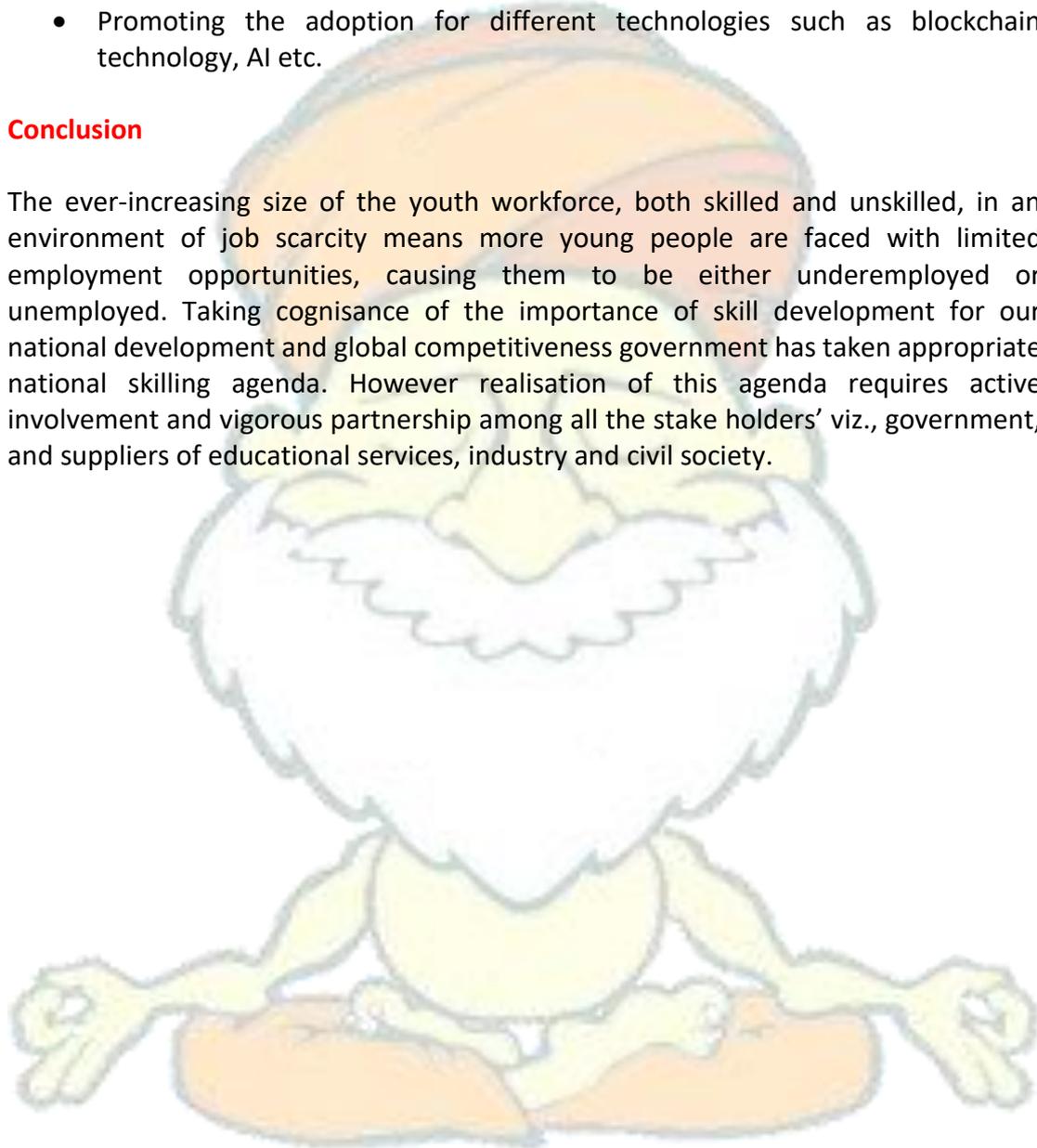
68. Examine the factors that ail the primary healthcare system in India. Why is there a wide variance in the performance of states? Analyse.

Approach - It expects students to write about factors ailing the primary health sector and highlight about wide variations in the performance of states.

Introduction

Primary health care is a whole-of-society approach to health and well-being centred on the needs and preferences of individuals, families and communities. It addresses the broader determinants of health and focuses on the comprehensive and interrelated aspects of physical, mental and social health and wellbeing. Primary health care is rooted in a commitment to social justice and equity and in the recognition of the fundamental right to the highest attainable standard of health.

Body

Factors behind ailing primary health care system in India:
- Limited services: Although Primary Health Care system exists in India but its scope is limited to pregnancy care, limited childcare and certain services related to national health programmes. Massive shortages in the supply of services (human resources, hospitals and diagnostic centres in the private/public sector) which are made worse by grossly inequitable availability between and within States. E.g. Even a well-placed State such as Tamil Nadu has an over 30% shortage of medical and non-medical professionals in government facilities.
- Funding: Funding for overall health care is very low, leaving insufficient amount that requires to be spend on Primary Health Care. The health budget has neither increased nor is there any policy to strengthen the public/private sector in deficit areas. While the Ayushman Bharat provides portability, one must not forget that it will take time for hospitals to be established in deficit areas.
- Staff shortage: PHCs are also suffering from inadequate skilled and trained manpower. There is a shortfall of about 9,000 doctors in about 25,000 PHCs in the country. There is a massive shortage of medical staff, infrastructure and last mile connectivity in rural areas. Eg: Doctor: Population 1:1800 and 78% doctors cater to urban India (population of 30%).
- Healthcare without holistic approach: There are a lot of determinants for better health like improved drinking water supply and sanitation; better nutritional outcomes, health and education for women and girls; improved air quality and safer roads in rural areas which are outside the purview of the Health Ministry.
- Crumbling primary health care infrastructure: Given the country's crumbling public healthcare infrastructure, most patients are forced to go to private clinics and hospitals. There is a shortage of PHCs (22%) and sub-health centres

(20%), while only 7% sub-health centres and 12% primary health centres meet Indian Public Health Standards (IPHS) norms.

- Social Inequality: The growth of health facilities has been highly imbalanced in India. Rural, hilly and remote areas of the country are under served while in urban areas and cities, health facility is well developed. The SC/ST and the poor people are far away from modern health service.
- Training and manpower problems: PHCs are suffering from poor management skills, lack of appropriate training and supportive supervision for health workers.
- Poor facilities: Primary level facilities need complete building reconstruction, as they operate out of rented apartments and thatched accommodations, and lack basic facilities such as toilets, drinking water and electricity.
- Overburdened PHCs: India has a large network of primary health centres (PHCs), each supposed to serve a population of 25,000. But in states such as Madhya Pradesh, Bihar and Jharkhand, however, a PHC covers as many as 45,000, 49,000 and 76,000 people.

Wide variations in performance of different states:
- Decentralised health care and community level engagement: The synergy generated by integrating state government plans and programmes with the local governments, the co-operatives, women neighbourhood groups and civil society organisations for example Kudambashree and Vigilance wing by Kerala.
- Expenditure by states: Prevalence of considerable inequity favouring high income group of States in terms of healthcare resources, for instance, it indicates that the high income States hold a superior position in terms of per capita government expenditure on medical and public health, total number of hospitals and dispensaries, per capita availability of beds in hospitals and dispensaries and health manpower in rural and urban areas.
- Poor governance: The most important factor that influences health care is the quality of governance. States that have moved forward have had the spell of good governance for most of the periods are good performing states.
- Difference in female literacy: Woman's low health literacy affects not only her own health knowledge, preventive behaviour, and ability to navigate the health care system but also her ability to care for her children.
- Geographical factor: Difficult terrain surrounded by hills, rivers, and dense forests leads to increase in the cost of health care, cost of health projects.

Conclusion

Pandemics such as Covid-19 starkly remind us that public health systems are core social institutions in any society. The government has made several efforts to address the shortfall in the public health system through the schemes. However, the need of the hour is an adequate investment, for creating a health system that can withstand any kind of public health emergencies, incentivise good performing states, deliver universal health coverage and meet the targets of the Sustainable Development Goals.

69. Should the Chinese model of constructing massive dams like the Three Gorges Dam to tap hydroelectricity be followed in India? Critically comment.

Approach - It expects students to write about - in first part write about benefits of dam construction - while in second part write about issues pertaining to dam construction.

Introduction

Amid simmering border tension with India along the Line of Actual Control (LAC) in Eastern Ladakh, China is planning to build a major hydropower project on Brahmaputra River in Tibet and a proposal for this has been clearly put forward in the 14th Five-Year Plan to be implemented from next year.

Body

India also planning a dam on Brahmaputra river against Chinese projects. There are both benefits and issues related to adopting Chinese model of constructing massive dams like Three Gorges Dam to tap hydroelectricity which are as follows.
Benefits of dam construction:
- Water for drinking and industrial use
  - Due to large variations in hydrological cycle, dams and reservoirs are required to be constructed to store water during periods of surplus water availability and conserve the same for utilization during lean periods when the water availability is scarce.
  - Properly designed and well-constructed dams play a great role in optimally meeting the drinking water requirements of the people.
  - Water stored in reservoirs is also used vastly for meeting industrial needs.
  - Regulated flow of water from reservoirs help in diluting harmful dissolved substances in river waters during lean periods by supplementing low inflows and thus in maintaining and preserving quality of water within safe limits.
- Irrigation
  - Dams and reservoirs are constructed to store surplus waters during wet periods, which can be used for irrigating arid lands. One of the major benefits of dams and reservoirs is that water flows can be regulated as per agricultural requirements of the various regions over the year.
  - Dams and reservoirs render unforgettable services to the mankind for meeting irrigation requirements on a gigantic scale.
  - It is estimated that 80% of additional food production by the year 2025 would be available from the irrigation made possible by dams and reservoirs.
  - Dams and reservoirs are most needed for meeting irrigation requirements of developing countries, large parts of which are arid zones.
  - There is a need for construction of more reservoir based projects despite widespread measures developed to conserve water through other improvements in irrigation technology.

- Flood Control
  - Floods in the rivers have been many a time playing havoc with the life and property of the people. Dams and reservoirs can be effectively used to control floods by regulating river water flows downstream the dam.
  - The dams are designed, constructed and operated as per a specific plan for routing floods through the basin without any damage to life and property of the people.
  - The water conserved by means of dams and reservoirs at the time of floods can be utilized for meeting irrigation and drinking water requirements and hydro power generation.
- Hydro Power Generation
  - Energy plays a key role for socio-economic development of a country. Hydro Power provides a cheap, clean and renewable source of energy.
  - Hydro Power is the most advanced and economically viable resource of renewable energy.
  - Reservoir based hydroelectric projects provide much needed peaking power to the grid.
  - Unlike thermal power stations, Hydro Power stations have fewer technical constraints and the hydro machines are capable of quick start and taking instantaneous load variations.
  - While large hydro potentials can be exploited through mega hydroelectric projects for meeting power needs on regional or national basis, small hydro potentials can be exploited through mini/micro hydel projects for meeting local power needs of small areas. Besides hydro power generation, multipurpose hydroelectric projects have the benefit of meeting irrigation and drinking water requirements and controlling floods etc.
- Inland navigation
  - Enhanced inland navigation is a result of comprehensive basin planning and development, utilizing dams, locks and reservoirs that are regulated to play a vital role in realizing large economic benefits of national importance.
- Recreation:
  - The reservoir made possible by constructing a dam presents a beautiful view of a lake. In the areas where natural surface water is scarce or non-existent, the reservoirs are a great source of recreation.
  - Along with other objectives, recreational benefits such as boating, swimming, fishing etc. linked with lakes are also given due consideration at the planning stage to achieve all the benefits of an ideal multipurpose project.

While dams provide a yeoman service to the mankind, the following impacts of the construction of dams are required to be handled carefully: -

- Resettlement and Rehabilitation: displacement of local people due to dam project is major issues in India.
- Environment and Forests: dam construction required clearance of forest cover due to this Environment and Forests will be impacted.

- Geostrategic implications: it will impact India's big brother reputation and neighbourhood policy as building dams lead to low water flow to downstream countries.
- Sedimentary issues
- Socio economic issues
- Safety aspects

Conclusion

The above problems related to the construction of dams may be resolved successfully in case the approach of government is objective, dynamic, progressive and responsive to the needs of the hour.

70. The Arctic region must be approached carefully for exploration and drilling? Do you agree? Substantiate your views.

Approach - As the directive here is substantiating it is necessary to give examples while giving arguments. In the introduction candidate can start by giving importance of Arctic region. In the first half of main body part it is necessary to explain the reasons behind adopting a careful approach to explore and drill. A brief of way forward will enrich your answer. Conclusion in the context of sustainability will be good way to conclude.

Introduction

Americans Robert Peary and Matthew Henson, along with several Inuit's, were the first people to finally reach the North Pole. They arrived on April 6, 1909, by traversing across the sea ice. It opened up a new land of opportunities for human kind. Subsequently, the global warming has intensified melting of glaciers thus started a new competition for the acquisition of resources.

Body

Arctic a new land of opportunities:
- It is estimated that Arctic contains 90 billion barrels of oil, 1,670 trillion cubic feet of natural gas, and 44 billion barrels of natural gas, which is approximately 13% of the world's undiscovered oil resources, 30% of its undiscovered natural gas resources, and 20% of its undiscovered natural gas.
- The Arctic region also holds mineral resources, as mentioned earlier, including gold, nickel, copper, graphite and uranium. The potential of Arctic in terms of resources and to change geo-politics and in the Arctic are as represented in Figure 1.

A NEW ENERGY FRONT

With the Arctic ice melting, the region's abundant oil, gas and mineral deposits have become accessible and have shortened the shipping routes, setting off a global race for influence and economic opportunities far beyond the nations that border the Arctic

NORTHWEST PASSAGE 12,894 km

THE ARCTIC CIRCLE ENCLOSES

21mn sq.km of land

13mn sq.km of mostly ice-bound seas

OFFICIALS ESTIMATES THE ARCTIC HOLDS

13% of the world's undiscovered oil reserves

30% of undiscovered gas deposits

THE ARCTIC COUNCIL INCLUDES EIGHT NATIONS: Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States

NEW OBSERVERS ADDED BY THE KIRUNA COUNCIL: China, India, Italy, Japan, Republic of Korea and Singapore

Already six European countries are permanent observers

They will not be able to directly raise issues but will have to bring them forward through one of the eight core members
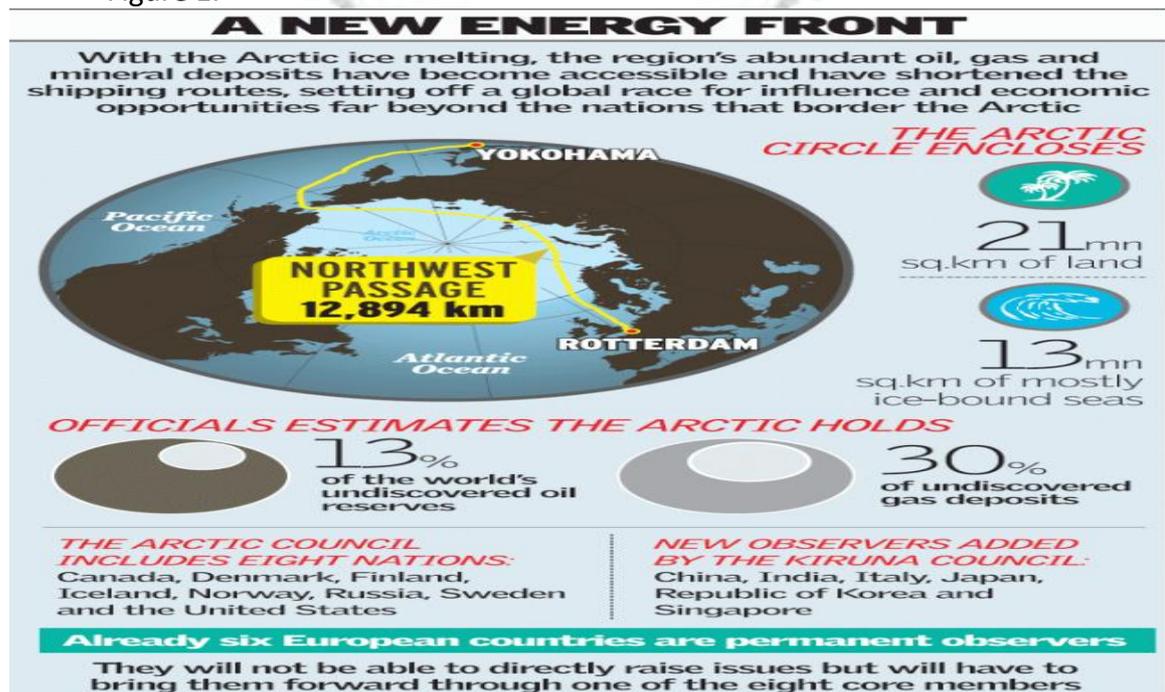
Figure 1

Hence, the opening of the Arctic Sea has given way for resource mapping in the Arctic region. Thereby initiating the processes of exploration and drilling. For instance, Russia has already started to venture as explorer. However, to save the mother earth and sustain humankind on the earth it is necessary to adopt a careful approach for exploration and drilling.

