1. What is the mandate of SEBI? Examine the recent issues pertaining to the functioning and role of SEBI in the regulatory context.

Approach

Question is straight forward in its approach, students are expected to give a brief about SEBI in introduction and the mention about the mandate of the SEBI as demanded by the question then in the second part issues pertaining to the functioning and role of SEBI need to be explained properly and then conclude by arriving at a balanced and forward looking conclusion.

Introduction

SEBI is a statutory body established on April 12, 1992 in accordance with the provisions of the Securities and Exchange Board of India Act, 1992. Before SEBI came into existence, Controller of Capital Issues was the regulatory authority it derived authority from the Capital Issues (Control) Act, 1947. In April, 1988 the SEBI was constituted as the regulator of capital markets in India under a resolution of the Government of India. Initially SEBI was a non-statutory body without any statutory power. It became autonomous and given statutory powers by SEBI Act 1992.

Body

Mandate of SEBI –

- To Inspect Books of Accounts: Accounts of any listed public company or a public company intending to be listed can be inspected by SEBI. However for such inspection there should be reasonable grounds to suggest that the company is indulging in unfair trade practices or is involved in insider trading.
- To regulate securities market intermediaries: SEBI has the power to regulate the intermediaries for proper functioning of the market. In order to do so it can also restrain persons from accessing the securities market and even prohibit any person from such access.
- To investigate: If SEBI has reasonable grounds to suggest that the any particular transaction or transactions are dealt in a manner which is detrimental for the investor, then it can order anyone to investigate such transactions.
- To review the market operations, organizational structure and administrative control of the stock exchanges.
- To overlook the registration and regulation of working of market intermediaries such as merchant bankers, portfolio managers, stock broker etc.
- To overlook the registration and regulation of Mutual Funds, Venture Capital Funds and Collective Investment Schemes.
- Prohibiting fraudulent and unfair trade practices in the securities market. Prohibition of Insider Trading and to educate and train the investors.

Issues pertaining to functioning and role of SEBI –

- SEBI has given intellectual leadership for the transformation of equity market. Initially the objectives of SEBI were not adequately defined and it frequently succumbed to lobbying. SEBI regulations are laws but the process through which regulations are drafted leaves a lot to be desired. Neither regulation making nor post-mortem analysis of regulations is shaped by evidences.

- Enforcement process- The statutory powers of SEBI are at par with a civil court SEBI has made various regulations but only making regulations and giving orders is not enough if it is not able to enforce the same. SEBI need to strengthen its surveillance and enforcement functions.it needs to ensure that violations do not go unnoticed whether small or large.

- Talent pool and market intelligence- In 2012 SEBI had 643 employees whereas US security and exchange commission alone had 1000 people. As we all know human resource is the most important resource for an organisation. SEBI needs to increase its human resource in both quality and quantity. It needs to significantly improve its market intelligence, technology and talent pool in order to improve its performance.

- Deepening capital market- The number of participant in the capital market has not risen much. Still a large section of society does not deal in security market. SEBI has done a lot to encourage people to participate in capital market such as abolishing entry load on mutual funds, simplifying KYC norms but it needs to take some stronger steps to deepen participation in capital market. It should work deeper participation in equity by pension, superannuation and gratuity funds, developing a vibrant retail debt segment and reducing the cost of transaction.

- Corporate debt and securitization market- Despite numerous attempts the debt market volume has increased but it has failed to attract sufficient liquidity. The regulator need to develop a vibrant corporate debt market and securitization market but these largely remain part of over the counter market.

- Matching up to global standard- Capital markets are growing and the size of SEBI as compared to security market is not sufficient to properly regulate the capital market .like its peers (regulators of US and UK) it needs to established self-regulatory organisations. SRO can focus on routine decisions and SEBI can work on more important issues.

- Negatively charged- SEBI's appointment process has always been criticise. Allegation of corruption by SEBI staff are frequently heard. The accountability mechanism that envelope SEBI are quite poor. It is very important to make the recruitment process fair and transparent.

- The performance of Sebi also came under severe criticism in the report of the Joint Parliamentary Committee (JPC) constituted to examine the stock market scam and matters relating thereto in April 2001. The committee indicted Sebi for all-round failure in properly regulating the market.