- The objective of an Arctic policy, should be centred on placing more weight on environmental and scientific aspects rather than the economic potential of the region.
- For instance, the kind of overexploitation of natural resources going on in Gulf region and South American continent actually shows the kind of environmental damage humankind is doing to Mother earth.
- Arctic as a land is not well known to humankind. If any aggressive action culminates into disaster like phenomena, then it will hamper survival of humankind.
- The race for resource utilisation at Arctic is swift. However, big countries like USA and Russia could dominate the landscape and may overexploit the resources. Which might also hamper other countries interests. Hence, there arises a need of well-articulated policy for exploration and drill.
- Enhancement of economic activity in the Arctic Region will accelerate global warming and lead to large sea level rise. Melting ice may also supplement the problem of global warming with its reduced capacity to absorb carbon dioxide.
- Any drastic change in the Arctic is going to affect the monsoon system, which may fall worst on the agrarian economic countries like India.
- This may also results in thermal expansion, which increases the sea level, thereby allowing melted glacial water to flow into tributaries of Himalayan Rivers.
- The Arctic has enough hydrocarbons to cater to the needs of people. However, the technologically advanced solutions to explore and drill at the Arctic are not made or not tested. Hence, we need to adopt a very careful approach to utilise the resources of Arctic.
- Adding more water in the sea may result in submergence of coastal areas. Hence, while exploring at the Arctic it is necessary to consider this aspect also.
- The melting of arctic ice and the commercial exploitation of the resources would have detrimental effect on the local inhabitants like Inuits, Chukchis, Lapps etc.

It is in everyone's best interest that, the Arctic Sea should be governed by an Antarctica type international treaty which makes the region a global common. India should remain engaged with the leading organisations like the Arctic Council where many important decisions on the future of the Arctic region will be taken. These can have direct or indirect impact on everyone. Universities and think tanks should pay greater attention to the study and analysis of the developments and needs to explore sustainable exploration and drilling opportunities in the Arctic Region.

Conclusion

The opening of the sea routes and the exploration of hydrocarbons present economic opportunities which everyone can utilise. On the negative side, the enhancement of economic activity in the Arctic Region will accelerate global warming and lead to large sea level rise impacting the global climate to which India cannot remain indifferent.

71. What has been India's recent performance on the ease of doing business index? What are the key areas that require improvement? Examine.

Approach - It expects students to write about ease of doing business index, recent India's performance and also suggest key areas that require improvement.

Introduction

Ease of Doing Business is an annual survey published by World Bank. The report was introduced in 2003 to provide an assessment of objective measures of business regulations and their enforcement across 190 economies on ten parameters affecting a business through its life cycle. India bagged 63rd position this time 2019 marking an improvement of 14 places from its 77th in 2018. India for the third consecutive year was present in the list of 10 economies where business climates had improved the most.

Body

India's performance in recent years –

1. Resolving insolvency: The latest improvement has come on the back of the implementation of the Insolvency and Bankruptcy Code (IBC). India's rank has improved from 108 to 52 in the "resolving insolvency" category with the overall recovery rate for lenders moving up from 26.5 cents to 71.6 cents to the dollar according to the World Bank.

2. Trading across border: The country's ranking in the "Trading across borders" category jumped 12 places from 80 to 68 signifying the abatement of paperwork in favour of electronic filing of documents and single-window customs procedures. Importing and exporting also became easier for companies with the creation of a single electronic platform for trade stakeholders, upgrades to port infrastructure and improvements to electronic submission of documents.

3. Dealing with construction permits: Interestingly, there has been improvement in a parameter that most industrialists would consider as a problem even now: "Dealing with construction permits". The country's ranking has improved by 25 places from 52 to 27. Obtaining all permits and authorizations to build a warehouse now costs 4% of the warehouse value, down from 5.7% the previous year.

4. Enforcing contracts: The introduction of the National Judicial Data Grid has made it possible to generate case management reports on local courts.

5. Paying taxes: The report notes that India made paying taxes easier by requiring that payments to the Employees Provident Fund are made electronically. Further, it introduced measures to ease compliance with corporate income tax.

6. Starting a business: Starting a business involves obtaining clearances, and conforming to various regulations under laws such as Companies Act, 2013. The report noted that India merged the application procedure for getting a Permanent Account Number (PAN) and the Tax Account Number

(TAN) for new businesses. It also improved the online application system for getting a PAN and a TAN.

Expert Committee constituted by the Department of Industrial Policy and Promotion and the Standing Committee of Commerce, have studied the the regulatory requirements for starting a business in India and the made recommendations on the ease of doing business to improve the business environment in India:

- Starting a business: Need to streamline regulations to give businesses in India a boost. The Committee had suggested that the procedures and time period for registration of companies should be reduced. In addition, a unique business ID should be created to integrate all information related to a debtor. This ID should be used as sole reference for the business.
- Acquiring land, registering property: It has been noted that land titles in India are unclear due to various reasons including legacy of the zamindari system, gaps in the legal framework and poor administration of land records.
  - It recommended process of updating and digital land records should be completed at the earliest.
  - The digitised records would assist in removing ambiguity in land titles and help in its smooth transfer.
  - It also suggested that land ownership may be ascertained by integrating space technology and identification documents such as Aadhaar. Note that as of September 2017, land records had been linked with Aadhaar in 4% of the villages across the country.
  - Steps include integration of land records and land registration and the passage of a law to certify land titles in urban areas.
- Enforcing contracts: Standing Committee noted that it took close to four years in India for enforcing contracts. On the other hand, it took less than six months for contract enforcement in Singapore. This may be due to various reasons including complex litigation procedures, confusion related to jurisdiction of courts and high existing pendency of cases.
  - It recommended that an alternative dispute resolution mechanism and fast track courts should be set up to expedite disposal of contract enforcement cases.
  - It suggested that efforts should be made to limit adjournments to exceptional circumstances only.
  - It also recommended that certified practitioners should be created, to assist dispute resolution.
- Construction permits: The Committee had observed that it took 33 procedures over 192 days to obtain a construction permit in India. Similar permit in Singapore involved 10 procedures and took 26 days. The Committee also recommended creating a single window for registration and issuance of permit, to reduce delays.
- Taxation: The Standing Committee had noted that the tax administration in India was complex, and arbitration proceedings were time-consuming.
  - The Committee observed that for 'Make in India' to succeed, there is a need for a fair, judicious and stable tax administration in the country.

- Further, it suggested that to reduce harassment of tax payers, an electronic tax administration system should be created.
- Such a system would reduce human interface during dispute resolution. The GST framework allows for electronic filling of tax returns, among other measures.

Other side of the coin that need to be addressed:
- However, the rankings do not capture the real cost of doing business in the countries with large unorganized sectors (such as India), and the cost of production are different from larger formal companies.
- Starting, running or shutting down a business may be easier in Delhi and Mumbai compared to Coimbatore or Hyderabad where it is probably more difficult.
- The index fails at measuring the difficulties businesses face in terms of raising liquidity, controls on internal trade, skilling/employability issues, etc.
- Admittedly, it is not easy to streamline processes across the country given India's federal set up where States have a big say in several parameters that go into the ranking such as securing building permits, land approvals, electricity connections, registering assets etc.

Conclusion

Improvement have taken place due to the commitment of the Government to carry out comprehensive and complex reforms, supported by the bureaucracy which has changed its mind-set from a regulator to a facilitator. To come under 25 or below 50, the government needs to announce and start implementing next set of ambitious reforms now, as these reforms takes a few years to be realised on the ground.

72. What are global supply chains? How do they evolve? Explain.

Approach - It expects students to write about global supply chain and write about how they evolve.

Introduction

The COVID-19 pandemic has caused closures of business, the stoppage of factory outputs, and the disruption to global manufacturing industries and their supply networks. This is a result of China becoming the production hub of the entire world in the last two decades. Global supply chains are networks that can span across multiple continents and countries for the purpose of sourcing and supplying goods and services.

Body

Global supply chain:
- Global supply chains involve the flow of information, processes and resources across the globe. It is a chain of separate but inter-linked and coordinated activities in different geographical locations to bring out a product or a service to complete production and delivery to final consumers.
- Belt and Road Initiative (BRI) is strategy of China for global supply chain management under which it is promoting transport infrastructure and communication facilities, supply chain logistics network.
- India needs to develop a robust long-term vision to establish itself as a major player in the global supply chain arena. The Sagarmala Programme is an initiative by the government of India to enhance the performance of the country's logistics sector.

Evolution of global supply chains:
- Before 1900: The industrial revolutions started to change things. As railroads were laid, it became faster, easier and cheaper to transport goods over longer distances, although supply chains still tended to be limited to countries. International ocean trade was fairly inefficient as loose goods were stored in ship's hulls, and required a lot of effort to load and unload.
- Early 20th Century: Since the invention of the internal combustion engine and cars in the late 19th century, pioneers started developing trucks to allow for the faster transport of goods by road. A major development in supply chain storage was in 1925 when pallets started to be used in warehouses. This allowed goods to be consolidated together onto pallets, which could then be stacked vertically, saving space and making goods handling more efficient.
- From the 1930s to the 1940s Greater Mechanisation: Logistics became very important during World War II, as military organisations needed efficient supply chains at home and in Europe. The 1940s saw a consolidation of industrial engineering and operations research into supply chain engineering.

- The Global Supply Chain in the 1950s: The revolution in global supply chains was the invention of the shipping container. Whether a container is being pulled by road on a truck, carried on the railway or shipped overseas on a container ship, standardisation makes transporting and handling these containers fast and easy. The invention of containerisation was one of the main drivers in making global trade cheaper and more efficient.
- From the 1960s to the 1980s: IBM developed the first computerised inventory management and forecasting system in 1967. Before the 1960s, logistics records and data were captured, sent and reported through paper. Data computerisation started to streamline logistics, and created opportunities in many areas including more accurate forecasting, better warehouse storage, truck routing and better inventory management. In global supply chain due to barcodes made it much easier to scan products.
- Further Efficiencies and the Shift to a Global Model: The 1980s new software like flexible spreadsheets, mapping and route planning made it easier to track costs and maximise profits. This was coupled with other advancements including air freight optimisation, supply chain distribution networks and the introduction of Enterprise Resource Planning (ERP) systems. MIT also developed RFID tags to make it easier to electronically track goods and shipments, a predecessor of the Internet of Things devices we use today.
- Now with True sense of Globalisation: All of this history brings us to the present, and continued transformation in global supply chains. One of the biggest influences has been the explosion of manufacturing in Asia, with China, Japan and Korea becoming major suppliers and exporters of goods. At the same time Block chain technology, AI, and machine learning combines with predictive and prescriptive analytics to provide better forecasting, enhanced order management and more. What's more, the supply chain is evolving toward a more data-driven, network-driven and collaborative supply chain ecosystem that drives real value and growth for all participants.

Importance of Global supply chain GSC:
- Tool to Economic Growth: GSC are a powerful driver of productivity growth, job creation, and increased living standards. Countries that embrace GSC grow faster, import skills and technology, and boost employment.
- Diversifying Country's Export Sector: It provides opportunities for developing countries to diversify their exports and intensify their integration into the global economy.
- Boon to Developing Countries: By embedding more technology and know-how in all their agriculture, manufacturing, and services they make it easier for those countries to diversify away from primary products to manufactures and services and develop high value added task.

Conclusion

For many countries like India, the ability to effectively insert themselves into Global supply chain is a vital condition for their development. This supposes an ability to

access Global supply chain, to compete successfully and to capture the gains in terms of national economic development, capability building and generating more and better jobs to reduce unemployment and poverty.

73. What are your views on the efficacy of India's security intelligence establishment? Substantiate your views.

Approach - It expects aspirants to write about - in first part write about major intelligence agencies currently operating in the country and their mandate - in second part write about concerns about the existing intelligence network - in third part write way forward.

Introduction

An intelligence agency is an agency of government that is responsible for the collection, analysis, and exploitation of information which is in support of law enforcement, national security, military, and foreign policy objectives. They gather information directly or indirectly and that includes espionage, communication interception, cryptanalysis, cooperation with other institutions, and evaluation of sources (public).

Body

The major intelligence agencies currently operating in the country and their mandate include-

- Intelligence Bureau (IB) – The Intelligence Bureau specialised agency used to garner intelligence from within India and also execute counter-intelligence and counter-terrorism tasks.
- Counter-intelligence refers to information gathered and activities conducted to protect against espionage, other intelligence activities, sabotage, or assassinations conducted for or on behalf of foreign powers, organizations or persons or international terrorist activities, but not including personnel, physical, document or communications security programs.
- Counter-terrorism tasks include political or military activities designed to prevent or thwart terrorism thereby giving a wide remit to the agency.
- Research and Analysis Wing (RAW) – A specialised, independent agency dedicated to foreign intelligence gathering.
- Computer Emergency Response Team (CERT-IN)- Deals with the Collection, analysis and dissemination of information on cybersecurity incidents.
- Directorate of Enforcement (DE)- An economic intelligence agency responsible for enforcing economic laws and fighting economic crime in India.
- Directorate of Revenue Intelligence (DRI)- A major intelligence agency which enforces the prohibition of the smuggling of items including drugs, gold, diamonds, electronics, foreign currency, and counterfeit Indian currency.
- Intelligence units of different states with different mandates. For example, Maharashtra intelligence unit is concerned with organised crime and smuggling activities while north-eastern states also have to deal with secessionist movements.

Concerns about the existing intelligence network:

- The changing nature of threats emanating from the Cyberspace and social media like ISIS using secure communications networks to further its propaganda and recruit people online which cannot be tackled through the traditional setup.
- A chronic shortage of specialised personnel coupled with the inefficient use of human resources. Take for instance the IB, a major portion of its human resources gets diverted doing daily police work like verifications, something that the agency claims it does not do any better than the police forces.
- Intelligence Agencies with different mandates, often overlapping each other's, sometimes leading to duplication of efforts and non-cooperation between agencies. For Ex: The mandates of RAW and IB with respect to organised crimes like smuggling.
- Intelligence collection is ad-hoc in the absence of clear-cut requirements from the consumers of intelligence.
- Poor cadre management and inability to recruit qualified language specialists and technical skills.
- Lack of intellectual capacity and investment in the education system exacerbate recruitment shortfalls in intelligence agencies. Engaging private players for specialist tasks is therefore necessary.
- Agencies suffer from a chronic shortage of military expertise.
- Lack of a comprehensive national-level database of suspected individuals. Initiatives like NATGRID are yet to take off due to differences over data sharing between the centre and states.
- Failure to act swiftly over the gathered intelligence by the enforcement agencies due to doubts over the credibility of the data, a fact which came to light post the Pathankot airbase attacks.
- The country's inability in ending various armed conflicts, be it Naga insurgency or other northern movements or Kashmir militancy exposing the fault lines in our intelligence establishment. Neighbouring countries such as Pakistan and China also have a role in fomenting these movements.
- The inability of the police forces to prevent communal violence and growing fundamentalism in many instances like the Muzaffarnagar violence, which is mainly due to the failure of the traditional intelligence networks.
- Lack of parliamentary statute failing to enforce accountability in intelligence agencies.
- The National Cyber Security Policy which aimed at creating a skilled workforce of 5,00,000 professionals to tackle the growing cyber-attacks fails to suggest ways to create such a talent pool.
- Lack of political attention and effective guidance has prevented reform and optimal functioning of the intelligence system.
- The absence of the Chief Of Defence staff has hampered the coordination between the military and other intelligence agencies.

Way forward:
- Intelligence agencies need to anticipate threats in advance to prevent and mitigate possible security breaches.
- The states must rise above politics in matters of national security to implement crucial initiatives like NATGRID and NCTC.

- A comprehensive law bringing intelligence agencies under parliamentary scrutiny will help in delineating functions of different agencies and enforce accountability to the legislature rather than the present ad-hocism.
- The Central Government should take active steps to ensure interagency, interstate and centre-state cooperation to plug the information gaps.
- While the revenue outlays have been increasing, the capital outlays have seen troughs and crests in the last four years. Hence, expenditure on expanding manpower has to be balanced by commensurate expenditure on infrastructure like training schools, forensic laboratories, procuring additional vehicles etc.
- The National Cyber Security Policy has to be strengthened to address the skill gap and develop cutting edge/bleeding edge technologies in the upcoming fields of big data and data analytics to detect early patterns of crime and effectively prevent it.

Conclusion

No security network would be strong enough to tackle security threats unless the centre and states focus on intelligence gathering and sharing. A coordinated plan of intelligence gathering involving all stakeholders and dissemination should come into place immediately without any delay so that we can tackle the present challenges effectively.
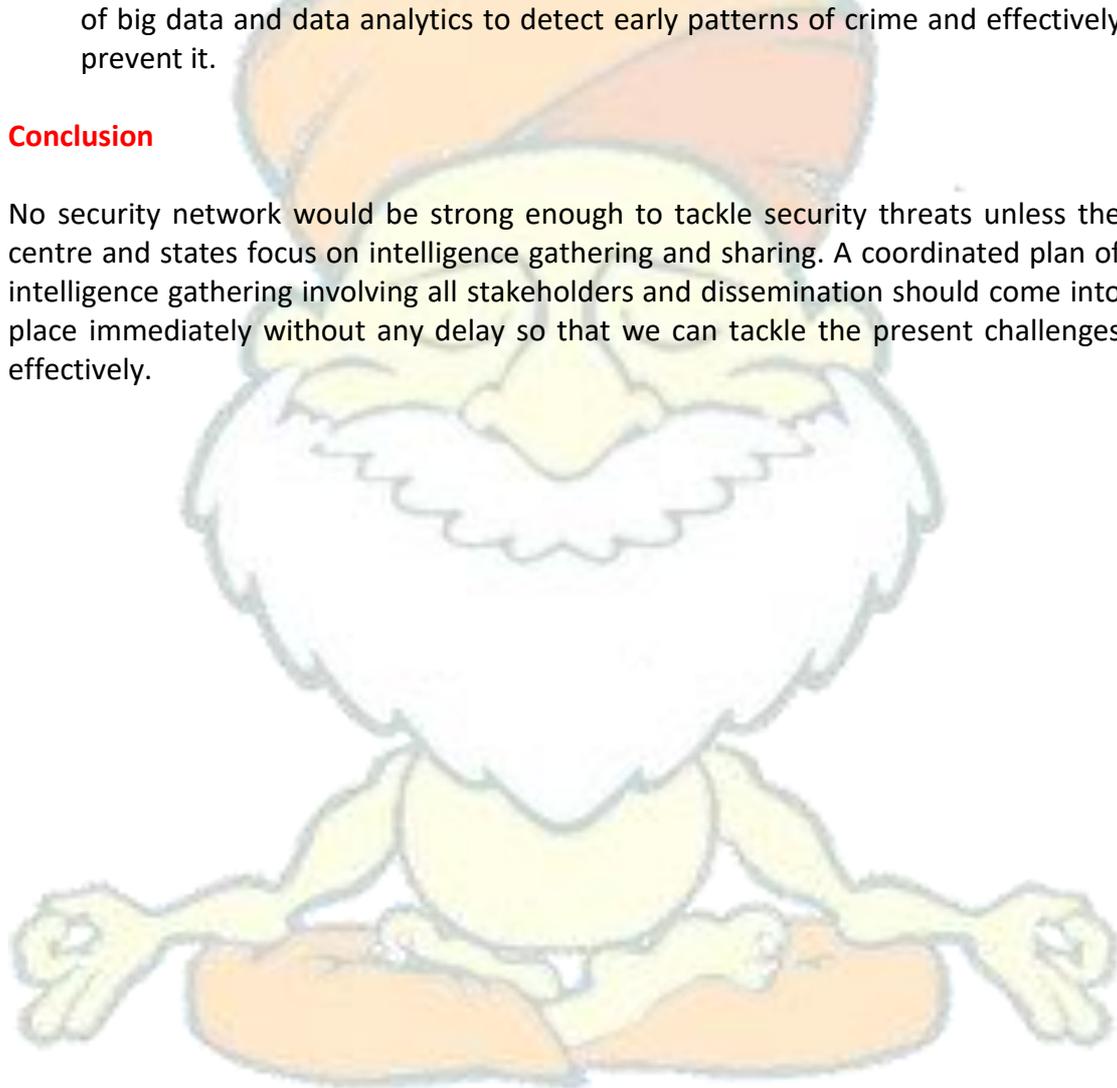
74. Discuss the mandate of Border Security Force (BSF)? How is it different from the roles and responsibilities of the Indian Army? Examine.

Approach - In the introduction explain what BSF is and brief about its origin. In the first half of main body part explain about the mandate of BSF. In the next half compare and differentiate the BSF's mandate from roles and responsibilities of Indian Army.

Introduction

The Border Security Force (BSF) is India's Primary border guarding organisation on its border with Pakistan and Bangladesh. It is one of the three Border Guarding Forces (BGF) of India, and was raised in the wake of the 1965 War on 1 December 1965, "for ensuring the security of the borders of India and for matters connected there with".

Body

Mandate of Border Security Force (BSF):
- It is a border guarding force charged with guarding India's land border with Pakistan and Bangladesh during peacetime and preventing transnational crime at the same, it has various active roles during an outbreak of war. It comes under Ministry of Home Affairs.
- The BSF are the border guards of the country and are called the 'First Wall of Defence of Indian Territories'.
- It ensures the security of the borders of India and headed by an officer from the Indian Police Service. It also undertakes defensive actions during wartime to free up Indian Army troops for offensive operations.
- The BSF has also been tasked with assisting the CRPF and army in counter-insurgency operations.

Mandate of Border Security forces differs from roles and responsibilities of the Indian Army in following ways:

INDIAN ARMY	BORDER SECURITY FORCES
- Indian Army or Bhartiya Thal Sena is the land-based component of the armed forces. - It is evolved from the armed forces of the East India Company, ultimately turned into the British Indian Army and the Indian Army after independence. - It is commanded by the Chief of Army Staff (COAS). Indian Army comes under defence ministry of India. - It aims to preserve national interests and safeguard	- The government created the Border Security Force as a unified central agency with the specific mandate of guarding India's land border with Pakistan and Bangladesh during peacetime and preventing transnational crime at the same, it has various active roles during an outbreak of war. - The BSF takes its officers from IPS on deputation at command and leadership levels, from the

sovereignty, territorial integrity and unity of India against any external threats by deterrence or by waging war.

- It assist Government agencies to cope with 'proxy war' and other internal threats and provide aid to civil authority when requisitioned for the purpose.

- The mission of the Indian Army is to guarantee the national security and defend the sovereignty, territorial integrity and harmony of India from external aggression and intimidation.

- It also includes providing humanitarian support and aid to the common people during natural disasters and unexpected time.

- The Para Commandos are the most well-known of the Indian Army's Special Forces.

- It undertakes operations behind enemy lines, anti-terrorist and counterinsurgency missions as well as rescue operations during natural disasters.

rank of Deputy Director General (DIG) and above.

- It aims to guard border and prevent trans-border crimes, unauthorized entry into or exit from the territory of India.

- It also aims to prevent smuggling and any other illegal activities on the border.

- It is also charged with Anti-infiltration duties, collection trans-border intelligence and to promote a sense of security among the people living in the border areas.

- During war time it holds ground in assigned sectors.

- Besides looks for maintenance of Law and Order in enemy territory administered under the Army's control.

- It acts as guide to the Army in border areas and aids in control of refugees.

- It also performs special tasks connected with intelligence including cross-border raids.

Conclusion

Border Security Force and the Indian Army, work and strive hard to secure India from Internal and external threats respectively. Although their mandate, roles-responsibilities are different, they have worked well as a fine 'wall of defence' against security threats to India. Their personals hard work and sacrifice to check security threat is non-comparable with any other field of career which needs to be praised as we can avail good sleep at night only because of their sacrifice.

75. Should betting be legalised in India? Discuss its pros and cons.

Approach - It expects aspirant to write about - in introduction define betting or write recent examples of betting - in main body part give view on betting legalisation, write advantages and disadvantage of betting legalisations.

Introduction

Betting is the wagering of money or something of value on an event with an uncertain outcome, with the primary intent of winning money or material goods.

Body

The Law Commission has recommended that gambling and betting on sports, including cricket, be allowed as regulated activities taxable under the direct and indirect tax regimes and used as a source for attracting foreign direct investment (FDI). The commission's report, "Legal Framework: Gambling and Sports Betting including Cricket in India", recommends a number of changes in the law for regulating betting and generating tax revenues from it

Advantages of legalising betting:
- Curb black money and terror financing: The reasons to look at legalising and regulating gambling are several. First, gambling is already operating in a spread out and operating in a huge way. Despite devoting several legal measure andc covert actions, legal enforcement authorities are not able to curb it. Gambling and betting is mostly done very secretly and which is handled in a delicate manner. It is mostly headed underworld and strong syndicates who use the unaccounted money earned from gambling activities for nefarious activities. These activities could include terror financing. So legalising the activity will not only help curtail an important source of black money and stop funds flowing to terror agencies.
- Huge Revenues: Estimates about the size of the gambling market in India vary according to various private and government agencies. According to KPMG report, the size could be around $ 50- $60 billion, while other, more recent, studies from financial institution peg the value even to higher numbers. Even a normal estimate suggests with just 15 per cent GST, the government could earn tens of thousands of crores by legalising sports betting. If online gambling and casinos are also permitted in a strong restrictive way, the estimated tax revenue very huge to both state and central government. These can be used to fund health and other constructive projects of the government.
- Employment opportunities: Apart from revenue generation, legalizing the gambling will surely create huge employment. Globally, wherever gambling is regulated, it has created a massive opportunity for employment generation. In India it could create direct and indirect jobs for around 25-40 lakh. How ? U.S. employs over 2.5 lakh people in the gambling industry, while over 1 lakh individuals are employed in the U.K.

Disadvantages of legalising betting:
- Spoils the integrity: Integrity is a core component in any activity, but in sports and games is crucial to its success. It serves the basis for the enjoyment of participants and spectators. But if the gambling and betting are legalized, integrity and honesty will be under great threat. Match fixing and spot fixing would drastically increase. Athletes and players will be tempted. Psychologically, players attracted to gambling naturally because of their competitive nature, media success, money and self-assured sense of entitlement.
- Affects common man: If betting were to be legalised, this lower class of the country will affect. Betting attracts the common man to try their luck and tempts them to play with money. It is very tough to imagine the consequences of a poor person losing his hard-earned money or his life saving on betting. Law commission report on legalizing gambling

Conclusion

Legalizing gambling would also lead to demands for legal frame work other nefarious activities like prostitution, drugs etc. So the government has to weigh the pros and cons before indulging the act of legalizing gambling, which can lead to a complex impact on the society.
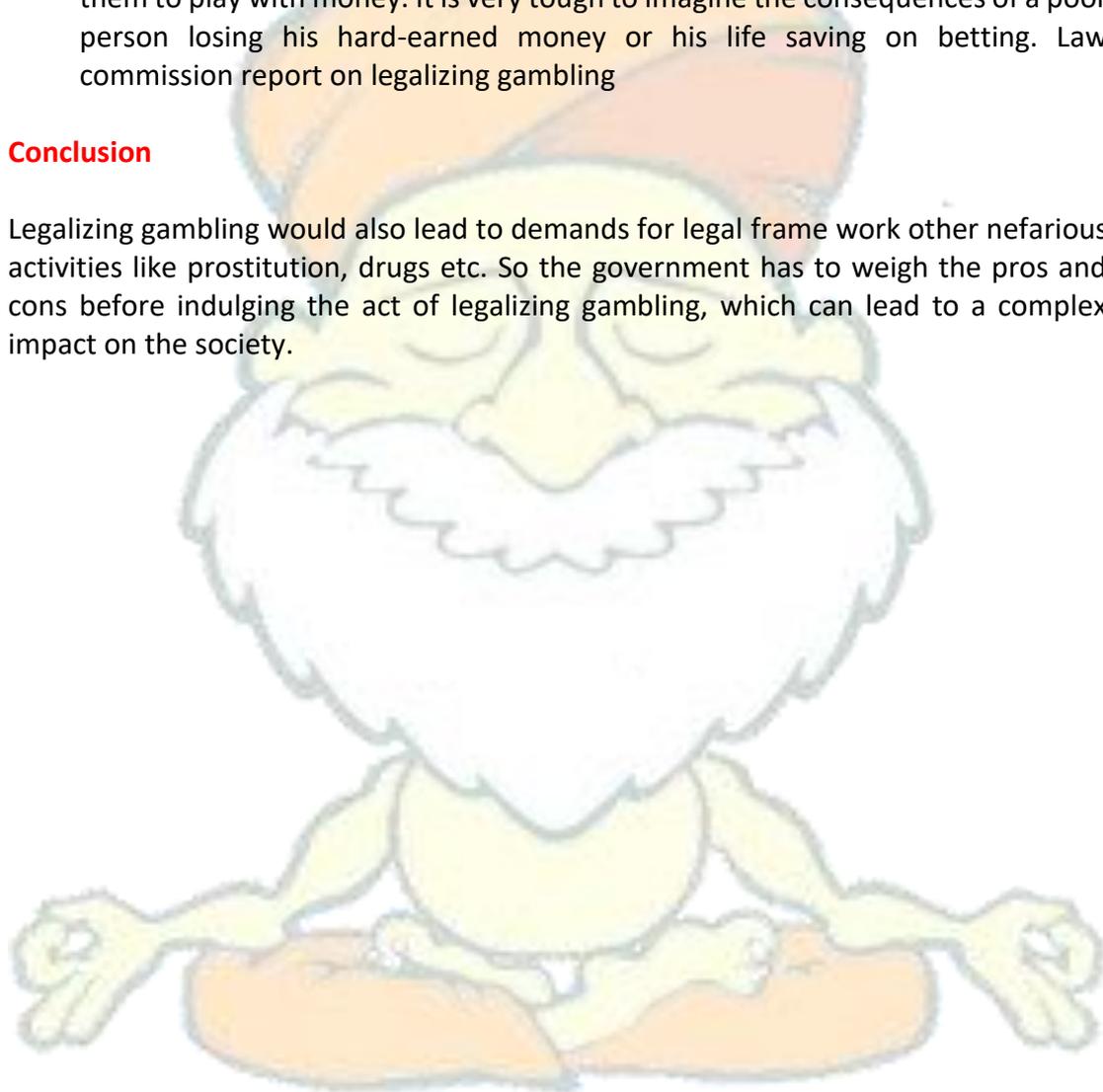
76. What are the current legal and institutional frameworks for the prevention of money laundering in India? Discuss.

Approach - As the directive here is discuss it is necessary to cover various angles of the topic. In the introduction explain the meaning of money laundering. In the main body part explain the legal and institutional frameworks for the prevention of money laundering in India.

Introduction

Money laundering is concealing or disguising the identity of illegally obtained funds so that they appear to have originated from legitimate sources. According to the IMF, global Money Laundering is estimated between 2 to 5% of World GDP.

Body

Money laundering involves three steps i.e. placement, layering and integration. Placement puts the "dirty money" into the legitimate financial system. Layering conceals the source of the money through a series of transactions and bookkeeping tricks. In the case of integration, the now-laundered money is withdrawn from the legitimate account to be used for criminal activities.

Current legal and institutional frameworks for the prevention of money laundering in India:

Legal Framework:
In India, the specific legislation dealing with money laundering is the Prevention of Money-Laundering Act (PMLA), 2002. The law was enacted to combat money laundering in India and has three main objectives which are as below:
- To prevent and control money laundering.
- To provide for confiscation and seizure of property obtained from laundered money.
- To deal with any other issue connected with money-laundering in India.
- Under the PMLA Act, the Enforcement Directorate is empowered to conduct a Money Laundering investigation.
- Apart from the provisions of PMLA, there are other specialised provisions such as RBI/SEBI/IRDA anti-money laundering regulations.

Foreign Exchange Management Act, 1999 (FEMA) also deals with the issue of money laundering in an alternative way.
- It is a set of regulations that empowers the Reserve Bank of India to pass regulations and enables the Government of India to pass rules relating to foreign exchange in tune with the foreign trade policy of India.
- It gives powers to the Central Government to regulate the flow of payments to and from a person situated outside the country.

- All financial transactions concerning foreign securities or exchange cannot be carried out without the approval of FEMA. All transactions must be carried out through "Authorised Persons".