Conclusion

SEBI has taken a number of steps in the last few years to reform Indian capital market. It has past various regulations such as freedom in designing and pricing instruments, introduction of stock invest scheme, banning badla system and introduction of electronic trading. It also has faced various controversies such as Ulips, Sahara and MCXSX controversies. In such a small time SEBI has earned its respect and place in the capital market however there are various problems and challenges in front of it which it needs to overcome.

2. What is the existing framework for clinical trials of vaccines and medicines in India? Explain.

Approach

Candidates are expected to explain about clinical trials. And write about existing framework in India for clinical trials of vaccines and medicines.

Introduction

The Union Ministry for Health and Family Welfare has notified the Drugs and Clinical Trials Rules, 2019 with an aim to promote clinical research in the country. The new rules will change the regulatory landscape for the approval of new drugs and conduct of clinical trials in the country.

Body

Clinical trials: Clinical trials are research studies performed in people that are aimed at evaluating a medical, surgical, or behavioural intervention. They are the primary way that researchers find out if a new treatment, like a new drug or diet or medical device is safe and effective in people. Often a clinical trial is used to learn if a new treatment is more effective and/or has less harmful side effects than the standard treatment.

Clinical trials framework in India –

- Clinical trials in India are governed by the acts: Drugs and Cosmetics Act, 1940, Medical Council of India Act, 1956 and Central Council for Indian Medicine Act, 1970. Under the Drugs and Cosmetics Act, CDSCO is responsible for approval of Drugs, Conduct of Clinical Trials.
- It also lays down the standards for Drugs and has control over the quality of imported Drugs in the country. It is also responsible for coordination of the activities of State Drug Control Organisations by providing expert advice with a view of bring about the uniformity in the enforcement of the Drugs and Cosmetics Act.
- Further CDSCO along with state regulators, is jointly responsible for grant of licenses of certain specialised categories of critical Drugs such as blood and blood products, I. V. Fluids, Vaccine etc.

Prerequisites of conducting a clinical trial in India are –

- Permission from the Drugs Controller General, India (DCGI).
- Approval from respective Ethics Committee where the study is planned.
- Mandatory registration on the ICMR maintained website.

- Online application: The application for conducting a clinical trial is required to be submitted to the DCGI via SUGAM, an online portal managed by the CDSCO.
- DCGI will decide the compensation in cases of death and permanent disability or other injury to a trial participant. Ethics committee will monitor the trials and decide on the amount of compensation in cases of adverse events. The quantum of compensation is required to be calculated on the basis of the formula specified in the New Rules.

Clinical trials are carried out in four phases. Clinical trials of drugs developed in India have to undergo all four phases of trials in India.

- Phase I or clinical pharmacology trials or "first in man" study: This is the first time where the new drug is administered to a small number, a minimum of 2 healthy, informed volunteers for each dose under the close supervision of a doctor. The purpose is to determine whether the new compound is tolerated by the patient's body and behaves in the predicted way.
- Phase II or exploratory trials: During this phase, the medicine is administered to a group of approximately 10-12 informed patients in 3 to 4 centres to determine its effect and also to check for any unacceptable side effects.
- Phase III or confirmatory trials: Purpose is to obtain sufficient evidence about the efficacy and safety of the drug in a larger number of patients, generally in comparison with a standard drug and/or a placebo as appropriate. In this phase, the group is between 1000-3000 subjects. If the results are favourable, the data is presented to the licensing authorities for a commercial license to market the drug for use by the patient population for the specified and approved indication.
- Phase IV trials or post-marketing phase: Phase of surveillance after the medicine is made available to doctors, who start prescribing it. The effects are monitored on thousands of patients to help identify any unforeseen side effects.

Conclusion

Clinical trial framework should provide for a predictable, clear and transparent system for regulation of clinical trials. The changes such as reduced approval period and online registry, are expected to revive and drive the growth of the clinical trials industry in India. Therefore it is important for anyone preparing a trial of a new therapy in humans that the specific aims, problems and risks or benefits of a particular therapy be thoroughly considered and that the chosen options be scientifically sound and ethically justified.

3. What are the recent guidelines issued by the government for regulating the OTT space and social media? Should there be any government control in their functioning? Critically examine.

Approach

Candidate is required to outline the guidelines in the initial body part and then analyse the same in the second half. With some examples and similar judgments answer can be concluded.