The Benami Transactions (Prohibition) Act, 1988:
- Benami transactions refer to those transactions in which the real beneficiary of the transaction and the person in whose name the transaction is made are different, specifically transactions relating to properties. The property is held by one person while the payment for purchasing the property is made by another.
- By doing so, public revenue is defrauded and the real owner is hidden. Benami property could include assets of any kind including legal documents, rights, assets, intangible assets, tangible assets, movable property or immovable property.

Black Money (Undisclosed Foreign Income and Assets) and Imposition of Tax Act, 2015:
- Black Money Act, 2015 is an Act of the Parliament of India. It aims to curb black money, or undisclosed foreign assets and income and imposes tax and penalty on such income.
- The Act has been passed by both the Houses of the Parliament. The Act has received the assent of the President of India on 26 May 2015.
- The goal of this law is to bring back the income and assets held abroad back to the country. As a result, only an Indian resident gets the opportunity to declare undisclosed assets.
- The government gives a time frame when someone can disclose assets. If the resident holding undisclosed assets declare the assets in the given time frame they are not subject to prosecution.

Institutional Framework:
1. Enforcement Directorate: Directorate of Enforcement is a specialized financial investigation agency under the Department of Revenue, Ministry of Finance, and Government of India.
- In 1956, an 'Enforcement Unit' was formed, in Department of Economic Affairs, for handling Exchange Control Laws violations under Foreign Exchange Regulation Act, 1947.
- In the year 1957, this Unit was renamed as 'Enforcement Directorate'.
- ED enforces Foreign Exchange Management Act, 1999 (FEMA) and Prevention of Money Laundering Act, 2002 (PMLA).
2. Financial Intelligence Unit India (FIU-IND): It was set up by the Government of India in 2004 as the central national agency responsible for receiving, processing, analyzing and disseminating information relating to suspect financial transactions.
- FIU-IND is also responsible for coordinating and strengthening efforts of national and international intelligence, investigation and enforcement agencies in pursuing the global efforts against money laundering and related crimes.

- FIU-IND is an independent body reporting directly to the Economic Intelligence Council (EIC) headed by the Finance Minister.

3. Reserve Bank of India (RBI) and Securities and Exchange board of India (SEBI):
   - Reserve Bank of India (RBI) is India's central bank. It controls the monetary policy concerning the national currency, the Indian rupee. The basic functions of the RBI are the issuance of currency, to sustain monetary stability in India, to operate the currency, and maintain the country's credit system.
   - It aims to regulate the issue of Bank Notes and keeping of reserves to secure monetary stability in India and generally to operate the currency and credit system of the country to its advantage.
   - In an attempt to curb money laundering it can take corrective actions too. For instance, in 2013, the then RBI governor D Subbarao took corrective steps to check money laundering in India and strengthen in India.
   - SEBI also issued guidelines in the past to curb money laundering through capital market in India.

Conclusion

Black money in India, accounts for around 40% of India's GDP. Hence, it poses a serious threat not only to the India's financial system and governance but also to the global financial system and governance. Governments in various countries today have come up with different legislations to deal with this menace. However, more needs to be done in this regard so that India can truly realise its dream to be a $5 trillion economy by 2025.

77. What are the applications of big data in governance? In this regard, discuss the recommendations of Kris Gopalan panel.

Approach - Students are expected to write about the applications of big data in governance in first part, and discuss the recommendations of Kris Gopalan panel in the second part.

Introduction

Big data is a term that describes the large volume of data – both structured and unstructured – that inundates a business on a day-to-day basis. Big data can be analysed for insights that lead to better decisions and strategic moves. The use and adoption of big data within governmental processes allows efficiencies in terms of cost, productivity, and innovation. Data analysis often requires multiple parts of government (central and local) to work in collaboration and create new and innovative processes to deliver the desired outcome.

Body

By implementing a big data platform, governments can access vast amounts of relevant important information of daily functions.
Applications of big data in governance:
- Income tax dept has initiated Project insight. Under this project an integrated data warehousing business intelligence platform being rolled out in phased manner. Under this project a dedicated compliance portal would be used to capture response on compliance issue in structured manner for effective compliance monitoring and evaluation. It shows the transparency attribute of good governance.
- National Intelligence Grid (NATGRID) an Information Technology (IT)-enabled platform, is being created to help the security and law enforcement agencies across the country by sharing information relating to crime in real time and keep track of such incidents in the best interest of national security. It will use modern technologies like big data and to analyse vast amounts of data to track suspected terrorist and crime related activities to help prevent them. It shows the responsive nature of good governance.
- Geo-MGNREGA', as geo-tagging of assets created under MGNREGA is known, involves generation of an asset ID after completion of work and marking it as a primary asset. Geo-tagging of completed assets is done through the Bhuvan mobile platform, which involves capturing of the GPS location of the asset along with two photographs. It shows the transparency and accountability attributes of good governance.
- Smart city's network would be based on Big Data. Big data systems are stored, processed, and mined in smart cities efficiently to produce information to enhance different smart city services. In addition, big data can help decision makers plan for any expansion in smart city services, resources, or areas. It shows the Effective and efficient attributes of good governance.

- The government has rolled out the direct benefits transfer scheme (DBT) in various states where benefits and subsidies are transferred to the bank accounts seeded with the Aadhaar numbers of the individuals directly in order to do away with the intermediaries involved in the flow of funds, thereby reducing leakages. It shows the transference attribute of good governance.
- CCTNS (Crime and Criminal Network Tracking System) is an e-governance project under the Digital India mission which seeks to use IT for better provision of citizen-centric services, connect about 14000 police stations across the country and facilitate investigation, detection and prevention of crime. It shows the accountable attribute of good governance.

Recommendations of Kris Gopalan panel –

- The Committee has defined three categories of Non-Personal Data – 1) Public Non-Personal Data 2) Community Non-Personal Data & 3) Private Non-Personal Data. The Committee has also defined a new concept of 'sensitivity of Non-Personal Data', as even Non-Personal Data could be sensitive from the following perspectives – 1) It relates to national security or strategic interests. The Committee recommends that the data principal should also provide consent for anonymisation and usage of this anonymized data while providing consent for collection and usage of his/her personal data.
- Define Non-Personal Data Roles Articulating a legal basis for establishing rights over Non-Personal Data and Create a new category / taxonomy of business called 'Data Business' that collects, process, store, or otherwise manages data, and meets certain threshold criteria.
- Data Business is a horizontal classification and not an independent industry sector. Many existing businesses in various sectors, collecting data beyond a threshold level, will get categorized as a Data Business. Data Businesses will provide, within India, open access to meta-data and regulated access to the underlying data. The compliance process will be light-weight and fully digital.
- Data Sharing Purpose or Sovereign purpose in this, Data may be requested for purposes of national security, legal purposes, etc. Core Public Interest purpose – Data may be requested for community benefits or public goods, research and innovation, policy making, for better delivery of public-services etc.
- Data may be requested in order to encourage competition and provide a level playing field or encourage innovation through start-ups activities (economic welfare purpose), or for a fair monetary consideration as part of a well-regulated data market.

Conclusion

'Governance' is the process of decision-making and the process by which decisions are implemented or not implemented. Big data technology is vitally important for governments. It can't solve every problem, but it's a step in the right direction. It's giving leaders the tools necessary to enact important changes that will be of benefit for citizens now and in the future.

78. What is the Global Partnership on Artificial Intelligence (GPAI)? What are its objectives?

Approach - It is straightforward question where it expects students to write about - in first part write about Global Partnership on Artificial Intelligence (GPAI) - while in second part mention its objectives.

Introduction

India joins Global Partnership on Artificial Intelligence (GPAI) as a founding member to support the responsible and human-centric development and use of AI.

Body

Global Partnership on Artificial Intelligence (GPAI):
- GPAI is an international and multi-stakeholder initiative to guide the responsible development and use of AI, grounded in human rights, inclusion, diversity, innovation, and economic growth.
- It is the league of leading economies including India, USA, UK, EU, Australia, Canada, France, Germany, Italy, Japan, Mexico, New Zealand, Republic of Korea, and Singapore.
- GPAI will be supported by a Secretariat, to be hosted by Organization for Economic Cooperation and Development (OECD) in Paris, as well as by two Centres of Expertise- one each in Montreal and Paris.
- This is also the first initiative of its type for evolving better understanding of the challenges and opportunities around AI using the experience and diversity of participating countries.

Objectives of GPAI:
- Initiative will look to bridge the gap between theory and practice on AI by supporting cutting-edge research and applied activities on AI-related priorities.
- In collaboration with partners and international organizations, it will bring together leading experts from industry, civil society, governments, and academia to collaborate to promote responsible evolution of AI.
- It will help to evolve methodologies to show how AI can be leveraged to better respond to the present global crisis around COVID-19.

Conclusion

By joining GPAI as a founding member, India will actively participate in the global development of Artificial Intelligence, leveraging upon its experience around use of digital technologies for inclusive growth.

79. Failure to scale up successful governance models is a critical challenge in India. Do you agree? How can it be addressed? Suggest.

Approach - As no specific directive like comment or critically is given here, it is necessary to answer directly according to the miscellaneous directives i.e. Do you agree, suggest. In the introduction candidate can define the successful governance model. You can cite any report to add a legitimacy to the definition. In the first part of main body part explain in detail the reasons behind it in detail. You need to cite respective data, facts for substantiation of your arguments. In the next part explain a way forward in detail. You can conclude by showcasing the benefits of successful governance model in brief.

Introduction

UNDP describes governance as "a system of values, policies and institutions by which a society manages its economic, political and social affairs through interactions within and among the state, civil society and the private sector". Where, successful governance constitutes complete devolution of powers to local level and their respective successful implementation at the grass-root level.

Body

The World Bank defines governance as 'how power is exercised in the management of a country's economic and social resources for development.' India is ranked 111 in World Bank's Global Governance Indicators (GGI) in 2016.
Critical challenges to scale up successful governance model in India –

- Lack of Accountability: A common reason usually cited for inefficiency in governance is the inability within the system to hold the Civil Services accountable for their actions. Seldom are disciplinary proceedings initiated against delinquent government servants and imposition of penalties is even rarer.
- Low Levels of Awareness of the Rights and Duties of Citizens: Inadequate awareness about their rights prevents citizens from holding erring government servants to account. Similarly, low levels of compliance of Rules by the citizens also acts as an impediment to successful governance; when citizens do not adhere to their duties they infringe on the freedom and rights of other citizens.
- Ineffective Implementation of Laws and Rules: There is a large body of laws in the country, each legislated with different objectives-maintaining public order and safety, maintaining sanitation and hygiene, protecting rights of citizens, giving special protection to the vulnerable sections etc.
- Red Tapism: Bureaucracies the world over are expected to adhere to rules and procedures which are, of course, important for succeful governance. However, at times, these rules and procedures are ill-conceived and cumbersome and, therefore, do not serve their purpose.

- Hunger and Poverty are the biggest challenges for succeful governance in India. Which actually eats up more of resources required to be implemented in to successful governance. For instance, The latest Global Hunger Index (GHI) 2019 has ranked India a lowly 102 among the 117 countries slipped from 95th position in 2010.
- Digital illiteracy in India is also a major impediment for successful governance in India. For instance, As per a report from the Digital Empowerment Foundation in 2018, around 90% of India's population is digitally illiterate. Besides, Limited digitalisation of government offices and inadequate infrastructure has further been a stumbling block in ensuring effective transparency and accountability measures.

In ideal scenario if we observe successful governance is based on four E's of good governance, i.e. Ethos, Equity, Ethics and Efficiency. Hence, to scale up the successful governance model it is necessary to take the following steps.

- Transparency is broadly accepted as a major principle of successful governance. Transparency allows stakeholders to collect information that may be critical to uncovering abuses and defending their interests. Likewise, transparency increases accountability of the Government officials. Hence, increasing transparency through governance will scale up successful governance in India.
- The declaration of Right To Information Act (2015) set the stage for transparency in the functioning of the government and its various agencies. Under this Act, access to information from a public agency has become a statutory right of every citizen.
- Accountability become another crucial concept in maintaining successful governance. Accountability means being answerable for the performance of tasks assigned to a person.Additionally, it is also important to be clear about the responsibility for performance of those tasks; person responsible and whether it is clear to them.
- For instance, Citizens Charter Bill 2011 aims at providing rights to citizens for time bound delivery of goods and services and provide a Grievance Redressal Mechanism. Such a bill was previously recommended by the Second Administrative Reforms Commission.
- E-Governance initiatives for providing an accountable administration and swift delivery of services include a framework for efficient handling of public grievances through the Centralised Public Grievance Redress and Monitoring System (CPGRAMS) which is already in place. Which will scale up the successful governance in India.
- Rule of law: Without rule of law successful governance can't be ensured. It is also important that laws must benefit every individual of the society. Thus states must ensure rule of law in the territory.
- Democratic decentralisation: Participation of the people either direct or indirect in the development and decision making process is one of the cornerstones of good governance. Democratic decentralisation should be

emphasised which entails power to the Gram Panchayats and people at the lowest level of political hierarchy.
- There is imperative need to strengthen and widen the national public information infrastructure through developing information networks for wider access of digital information through wider use of information technologies.
- Changing the mindset of the government employees is important. This will be addressed to organizing programmes for orientation, training and capacity building.

Conclusion

The successful functioning of governance is the pillar of an efficient democracy. What is required is transparent, accountable and intelligible governance system absolutely free from bias and prejudices. In the present era when India is progressively moving towards development and prosperity, there is a need is to scale up successful governance in the country which will help the 'Aspiring India to transform its image in to New India'.
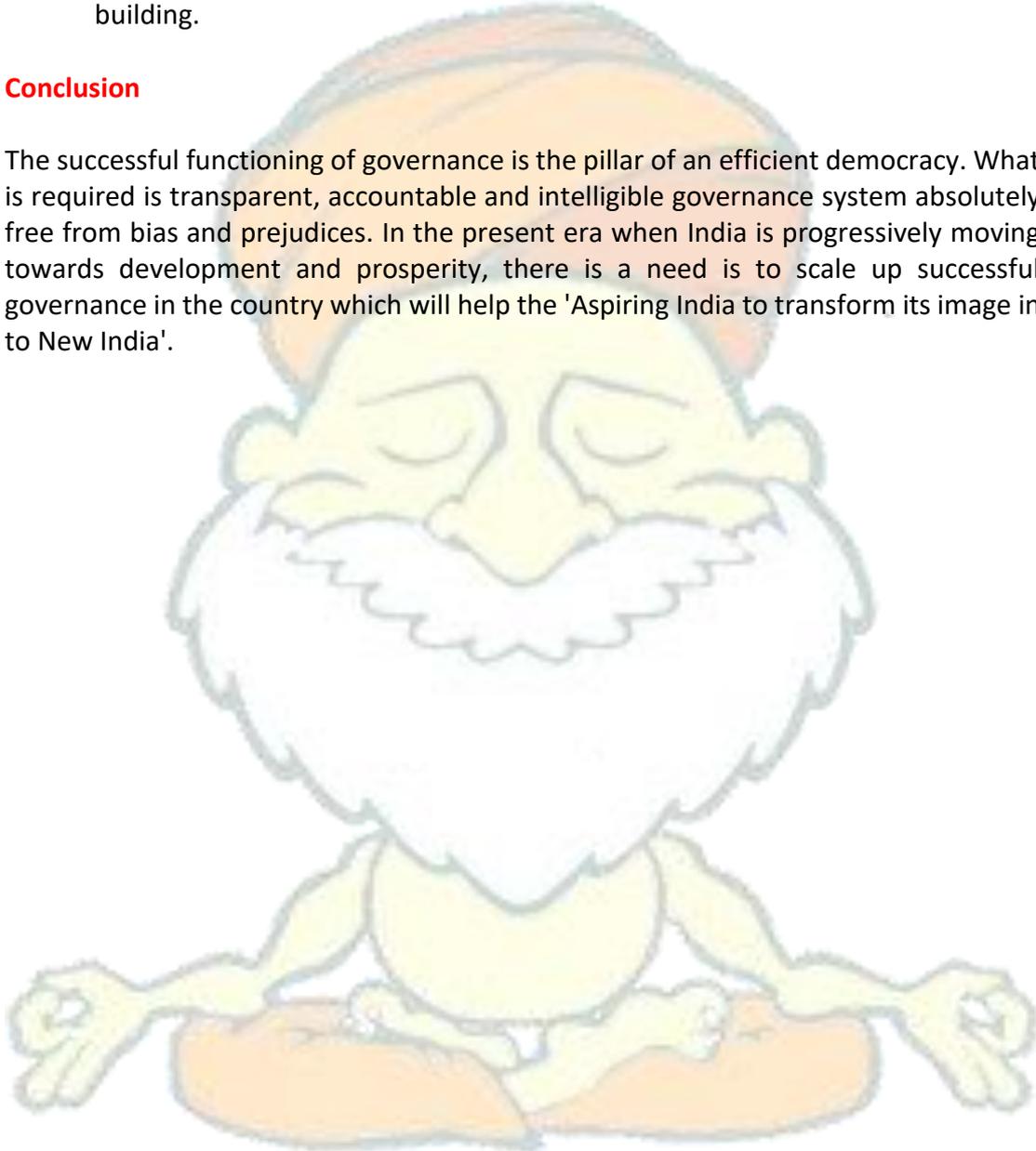
80. Effective two-way communication is the cornerstone of democratic governance. Do you agree? Substantiate.

Approach - It expects students to write about democratic governance and importance of effective two way communication in democratic governance.

Introduction

Democratic governance giving citizens a say in how decisions are made—is fundamental to ensuring that democracy delivers for all of society. Strong democratic governance is characterised by transparency and accountability in both the public and private sectors. An open, participatory governance process responds to citizen and business needs, resulting in better and fairer government policies.

Body

Communication process and structure in democratic governance –
- Communication processes can be one-way for example providing information and conveying messages or two-way for example dialogue, deliberation. Communication has evolved away from its traditional focus on one-way communication for the purpose of propaganda, social marketing, awareness-raising, and influencing attitudes, opinions and behaviour, towards a much greater emphasis two way communication more participatory and deliberative processes of dialogue.
- Communication structures include free, plural, and independent media systems, robust civil society, and the legal and regulatory framework that enables or precludes the free flow of information from government to citizens and vice versa. These form the framework through which citizens and government can communicate and engage in dialogue. They are essential components of the so-called democratic governance and play an important role in forming public opinion.

Role of communication in supporting democratic governance and stimulating economic growth is increasingly recognised in policy statements of the so-called 'good governance' agenda. Importance of effective two way communication for democratic governance -
1. Capability: Consultation and dialogue between state and citizens can in principle improve public understanding of and support for government policies and encourage citizen ownership of reform. Without the support of the public, governments often lack the capability to get things done.
2. Accountability: Access to information with two way communication and government transparency are in theory vital for enabling citizens to monitor and hold government to account for its actions. There is significant evidence that transparency can reduce opportunities for corruption.
3. Responsiveness: An informed and politically active electorate in theory strengthens the demand for governments to be accountable. There are several

examples where communication processes for example debate through the media, public information campaigns, social accountability mechanisms have encouraged government responsiveness to citizens' demands and resulted in better public services.

4. Agenda-setter: The communication can raise awareness of social problems, informing elected officials about public concerns and needs. A number of studies have demonstrated that the issues the communication through media present as important are the same as those the public subsequently think are important.

5. Gatekeeper: The communication with dialogue and deliberation can be a forum for the public debate and discussion of social issues and it can represent a plurality of perspectives, including those of poor and marginalised groups.

6. Watchdog: The effective discussion can provide a check on powerful sectors of society, including leaders within the private and public domains. Debate, in particular, can uncover corruption and monitor public interests.

Conclusion

Communication structures include free, plural, and independent media systems, robust civil society, and the legal and regulatory framework that enables or precludes the free flow of information from government to citizens and vice versa. These form the framework through which citizens and government can communicate and engage in dialogue. They are essential components of the so-called 'democratic public sphere' and play an important role in forming public opinion.
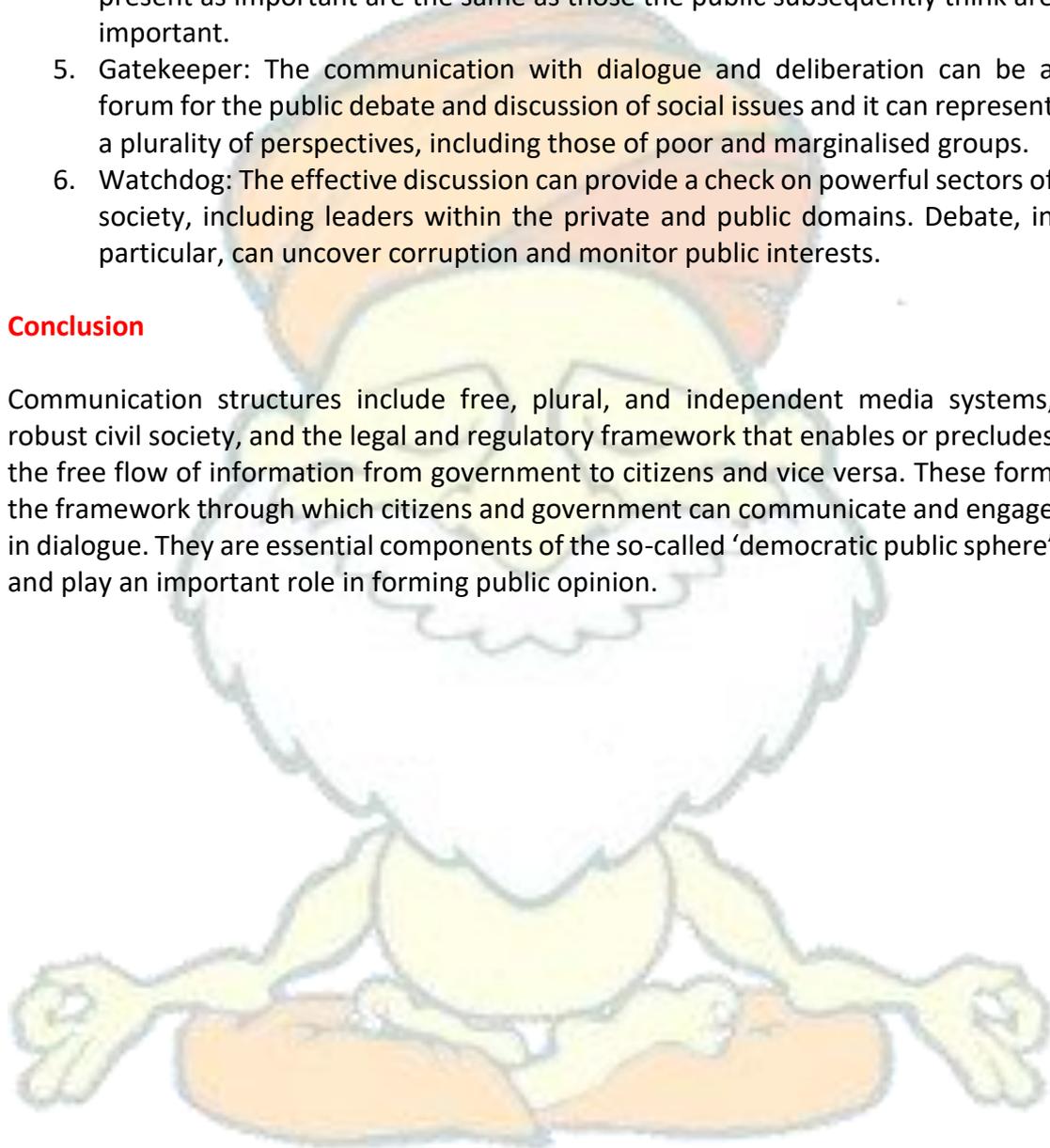
81. What are your views on the idea of introducing domain specialisation in the Civil Services? Comment.

Approach - As the directive here is comment it is necessary to give your opinion on the issue. In the introduction you can explain in brief the context of issue of domain specialisation. In the first half of main body part you can argue in support of introducing domain specialisation in the civil service. In the next half you can argue in support of having a generalist in civil services. A brief about government initiative to address the issue of domain specialisation as a way forward will be an enrichment of the answer. Candidate can conclude by showing the importance of achieving a golden mean to address this issue.

Introduction

Centre decided to introduce lateral entry in the highest echelons of the Indian Administrative Service, bringing skilled individuals from the private sector and academia. The decision itself is a historical one. However, the atmosphere of bureaucracy stirred after this due to the growing debate about the work bureaucrats do and how it is perceived, which culminated in to the debate of generalist v. specialist.

Body

Introducing domain specialisation in the civil services:
1. Many within the IAS community have balked at the idea, but some believe that change is long overdue in one of India's oldest institutions. The lack of specialisation across the top tier of Indian bureaucracy is a concern that has remained unaddressed until now.
2. To counter the tag of "generalists" (lack of domain expertise) attributed to IAS officers, the IAS Association is thinking to lobby the government into posting and transferring officials "according to their technical expertise."
3. IAS officers are 'generalists' who hop from one ministry to another through their careers and do not necessarily have expertise in any area. Sometimes it leads to lacunas in policy formulation area.
4. For instance, renowned poet and writer Ashok Vajpayi was made the secretary of the culture department in Madhya Pradesh a long time ago. The initiative to open the Bharat Bhavan, which is the hub of creativity in the state, was taken by him. It might not had happened if he was posted in coal ministry.
5. Arbitrary postings can be debilitating and can affect the career trajectory of civil servants and the general administration. For instance, what is the point of deputing an officer to a ministry where he will learn and understand problems of that ministry in a year's time? And then when he will be transferred to some other ministry, he will take another year to understand problems of that ministry.
6. A parliamentary panel has also recommended that the government bring 'specialised generalists' who have domain-specific knowledge into the civil

services to increase the efficiency of the bureaucracy. For instance, introducing lateral entry in to civil services is a step in the right direction.

7. Besides, the first ARC also indicated, in broad terms, the knowledge and specialization required for staffing posts in each of these areas. The selection of personnel to the eight areas of specialization was to be made through a mid-career competitive examination.

8. In its 'Strategy for New India @75' document, the NITI Aayog has recommended bringing in "domain experts"" into India's otherwise generalist bureaucracy by suggesting that recruits into the civil services be placed in a 'central talent pool', after which candidates can be allocated positions in the government based on their qualification and expertise.

Though having a specialist civil servant is the need of the hour, there are some pros of having a generalist in the civil services.

- The first is the argument that the best leadership is provided by generalists who have a breadth of understanding and experience. Specialists, no matter how competent, tend to have a tunnel vision and are not equipped to take a broader view.

- Sure, domain knowledge has to feed into policy-making, but that can be accomplished by domain experts advising the generalist leader in decision-making. In this worldview, a good IAS officer can head the Department of Agriculture as competently as she would the Department of Shipping.

- Young recruits join the IAS as generalists, acquire breadth and then go on to acquiring depth. Which makes them a more specialised person in the field of their respective work domain. Hence, recruiting a specialist who has narrowed vision to work on multidimensional problems will hamper the system.

- Also being a generalist doesn't mean that civil servants don't do a specialist kind work in their respective work domain. For instance, Nikhil Nirmal, the District Magistrate of Alipurduar a lawyer by profession, ably managed dengue outbreaks and enforced food security in the district.

- Managing specialisation can be a complex challenge. How much specialisation should there be? How should officers be allocated among the specialisations? What should be the weightages for expressed preferences and revealed competencies? Once allocated a specialisation, how should an officer's career be managed? It will make the task of recruitment more cumbersome.

- An IAS Officer never remains a 'generalist' as projected. They become specialists in public administration and governance; having unparalleled experience of managing every development scheme at the district and sub-district levels, interacting with people across different demographics, and ensuring coordination between different departments.

It is difficult to arrive at a conclusion, whether to introduce domain specialisation in the civil service or not. However, a golden mean has to be obtained. For instance, having a 'generalised specialised' should be a way forward. In this light Government of India recently launched 'Mission Karmyogi'.

- The mission is established under the National Programme for Civil Services Capacity Building (NPCSCB).It is aimed at building a future-ready civil service with the right attitude, skills and knowledge, aligned to the vision of New India.
- The capacity of Civil Services plays a vital role in rendering a wide variety of services, implementing welfare programs and performing core governance functions.

Conclusion

India's bureaucracy has long been criticised for being obstructionist, and that it has often been an impediment to implementing even well-intended policy initiatives. Bringing 'generalised specialist' in to civil services will strike a right balance while addressing the domain expertise question. Hence, it becomes imperative for India to achieve a golden mean while recruiting the civil servants who will supplement the transition of India in to 'New India'.
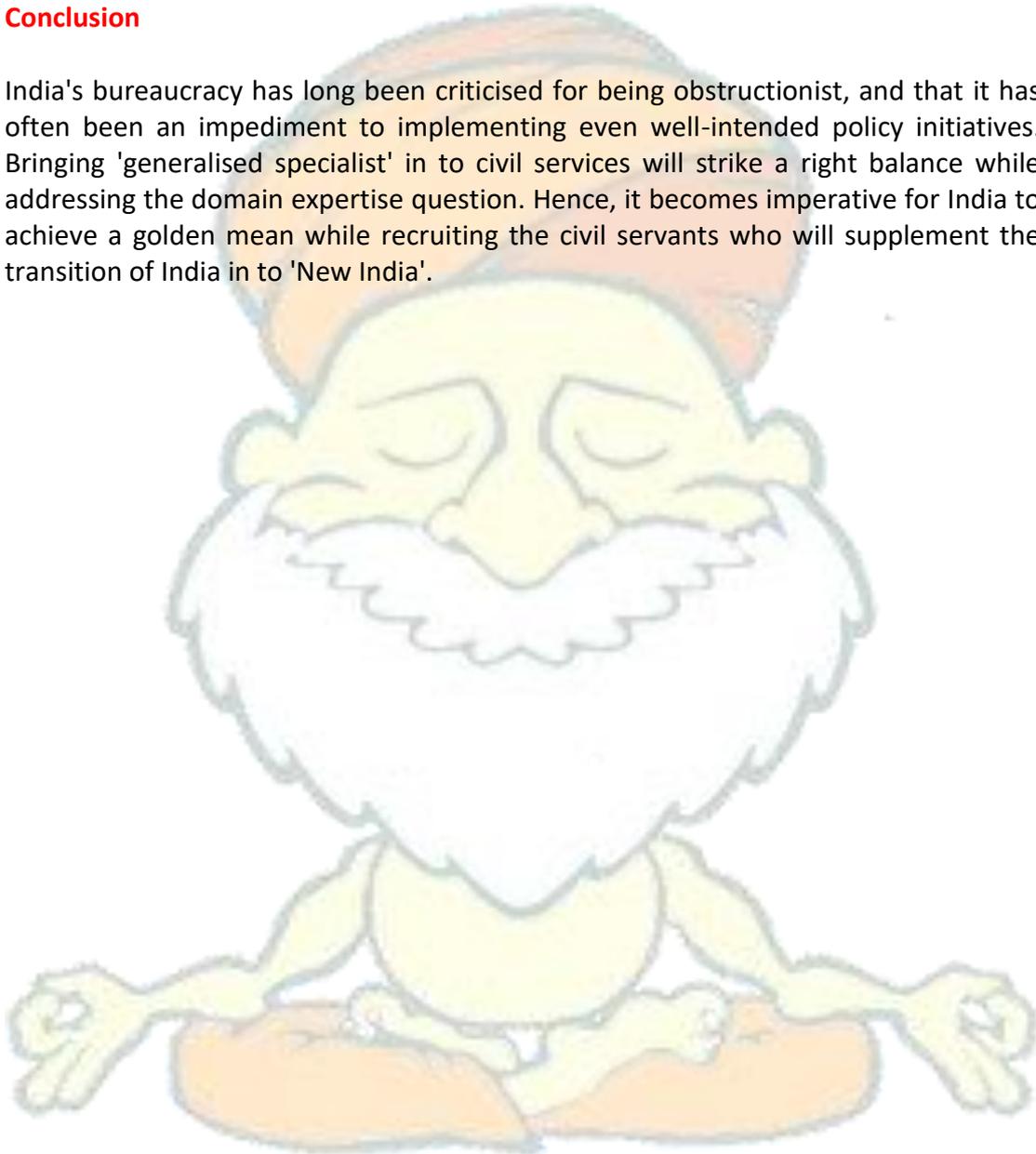
82. Should civil servants be active on social media platforms? Share and substantiate your views.

Approach - It expects students to write about use of social media platforms by civil servants. And highlight on whether civil servants should use social media.

Introduction

Social Media in recent times has become synonymous with Social Networking sites such as FaceBook or MicroBlogging sites such as Twitter. However, very broadly social media can be defined as any web or mobile based platform that enables an individual or agency to communicate interactively and enables exchange of user generated content.

Body

As Indian citizens, civil servants are free to express their views in public, subject to their specific service conditions. In this regard, the benefits of Social media use by civil servant can be seen from following points:

1. Show the human side: Social media offers a great opportunity to humanise your department or organisation. Tell stories and let your audience in behind-the-scenes to give your social media page a friendly, personal feel and improve engagement rates.

2. Use images and videos: Videos and images make your message more interesting and engaging, meaning your audience is more likely to listen to what you have to say. Visual content, therefore, tends to receive more engagement and so is prioritised by social media algorithms, making it more likely that your followers will see your post.

3. Create awareness: Social media can be used by them to create awareness about social welfare programmes as the audience are huge.Social media can help police and administrators to check on and control the mob in panic situation as well as early information about possible communal and ethnic clashes. For example –Bhima koregoan riots incident check by Pune police commissioner by early information through social media.

4. Create accessibility: Social media also acts as platform to reach the sections which are untouched due to geographical locations, environmental conditions, educate and alarm of any Climatic or environmental hazards.

5. It breaks down boundaries and hierarchies: Social media cuts across traditional silos, making projects or themes more open and accessible. In government, for example, in moments we can access similar activities other civil service departments are doing and the people behind them. Social media is non-hierarchical doesn't worry about geographical location, job title or government department.

6. Creates buzz around events: Twitter can hugely enhance how people experience an event. Attendees can ask questions, quote and connect with speakers, provide instant feedback and maintain connections afterwards.

7. Motivate, sharing new ideas: From motivational blogs and leadership tips to thingsthere are heaps of articles out there that can provide new information or a different perspective and social media is the place to find them. Finding and sharing this kind of content benefits people, team and networks. For example IFS officers with popular Twitter accounts are beginning to highlight the nature of their jobs inside dense, remote forests, and the problems and roadblocks they face.

However civil servants are needed to be politically neutral and impartiality is the corner stone of the service. So some concerns arise when sensitive issues like communalism, casteist incidents are highlighted in social media because –

- It shows their bias and people would perceive it as the civil servant is favouring one community over the other leading to loss of trust in the administration.
- Even the proposed changes to the rulebook to explicitly treat criticism of government policies on social media as a violation of conduct rules.
- Public servants are sharing their days through daily and weekly notes; engaging in open dialogue with colleagues, stakeholders, and citizens; and sharing progress and updates in real-time. Endangers anonymity of service and civil servant.
- It is not the official way to resolve grievances and should be treated as the last resort. It undermines the bureaucratic due process and may open another channel of public service.
- Their comments might lead to further decisions in the society and violence can crop up. For example Bareilly DM in 2018 Facebook post, questioned the "trend" of raising anti-Pakistan slogans in Muslim localities to foment communal trouble later witnessed violence when 250 kaanwariyas allegedly clashed with Muslims residents.
- The personal behaviour of public servants can undermine public trust if it causes a reasonable person to conclude that they are unable to serve the government of the day impartially and professionally. For example Shah feasal tweet about rape culture in South Asia.

Public servants in their capacity as 'officers of the state' are bound by service civil service conduct rules. These rules are different today from what they were in colonial times but they fall far short of today's digital expectations for sure.

Conclusion

The invisible civil servant is now becoming more and more visible in this ever evolving complex ecosystem. A number of civil servants are wanting to become visible. The public conduct of any civil servant must uphold the values of the Indian republic and promote the spirit and letter of the Constitution. The higher the civil servant's authority, the more stringent is the need to be consistent with constitutional morality.

83. Has India committed a blunder by not entering the RCEP? Critically examine.

Approach - As the directive here is critically examine it is necessary to cover various angles of the issue and provide both sides views. In the introduction you can start by introducing what is RCEP and stating why India pulled itself out of RCEP. In the first half of main body part explain points in support of India's move. In the next half argue against India's decision to pull itself out of RCEP. A way forward while explaining when and how India should join the RCEP is necessary.

Introduction

Described as the "largest" regional trading agreement to this day, RCEP was originally being negotiated between 16 countries-ASEAN members and countries with which they have free trade agreements (FTAs), namely Australia, China,South Korea, Japan, New Zealand and India. India had been a part of negotiations for almost nine years till it pulled out in November 2019, stating that inadequate safeguards and lowering of customs duties will adversely impact its manufacturing, agriculture and dairy sectors.

Body

The purpose of RCEP was to make it easier for products and services of each of these countries to be available across this region. However, India has some major concerns due to which India opted to stay out of RCEP.

India's decision to stay out of RCEP is a good decision:
- Unfavourable Balance of Trade: India has trade deficits with 11 of the 15 RCEP countries, and some experts feel that India has been unable to leverage its existing bilateral free trade agreements with several RCEP members to increase exports.
- For instance, as per paper published by NITI Aayog, India has a bilateral trade deficit with most of the member countries of RCEP. Following Table 1 shows India's trade balance with RCEP members.

Table 1: India's trade balance with RCEP members.

INDIA'S TRADE BALANCE WITH RCEP MEMBERS		
RCEP Member	**2018-19**	**2019-20**
ASEAN	-21.85	-23.82
China	-53.58	-48.65
South Korea	-12.05	-10.81
Japan	-7.91	-7.91
New Zealand	-0.25	-0.14
Australia	-9.61	-6.93

All figures in $ billion
Source: Ministry of Commerce and Industry

- Dumping of Chinese Goods: India has already signed FTAs with all the countries of RCEP except China. China is a major concern for India, as after signing RCEP, cheaper products from China might flood the Indian market.
- Auto-trigger Mechanism: In order to deal with the imminent rise in imports, India had been seeking an auto-trigger mechanism that would have allowed

India to raise tariffs on products in instances where imports cross a certain threshold. However, other countries in RCEP were against this proposal.

- Rules of Origin issue: Rules of origin are the criteria used to determine the national source of a product. India was concerned about a "possible circumvention" of rules of origin. The deal did not have sufficient safeguards to prevent routing of the products.
- Protection for domestic industries: Throughout the negotiations, the dairy industry demanded protection as the industry was expected to face stiff competition from Australia and New Zealand when the deal was signed. Similarly, steel and textiles sectors have also demanded protection.
- Most favoured Nation Status: India wanted RCEP to exclude most-favoured nation (MFN) obligations from the investment chapter, as it did not want to hand out, especially to countries with which it has border disputes, the benefits it was giving to its strategic allies
- No deal better than bad agreement: India's stance was based on a "clear-eyed calculation" of the gains and costs of entering a new arrangement, and that no pact was better than a "bad agreement".

However, the COVID-19 pandemic has changed the economic game of global powers. India is also not an exception.

Arguments for India to review its RCEP stand:

- Need for Economic Realism: India should deter seeing RCEP only from the Chinese perspective. India should acknowledge that the trade bloc represents 30% of the global economy and world population, touching over 2.2 billion people, and staying out of RCEP may result in suboptimal economic growth without leveraging Asia-Pacific demand.
- In this regard, India can draw inspiration from Japan & Australia, as they chose to bury their geopolitical differences with China to prioritise what they collectively see as a mutually beneficial trading compact.
- Strategic Need: It is not just because gains from trade are significant, but the RCEP's membership is a prerequisite to having a say in shaping RCEP's rules.
- This is necessary to safeguard India's interests and the interests of several countries that are too small to stand up to the largest member, China.
- Global Economic Stagnation due to Covid-19: With global trade and the economy facing a steep decline due to Covid-19 pandemic, RCEP can serve as a bulwark in containing the free fall of the global economy and re-energising economic activity.
- Impact on India's Act East Policy: There are concerns that India's decision would impact its bilateral trade ties with RCEP member nations, as they may be more inclined to focus on bolstering economic ties within the bloc.

Way forward –

- India, as an original negotiating participant of RCEP, has the option of joining the agreement without having to wait 18 months as stipulated for new members in the terms of the pact.

- A possible alternative for India is to review its existing bilateral FTAs with some of these RCEP members as well as newer agreements with potential for Indian exports.
- The problem is a broader one, of India's competitiveness, which has to be improved so that opening up leads to more benefits than costs, to industrialisation and not it's opposite.
- Conclusion of 17th ASEAN-India Virtual Summit and adoption of ASEAN-India Plan of Action for 2021-2025 proves that despite conclusion of RCEP, ASEAN countries are welcoming towards India. India must try to find out possibilities of increasing trade with ASEAN countries.

Conclusion

Given India's own ambitions to generate growth and jobs within, economic isolation could never be an option for India and becoming a key player and rule-maker on the world stage, India's decision to withdraw from the RCEP is debatable. Instead of sitting out and building tariff walls across sectors, it must prod and incentivise the industry to be competitive, and get inside the RCEP tent at the earliest opportune moment but it should not done at the cost of sacrifice of domestic industry in India.
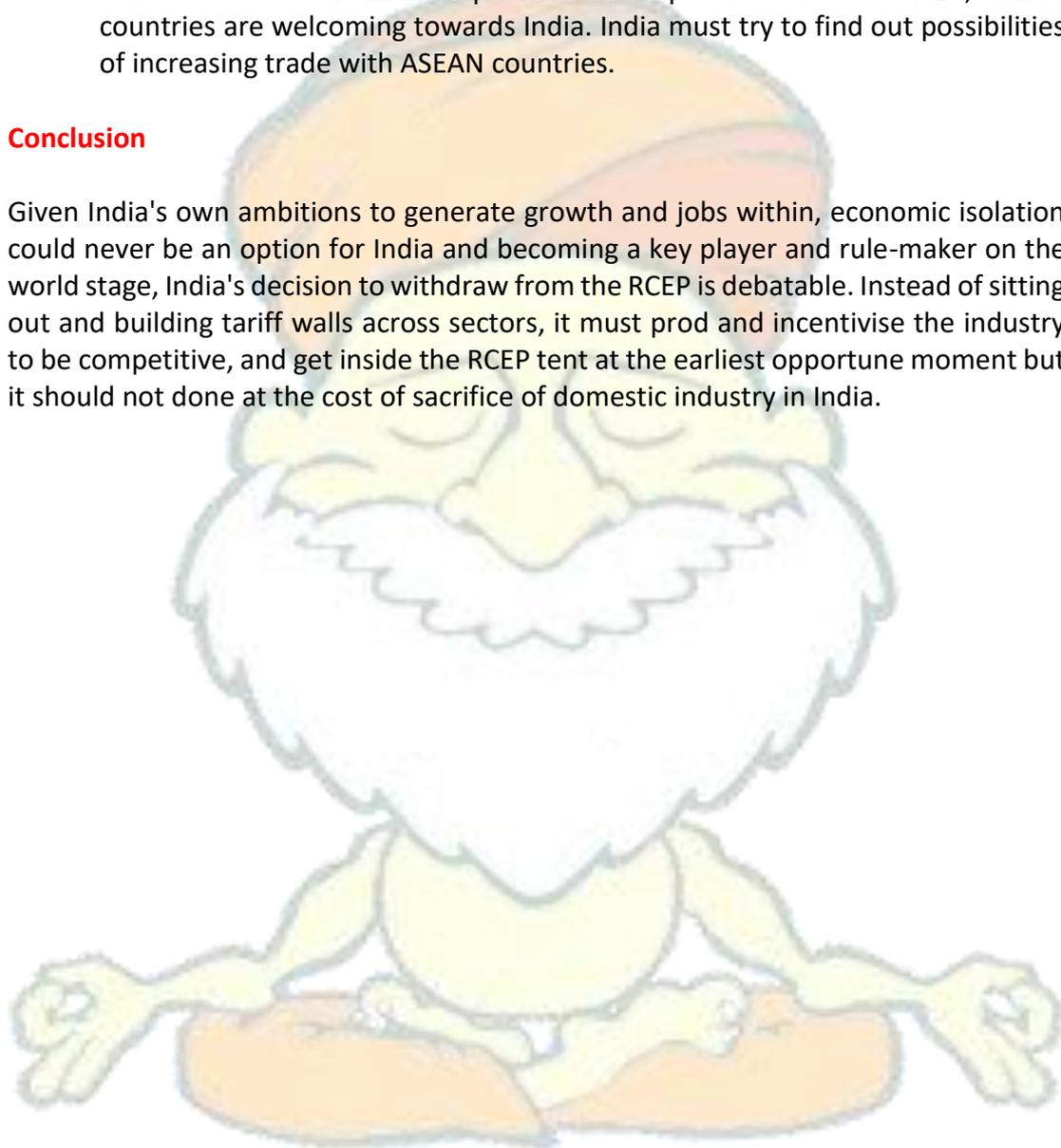
84. How do results of recent US elections affect India's interests? Critically analyze.

Approach – A straightforward question where in you need to critically analyze the effect of results of recent US elections on India's interests.

Introduction

With Democratic candidate Joe Biden winning the US Presidential Election over the Republican candidate and incumbent President Donald Trump as their new President by a significant margin, the world is now bracing itself for the significant changes anticipated by this turn of events. This also holds true for India as not only is the USA India's second-largest supplier of defence equipment, it is also one of India's most important trading partner (the Indo-US trade figures exceed $100 billion). India's bid for a permanent seat on the UN Security Council also makes its relationship with USA vital in strategic terms.

Body

Owing to India's strategic position in the world economy, growth prospects, and availability of cheap skilled labour, and also greater domestic demand momentum, traditionally, Indo-US ties have received a bipartisan support, and this is expected to continue even through Biden's tenure. In this regard, the effect on India's interests can be seen from the following points:

1. Under Biden administration, India's trade with the US could recover from the dip since 2017-18 where over the past 20 years, India has always had a trade surplus (exports exceeding imports) with the US.Trade surplus had peaked at USD 21.2 billion in 2017-18 and has moderated to some extent.

2. Beyond trade, over the past two decades, the US is the fifth-biggest source for Foreign Direct Investment (FDI) into India. Apart from FDI (or investment in the physical assets inside India), the US also accounts for one-third of all Foreign Portfolio Investments (that is, investment in financial assets) into India. Here, Biden is likely to be less obtrusive than the current Trump administration.

3. H1-B Visa Issue - Under President Trump, who severely curtailed the visa regime, owing to his policy of "America First", India had suffered the most.H-1B visa is a non-immigrant visa that allows American companies to employ foreign workers in speciality occupations that require theoretical or technical expertise. President Biden may again relax the norms for India's benefit.

4. A Biden presidency may also see a renewed push towards a rules-based trading system across the world — instead of outright ad-hocism as was the case under Trump — as well as a move away from the protectionist approach that has been getting strong across the world.

5. Here, India's exclusion from the US' Generalized System of Preference (GSP) could come up for reconsideration under Biden where India was the largest beneficiary of the programme in 2017 with USD 5.7 billion in imports to the US given duty-free status but was terminated by President Trump.

6. Further, under the Trump administration, the US sanctions on Iran severely limited India's sourcing of cheap crude oil. For an economy such as India, which

needs a regular supply of cheap oil to grow fast, a normalisation of US-Iran relationship (and lifting of sanctions), which President elect Joe Biden has promised, would be more than useful.

7. On China, too, while the US apprehensions are unlikely to be fewer even under a Biden administration, it is more likely that a Biden administration will help India against China, instead of clubbing the two together.

8. Also, Biden has promised to re-join the Paris Climate Accord, and this may help countries such as India in dealing with the massive challenges — both technical and financial — on this front.

9. Other Issues - Other points of contention between India and US - such as the tricky issue of data localisation or capping prices of medicines and medical devices - have a chance of getting towards a resolution under a Biden Presidency.

10. Civil Liberties and Democratic Rights in India - Although some US Congressmen and women had raised red flags on the human rights situation following the revoking of J&K's special status under Article 370 and passage of the Citizenship (Amendment) Act alongside the proposed nationwide National Register of Citizens (NRC), the Trump administration had not taken any actions beyond making some perfunctory statements. But this may change under the Biden Presidency, which can become an issue in terms of public outreach.

11. Further, there are many concerns related to the strategic aspects where India has some reservations in terms of Biden administration's approach to dealing with China as well as the overall emphasis on QUAD and Indo-Pacific approach. Relations with Pakistan vis-à-vis its support to terrorism as well as tackling the Afghan issue can also become a sore point in the normally flourishing strategic relationship.

Conclusion

Combined with the control of Covid infections and the economic recovery, the US could yet again provide a growth impulse to the global economy that countries such as India need to boost their exports and grow where it has become clear that the outcome of the United States presidential election doesn't affect India's relationship with Washington as much as in earlier times where India's ties with America find bipartisan support.

85. What are India's most critical challenges in WTO? Discuss. What has been India's response to those? Examine.

Approach - In the introduction candidate can start by explaining historical association of India with WTO. In the first half of main body part clearly explain the kind of concerns India has with that of WTO. In the next part give how India has responded to these concerns, what measures India has adopted and what strategy it has adopted so that our concerns get addressed by WTO. Candidate can conclude by giving a brief way forward.

Introduction

India has been a member of the World Trade Organisation (WTO) since January 1995 and also had been a member of the WTO's forerunner General Agreement on Tariffs and Trade (GATT) since July 1948. As a developing country, India has played a significant role in the proceedings of the WTO, especially in voicing its own concerns and also of the entire developing world.

Body

In the Doha WTO conference that took place in 2001, India emerged as the most outspoken of advocates for the developing bloc. However, there are many challenges for the Indian economy as a result of the many agreements signed as part of the WTO.

- Trade-Related Investment Measures (TRIMS): This agreement forbids the host country to discriminate against investments from abroad vis-a-vis domestic investment i.e. agreement requires investment to be freely allowed by nations.
- Peace Clause: High subsidies are seen to be distorting global trade. The peace clause protects a developing country's food procurement programmes against action from WTO members in case subsidy ceilings are breached.
- India's turn towards protectionist trade policy over the past years has not gone unnoticed at the WTO and a pattern is beginning to be visible when it comes to India at the WTO. For instance, USA consistently voicing the subsidy issues at WTO.
- Minimum Support Price and WTO: WTO's hard stand on agricultural procurement at minimum support price is a big concern, where India is defending its complex web of minimum support prices at the WTO amid international isolation and even opprobrium.
- Trade-Related Intellectual Property Rights (TRIPS): Intellectual property rights seek to protect and provide legal recognition to the creator of the intangible illegal use of his/her creation. Since the law governing these aspects vary vastly across countries, the agreement stipulates a basic homogeneity of the law so that no infringement of rights occurred.
- Due to TRIPS the pharmaceutical and biotechnology industries are expected to be hit the hardest. Another impact on India is expected to be in the transfer of technology from abroad.

- Ban on Chinese Mobile Apps: After India banned 59 mobile apps of China, they have claimed that India has violated World Trade Organization (WTO) rules. Which poses a challenge for India that it has to comply with the international trading norms.
- Information and Communication Technology (ICT) Tariff Case: The World Trade Organisation (WTO) has decided to set up a dispute panel against India. The panel is being set up on the request of Japan and Taiwan. The dispute panels of the World Trade Organisation (WTO) would determine whether India's customs duties on imports of certain information and communications technology (ICT) products infringe WTO norms or not.
- Developed countries have been putting pressure on inclusion of non-trade issues such as labour standards, environmental protection, human rights, rules on investment, competition policy in the WTO agreements.
- Fisheries Subsidies: WTO members are negotiating to finalise disciplines to eliminate subsidies for illegal, unreported and unregulated (IUU) fishing, and to prohibit certain forms of fisheries subsidies that contribute to overcapacity and overfishing. Which is a clear threat to India's domestic fishing industry.

India's Response to WTO's challenges:

- India's participation in an increasingly rule based system in the governance of international trade is to ensure more stability and predictability, which ultimately would lead to more trade and prosperity.
- India has an obvious interest in the liberalisation of services trade and wants commercially meaningful access to be provided by the developed countries. Since the Uruguay Round, India has autonomously liberalised its Services trade regime across the board.
- To comply with WTO TRIPS terms, it required some changes in the domestic laws of countries including India. As a result, India amended the Copyright Act, the Patents Act, and the Trade and Merchandise Act.
- Ensuring food and livelihood security is critical, particularly for a large agrarian economy like India. India is persistently demanding for a permanent solution on public stockholding subsidies at WTO.
- India strongly favours extension of higher levels of protection to geographical indications for products like Basmati rice, Darjeeling tea, and Alphonso mangoes at par with that provided to wines and spirits under the Trade-related Aspects of Intellectual Property Rights (TRIPS) agreement.
- India has responded against any inclusion of non-trade issues that are directed in the long run at enforcing protectionist measures (based on non-trade issues, the developed countries like USA and European Union are trying to ban the imports of some goods like textile, processed food etc.), particularly against developing countries.
- Besides, India has sought a clear dispute settlement mechanism in the global agreement to end harmful fisheries subsidies.

Conclusion

The role of WTO in future is very crucial as world is going through extraordinary situations such as the protectionism, trade war (like USA & China), Covid-19 Pandemic and Brexit. Since the WTO is consensus-based, reaching an agreement on reforms among all 164 members is extremely difficult. One possibility moving forward could be a plurilateral agreement with a group of like-minded countries on a new set of rules that serve as an addendum (supplement) to the broader WTO.

86. What are your views on the consistent decline of multilateralism in recent years? How is it impacting global affairs? Discuss.

Approach - It expects students to write about multilateralism and present a viewpoint on decline declining multilateralism and its impact and its impact on global affairs.

Introduction

Multilateralism has a long history, but it is principally associated with the era after World War II, during which there was a burgeoning of multilateral agreements led primarily by the United States. The organizations most strongly embodying the principle of multilateralism are to be found in trade (the World Trade Organization [WTO]), security (the North Atlantic Treaty Organization [NATO]) and environment (numerous multilateral environmental institutions also exist).

Body

Multilateralism:
- Multilateralism is the process of organizing relations between groups of three or more states. Beyond that basic quantitative aspect, multilateralism is generally considered to comprise certain qualitative elements or principles that shape the character of the arrangement or institution.
- Those principles are An indivisibility of interests among participants and A system of dispute settlement intended to enforce a particular mode of behaviour.

Consistent decline in multilateralism:
- Pursuing an aggressive "America first" policy, the Trump administration has relinquished the traditional role of the US as herald of the international liberal order and withdrawn from the Paris climate convention, the Iran nuclear deal, and the Trans-Pacific Partnership.
- China, aiming to bend the multilateral system in its favour, is setting up parallel governance structures such as the Shanghai Cooperation Organisation or the China Development Bank.
- The EU, a traditional champion of multilateralism, is internally divided and losing influence on the international scene. The G8 has shrunk to the G7, and a trade war is looming between the US and China.
- UN and its manifold agencies have been losing their lustre, criticised for their lack of efficiency, institutional sclerosis and ideological infighting.
- The WTO has failed to conclude the negotiations of the Doha Agenda started in 2001, as bilateralism and protectionism are resurging worldwide, and its dispute settlement system has stalled.
- The complex architecture of arms control set up at the end of the Cold War is threatened by the dismantling of the Iran nuclear deal.

- The governance of the internet is forfeiting its initial aspiration of a borderless knowledge society as a few private companies are hoarding data exponentially and authoritarian states are misusing it as a tool of surveillance and repression.
- As the current COVID crisis is illustrating, while existing multilateral mechanisms such as the WHO have excruciatingly shown their limits and shortcomings, alternative routes of unilateralism and uncoordinated action at the state levels have proven dead ends in containing the spread of the virus and are unlikely to address the global repercussions of the pandemic.

Impact of declining multilateralism on global affairs:

- Deadlock at WTO: The recurrence of deadlocks in the Doha Round for over the last 15 years is a clear sign of discontent from multiple stakeholders. Trump administration for the wreckage over WTO's Appellate Body, the practice of actually blocking appointments and re-appointments of judges.
- UN is undermined: United Nations Security Council failed to restrict terrorism by their use of the veto. In the most recent example of this power being exercised, Russia and China voted against a draft resolution that would have condemned a crackdown on anti-government protests in Syria and called on Bashar al-Assad, the Syrian president, to step aside. China's rejection of the Permanent Court of Arbitration's decision in the South China Sea case, despite signing up to the United Nations Convention on the Law of the Sea.
- Rise of Nationalism: Over the past decade and more, the world has been moving in direction opposite to that of multilateralism. There has been an upsurge in narrow nationalism, an assertion of parochial interests over pursuit of shared interests. There has been increased competition among states rather than embracing collaboration. US-China Trade war, BREXIT, US coming out of Paris Climate deal, Rise of right wing parties in Europe and decline in WTO are reflection of this trend.
- Increasing Incidences of Lawfare: It means the misuse of existing International and national laws by several countries (via forced technology requirements, intellectual property rights violations, and subsidies), to gain an unfair advantage over other countries. For example: The imposition of extraterritorial sanction (under CAATSA) by the US has affected development in developing economies like India and China. The trade war between the US and China has challenged the existing global trade.
- Dual Use of Global Supply Chain: Some of the developed countries have jurisdiction and control over global supply chains. Due to growing convergence between commercial interests with strategic goals, these supply chains enables them to have vast extraterritorial influence and has created new power asymmetries. For example: China through BRI is enhancing its role in global economic governance. The internet has become a distributed system of surveillance. There are fears pertaining to dual-use (commercial viability and military application) of Industrial Revolution 4.0.

Finding solutions to fix the malaise of multilateralism four sets of additional measures will be crucial:

- Reconsidering past trade-offs: This means reconsidering past trade-offs and developing a new bargain on globalisation with better distributive mechanisms, both domestically and internationally.
- Multilateralism will need a brand new narrative: Appealing to global public goods and the welfare of future generations are likely to prove insufficient as rationales, especially to those who feel shortchanged and are enduring economic hardships. This new narrative will need to have individual and group appeal. It will also need to work across different levels of politics local, regional, national, and global.
- Fundamental renegotiation of multilateral institutions is essential: To do this effectively, it would be wise to tap into ongoing efforts of the global South (e.g., UN Security Council reform). Additionally, however, given the risks that weaponised interdependence and economic statecraft pose today, multilateral rules will have to be updated to prevent their misuse and abuse.
- Agreeing values: Amidst the great power competition currently underway, fractures are emerging over first-order values, such as democracy, pluralism, embedded liberalism, and rule of law.

Conclusion

The current context, characterized by a weakening of multilateralism, the return of protectionism and the rise of extremist political movements, undermines the advancement of that global consensus, poses a grave challenge to the world economy and threatens the attainment of the Sustainable Development Goals. Since US and West have adopted nationalistic leaning, India should step into the leadership role by advocating the multilateral approach of tackling the pandemic, climate change and terrorism.

87. What are the most potent ecological hazards in the coastal regions? Examine.

Approach - It is straightforward question, here it expects aspirants to - start answer by defining term like ecological hazard - in main body part you need to write about various ecological hazards in coastal region and how they are impacting surrounding region.

Introduction

An ecological hazard is a substance, state or event which has the potential to threaten the surrounding natural environment or adversely affect people's health, including pollution and natural disasters such as storms and earthquakes.

Body

Some of the hazards include movement of barrier islands, sea level rise, hurricanes, nor'easters, earthquakes, flooding, erosion, pollution and human development along the coast.

- Movement of barrier islands: They create a barrier between the mainland and the ocean. They shelter and protect the mainland from the powerful forces of wind, waves, tides, currents and the ravages of storms and hurricanes. They shelter the estuaries that form behind the barriers. Between 75% and 95% of all marine species are dependent upon these estuaries at some point in their lives. They allow marshes to build up in the quiet waters of the sound. The marshes filter the pollutants that come in from Mainland Rivers and when the marsh grasses die they create detritus, a valuable food source for small marine organisms. Barrier islands provide valuable habitats for mammals, shellfish and fish including many endangered species, and offer a greater variety of bird species than any other ecosystem in the continental United States. They also serve aesthetic purposes and for years, have inspired artists, poets, writers, bird watchers, boaters, picnickers, sunbathers and swimmers.
- Sea level rise: Landward recession or erosion of sandy shorelines. Depending on the rate and scale of sea level rise, the environmental, social and economic consequences or shoreline recession within low lying inter-tidal areas, in particular, may be significant in the medium to long term. Salt water intrusion and landward advance of tidal limits within estuaries. This may have significant implications in the medium to long term for freshwater and salt water ecosystems and development margins, particularly building structures and foundation systems within close proximity to the shoreline. Existing coastal gravity drainage, storm water infrastructure and sewerage systems may become compromised over time as mean sea level rises. Sea level rise will influence the entrance opening regimes for intermittently closed and open lakes and lagoons and alter catchment flood behaviour over time.
- Pollution: Coastal and estuarine ecosystems have been, and still are, heavily influenced by humans through pollution and habitat loss worldwide. Over 80% of all marine pollution originates from land-based sources which are primarily industrial, agricultural and urban. Pollution accompanies most kinds of human

activities, including offshore oil and gas production and marine oil transportation. Besides altering the marine environment, pollution also causes economic losses

- Human development along the coast: Living organisms play an essential role in biogeochemical cycles through coastal systems. They are themselves vulnerable to rapid changes which take place in the coastal zone due to anthropogenic activities, but changes in the structure of populations of organisms will in turn affect the geochemistry of the habitat, to a point where such cycles might become dysfunctional. The consequences of such changes taking place in coastal ecosystems may have consequences at global level leading to an unbalance in fluxes of energy and minerals at the interface between land and sea.

Conclusion

Solution of these issues lies in more informed preparedness for coastal flooding, tsunami inundation or maritime conditions through timely and accurate forecasts, improved approaches for managing shoreline erosion, accurate estimates of extreme event magnitudes for coastal engineering design, through to long-term planning for the impacts of coastal hazards and sea-level rise on low-lying coastal margins
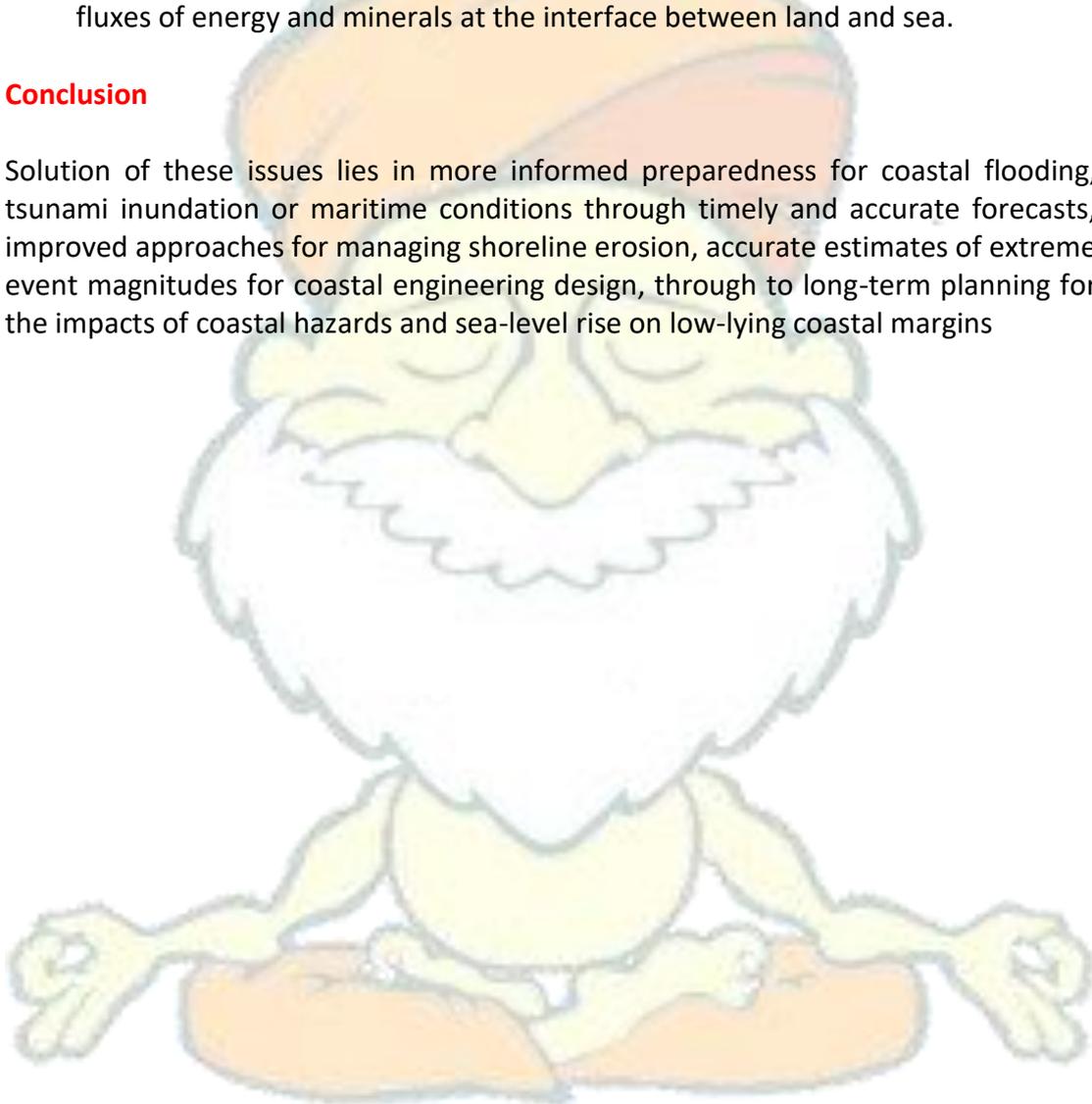
88. What are the post disaster management strategies for combating the impact of Earthquakes? Discuss.

Approach - As the directive here is discuss it is necessary to cover various angles of the topic. In the first part of main body part explain earthquake and its impact. In the next half of main body part tell the post disaster management strategies to combat the impact of earthquakes. You can conclude by explaining the significance of these strategies to combat earthquake and other natural hazards.

Introduction

An earthquake is shaking of the earth caused due to the release of energy from the earth's interior, which generates waves that travel in all directions. Minor tremors caused by small vibrations occur every few minutes but great earthquakes happen because of faulting (Normal, reverse and strike-slip) cause a great number of disruptions.

Body

Earthquake is characterized by suddenness, scale, and magnitude. These three characters make it extremely dangerous when it comes to life and property without any discrimination. Following are the impacts of the earthquakes:

- Damage to property: The upheaval caused by an earthquake does huge damage to the property. Especially in a developed area of high population density, the damage to the property is huge.
- Human loss: Within the period between 1990 and 2006, around 23,000 lives were lost because of major earthquakes in India.
- One of the important impacts of the earthquake is the change in the river course due to blockage.
- Earthquakes in the ocean basin creates huge waves that strike on the coast and create huge damages. The 2004 Tsunami in Sumatra brought Tsunami to the east coast of India.
- Mud fountains: Due to the huge impact of the earthquake, mud and hot water may emerge on the surface. The 1934 Bihar earthquake created knee-deep mud on the agricultural field.
- If the earthquake happens in areas of dams, reservoirs, the damage is multiplied. Earthquake in hilly and mountain areas may cause landslides and avalanches.
- Earthquakes cause damage to electric property and gas pipes. Due to the havoc caused by the earthquake, it is even difficult to contain the fire.

Post disaster management strategies to combat the impact of earthquakes: Disaster management, goes through different stages.

- Post disaster management strategy deals with 5R's i.e. Relief, Response, Rehabilitation, Reconstruction and Recovery.

- Post-disaster initiatives taken in response to a disaster with a purpose to achieve early recovery and rehabilitation of affected victims and communities.
- The relief phase includes providing the immediate relief in terms food, medical attention, and temporary shelter. It is the prime most post disaster strategy to mitigate the negative impact of earthquake.
- The response phase includes the search and rescue; fulfilling basic humanitarian needs of victims; assistance by regional, national and international bodies etc.
- Considering no possibility to reconstruct the area if damage is so grave, the rehabilitation phase comes in to picture. It includes rehabilitating the affected people at an alternate site. Besides it also includes making provisions for the livelihood of people.
- During reconstruction, the location or construction material of the property is considered.
- Recovery phase starts after the immediate threat to human life has subsided. The immediate goal of the recovery phase is to bring the affected area back to some degree of normalcy.
- Considering these strategies in mind Disaster management act, 2005 envisaged the creation of 'National Disaster Management Authority (NDMA)', headed by the Prime Minister to implement activities of Disaster Management in India. Besides State Disaster Management Authorities (SDMAs) headed by respective Chief Ministers to do the same at the state level.
- Besides, the government launched two Mobile apps, the first one is 'India Quake'– Developed by the National centre for seismology, the mobile app disseminates real-time earthquake information and the second one is 'Sagar Vani'-Intended to serve coastal communities, the mobile app disseminates ocean related information and alerts to the user community in a timely manner for their safety.
- The National Disaster Response Force (NDRF) strives to be the first responder at heritage sites, which are vulnerable to disasters such as earthquakes, floods, cyclones, and tsunami across India.
- In Earthquake management scenario in India, The NDMA guidelines of 2007 on earthquake preparedness are very important.
- Apart from it, India is a signatory to the Sendai Framework for Disaster Risk Reduction which works in disaster management in a very holistic way. India also works closely with the United Nations International Strategy for Disaster Reduction (UNISDR).
- At the international forum India has also took one step ahead to deal with such issues through the initiative of Coalition for Disaster Resilient Infrastructure (CDRI).

Conclusion

The UN Office for Disaster Risk Reduction (UNDRR) recently published its report titled "The Human Cost of Disasters". It enlists Earthquake as one of the highly dangerous disaster for human lives and its subsequent impact on economy. Hence, it becomes of

critical importance that apart from focussing on post mitigation measures if we focus on pre-disaster strategies then it will have less impact on the lives of people and its subsequent economic impact.

89. How does external funding of illegal organisations create internal security threats in India? Examine.

Approach - It expects students to write about - in first part write about different internal security threats created by external funding of illegal organisations - in second part write about steps taken by government.

Introduction

India is one of the worst affected countries by terrorism. Terrorist attacks on country both at border or interior of country has been funded by sympathizers and external state actors. Recent revelations by David Hadley made it clear that master minds of 26/11 is LeT gets funding. Terrorist funding does not only has impact on Indian law and order issue but also it has profound impact on economic and social front.

Body

External funding is the main source of resources for all the major internal security issues of India:

- Economic terrorism: The country has to contend with Economic terrorism. Pakistan has been flooding the country with counterfeit currency with a view to subverting its economy and funding terrorist activities in different parts of the country. It is estimated that Pakistan pumped in 16 billion worth of FICN into India in 2010, a figure that rose to 20 billion in 2011 and 25 billion in 2012.
- Organised crime: Organised crimes in India especially in metro cities such as Mumbai and Delhi are rising due to flourishing external funding to illegal organisations. Such organised criminals also fund for radicalisation of youth and terrorist attacks.
- Religious or ideological extremism: External funding is greatest source of financial help to extremists. Financial incentives lure unemployed youth towards antinational activities in the name of particular religion or ideology.
- Cybercrime: Crypto-currency and unrecorded cash transaction in e-commerce are also emerging means to supply resources to hostile elements in the country.
- Armed violence: Armed violence which was hitherto legacy of Maoists or insurgencies is now taking a new form throughout India especially in the form of right wing extremism. Recently there has been reports of seizure of illegal weapons and public firing by individuals. External funding is easy source of illegal arms trade in India.
- External funding can be used as a tool of resource mobilisation by insurgent groups, militants and Naxals who are threatening peace and security of India.
- External funding is used to fund separatist activities in Kashmir and insurgent groups in north east.
- External funding is used to fund NGOs and other civil society groups to propagate an agenda which are detrimental to the interests of the society.

Government has taken various steps to combat external funding of illegal organisations in the country, which inter alia, include: -

- Strengthening the provisions in the Unlawful Activities (Prevention) Act, 1967 to combat terror financing by criminalizing the production or smuggling or circulation of high quality counterfeit Indian currency as a terrorist act and enlarge the scope of proceeds of terrorism to include any property intended to be used for terrorism.
- An advisory on terror financing has been issued in April 2018 to States/ Union Territories. Guidelines have also been issued in March, 2019 to States/ Union Territories for investigation of cases of high quality counterfeit Indian currency notes.
- Training programmes are regularly conducted for the State Police personnel on issues relating to combating terrorist financing.
- Intelligence and security agencies of Centre and States work in tandem to keep a close watch on the elements involved in terror funding activities and take action as per law.

Conclusion

Better coordination between countries for data sharing and for information exchange can help to minimize the effect and a well-planned strategy can curb such menace.
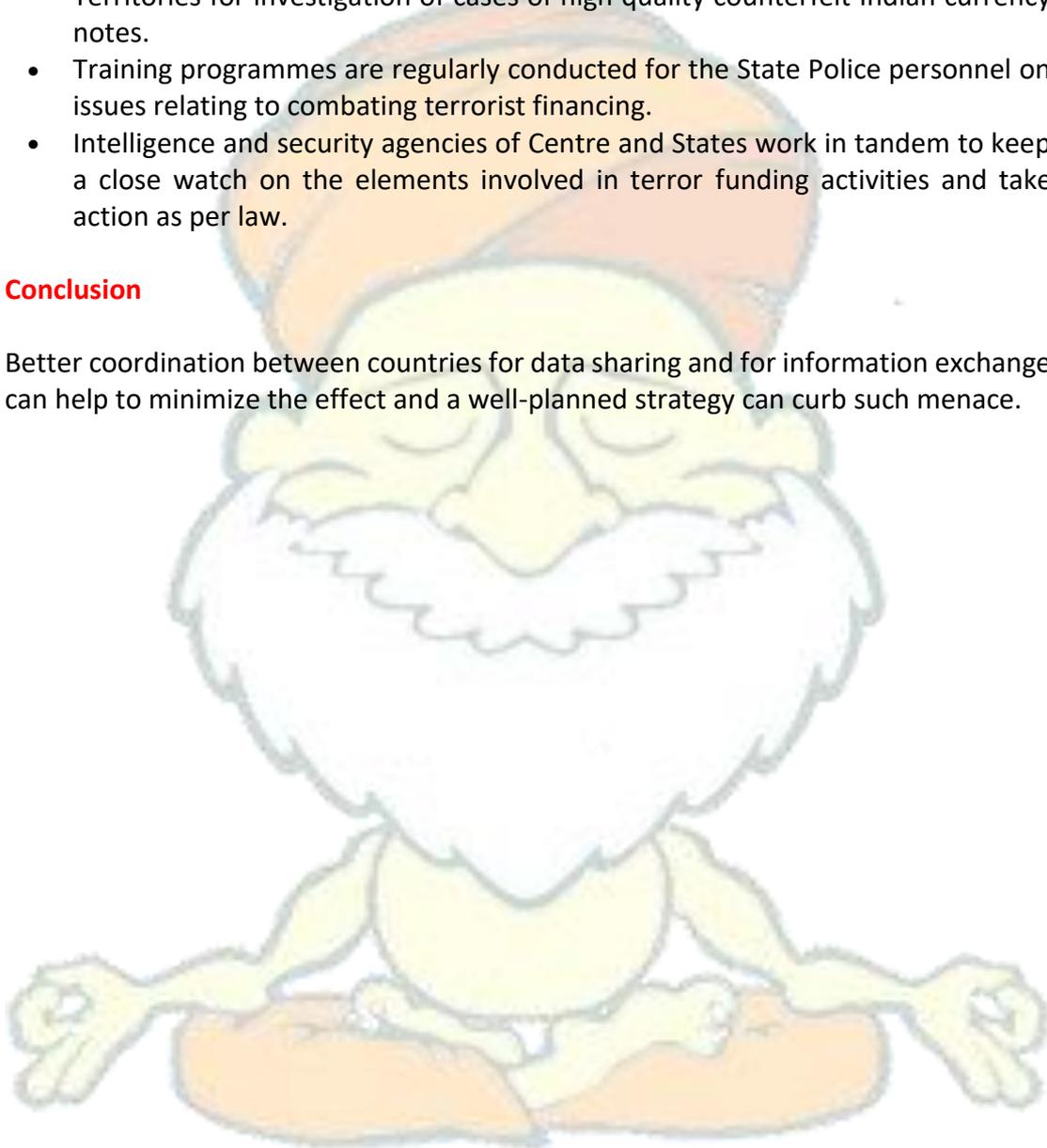
90. What is the current status of threats of secessionism in the Northeast? Discuss.

Approach - As the directive here is discuss, it is necessary to cover various angles of the issue and arrive at a conclusion accordingly. In the introduction you can start by explaining the relationship of secessionist movement and turmoil in the North-east region. In the first half of main body part explain kinds of secessionist movements in the Northeast region. In the next half explain current status of secessionism in the North-east. A constructive way forward to address the issue will fetch more marks.

Introduction

Northeast India is the eastern-most region of India. It is connected to East India via a narrow corridor (Siliguri corridor) squeezed between independent nations of Bhutan and Bangladesh. Secessionist movements in North east India have gained significance over the time. However, with moderate local support and high voter participation in the democratic elections, secessionist movement's future is debatable on the table of containing the insurgency in North-east India.

Body

Conflicts in the region can be broadly grouped under the following categories:
- National conflicts: Involving concept of a distinct 'homeland' as a separate nation and pursuit of the realization of that goal by use of various methods both violent as well as nonviolent. For instance, ULFA demand for sovereign Asom, NSCN for Greater Nagaland.
- Ethnic conflicts: Involving assertion of numerically smaller and less dominant tribal groups against the political and cultural hold of the dominant tribal group. In Assam this also takes the form of tension between local and migrant communities.
- Sub-regional conflicts: Involving movements which ask for recognition of sub-regional aspirations and often come in direct conflict with the State Governments or even the autonomous Councils. For instance, United People's Democratic Solidarity (UPDS) in Assam.

Current status of threats of secessionism in the Northeast:
- A cursory look at the demographic mosaic of northeastern India would show that this region is home to a curious amalgam of cross-cutting societies. What compounds the problem of this plurality is the fact that the tendency for ethno-political assertion is high among almost all the groups.
- This is primarily because the political boundaries in most cases do not coincide with the existing social boundaries. The northeastern units of the Indian federation, in spite of several political permutations and combinations have not been able to cater to the demands of all the ethnic categories clamouring for recognition of their distinctive identity.

- The militant organization United Liberation Front of Assam demands a separate country for the indigenous people of Assam. The Government of India had banned the ULFA in 1990 and has officially labelled it as a terrorist group.
- The United People's Democratic Solidarity (UPDS) demands a sovereign nation for the Karbi people. It was formed in March 1999 with the merger of two militant outfits in Assam's Karbi Anglong district, the Karbi National Volunteers (KNV) and Karbi People's Front (KPF).
- The United People's Democratic Solidarity signed a cease-fire agreement for one year with the Union Government on 23 May 2002. However, this led to a split in the UPDS with one faction deciding to continue with its subversive activities while the other commenced negotiations with the Government.
- The Nagalim is a proposed independent country for the Naga people. In the 1950s, the Naga National Council led a violent unsuccessful insurgency against the Government of India, demanding a separate country for the Nagas.
- The secessionist violence decreased considerably after the formation of the Naga-majority Nagaland state, and more militants surrendered after the Shillong Accord of 1975. 2014 General Elections of India recorded a voter turnout of more than 87% in Nagaland, which was the highest in India.
- The National Liberation Front of Tripura (or NLFT) is a Tripuri nationalist organisation which seeks for Tripura to secede from India and establish an independent Tripuri state.
- It has actively participated in the Tripura Rebellion. The NLFT manifesto says that they want to expand what they describe as the Kingdom of God and Christ in Tripura.
- The Tripura National Volunteers (also known as the Tribal National Volunteers or Tripura National Volunteer Force) was founded in 1978 with assistance from the Mizo National Front. The group has significantly reduced terror activities and recently 88 cadres of NLFT surrendered to the Indian Government.
- Nagaland, Manipur, Assam and Tripura had been witnessing conflict since 1950-60 period, but since 1990, the intensity of conflicts started to decrease. Now the only state where prominent insurgency exist is Manipur. But in this region several armed factions operate. Some groups call for a separate state, others for regional autonomy while some extreme groups demand complete independence.

The ceasefire agreements and peace negotiations have resulted in reducing the violence levels and given the civil societies of the region space to talk. Besides following approach needs to be adopted to reduce the secessionist tendencies in North-east India.

- It is important to understand the culture and psyche of the people of North East while framing policy alternatives.
- Security situation in the region has improved considerably in Assam and Meghalaya in particular facilitating conducive atmosphere for investment and development. The Northeast Industrial Policy initiated by the Government of India further contributed in encouraging investment and industries in the region.

- The North East Council (NEC) and the Ministry for the Development of the North East Region (DoNER) have become fund disbursing agencies instead of strategic planning agencies. At present approximately Rs. 11,000 crore is lying idle with the Ministry of DoNER.
- When development comes to a region then it becomes a panacea for the secessionist movement. For instance, the Khalistan movement in Punjab was active in the 1980s and the 1990s, but is now largely subdued within India.
- Integrated and bottoms up approaches are required for integration of the North east in the Look East Policy which will immensely yield benefits in terms of development. The North East should formulate plans as to how it can engage with the ASEAN. Better coordination of efforts by all the North-eastern states should be ensured.

Conclusion

Although varying in their demands and methods, there is a common thread running through the secessionist movement in north-east that is of identity and development. Implementing sixth schedule provisions in these areas will help them to preserve their identity and culture while giving them greater autonomy. Economic development of the area in a calibrated manner would ensure sustainable development which will help to penetrate the modern values of democracy at the grass-root level.