Introduction

For the first time, the government, under the ambit of the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021, has brought in detailed guidelines for digital content on both digital media and Over The Top (OTT) platforms, while giving powers to the government to step in.

Body

In a long anticipated move, the government notified guidelines that seek to provide a grievance redressal mechanism for users of digital platforms of all kinds — social media sites, messaging apps, over the top (OTT) streaming services, and digital news publishers.

The Information Technology (Guidelines for Intermediaries and Digital Media Ethics Code) Rules, 2021 mandate that social media and messaging platforms will have to adhere to new requirements in assisting investigative agencies of the government.

What are the new rules?

- The broad themes of the guidelines revolve around grievance redressal, compliance with the law, and adherence to the media code.
- Social media platforms like Google or Facebook, or intermediaries, for instance, will now have to appoint a grievance officer to deal with users complaints.
- intermediaries have to appoint a 'Chief Compliance Officer, who will have to ensure that the rules are followed; the officer "shall be liable in any proceedings relating to any relevant third party information, data or communication link made available or hosted by that intermediary.
- The intermediaries will also have to appoint a nodal contact person for "24x7 coordination with law enforcement agencies
- The other key requirement is that such a social media intermediary would have to "enable the identification of the first originator of the information on its computer resource" as may be required by a judicial order.
- This means, a problematic message, that is considered "an offence related to the sovereignty and integrity of India, the security of the State, friendly relations with foreign states, or public order, or of incitement to an offence

relating to the above or in relation with rape, sexually explicit material or child sexual abuse material", will have to be traced to its initiator on messaging applications like WhatsApp and Signal.

- For digital publishers of news and current affairs as well as video streaming services, an identical three tier structure for grievance redressal has been mandated.

- This structure will look into grievances in relation to a Code of Ethics, which is listed in the appendix to the rules. Among other things, the Code of Ethics includes the 'Norms of Journalistic Conduct' as prescribed by the Press Council of India, as also content that shall not be published "content which is prohibited under any law for the time being in force shall not be published or transmitted.

- The guidelines also require streaming services to classify content based on its nature and type. So, for instance, content "for persons aged 16 years and above, and can be viewed by a person under the age of 16.

Context and need of guidelines –

- A 2018 Supreme Court observation and a 2020 Supreme Court order in Sudarshan TV case, in addition to discussion in Rajya Sabha once in 2018 and then through a report laid by a committee in 2020 asked the need for coming up with rules to "empower the ordinary users of digital platforms to seek redressal for their grievances and command accountability in case of infringement of their rights".

- the government said that it wanted to create a level playing field in terms of rules to be followed by online news and media platforms vis-à-vis traditional media outlets.

- Citing instructions from the Supreme Court and the concerns raised in Parliament about social media abuse, the government released guidelines.

- The big push came in the form of the violent incidents at the Red Fort on January 26, compromised our honour on republic day, following which the government and Twitter were embroiled in a spat over the removal of certain accounts from the social media platform.

- Section 79 of the Information Technology Act provides a "safe harbour" to intermediaries that host user-generated content, and exempts them from liability for the actions of users.

- The new guidelines notified on Thursday prescribe an element of due diligence to be followed by the intermediary, failing which the safe harbour provisions would cease to apply.

- The recent campaign of misinformation on media during the CAA protests, farmer's protests, toolkit case, Sudarshan TV case calls for more responsible regulation of these platforms. Social media is used to tarnish image of India is a matter of concern

- Government can regulate some content but it has to be in reasonable limits. Self-regulation by OTT and social media platforms is the best way forward. OTT platforms are providing very explicit porn content with no option of

parental regulation. It is creating more problems of sexual abuse and harassment.

- Social media and OTT platforms are too big to control in terms of the information they generate, this does not mean that regulation cannot be done. A more proactive vigil and accountability from big platforms like Facebook and twitter will pave way for the harmonious balance of oversight.
- In the times of daily abuse, rape threats, hatred and unregulated pornographic content, social engagement has become matter of responsible and careful behaviour. We should not ignore elephant in the room and tame the giant before it goes out of control.

Conclusion

Social media and OTT platforms have become products of daily consumption in our life. It is necessary to take action before they become toxic and instruments of hate and polarisation. While regulation should not hinder the flow of information, we have to make sure that harmonious balance of optimum regulation is achieved.
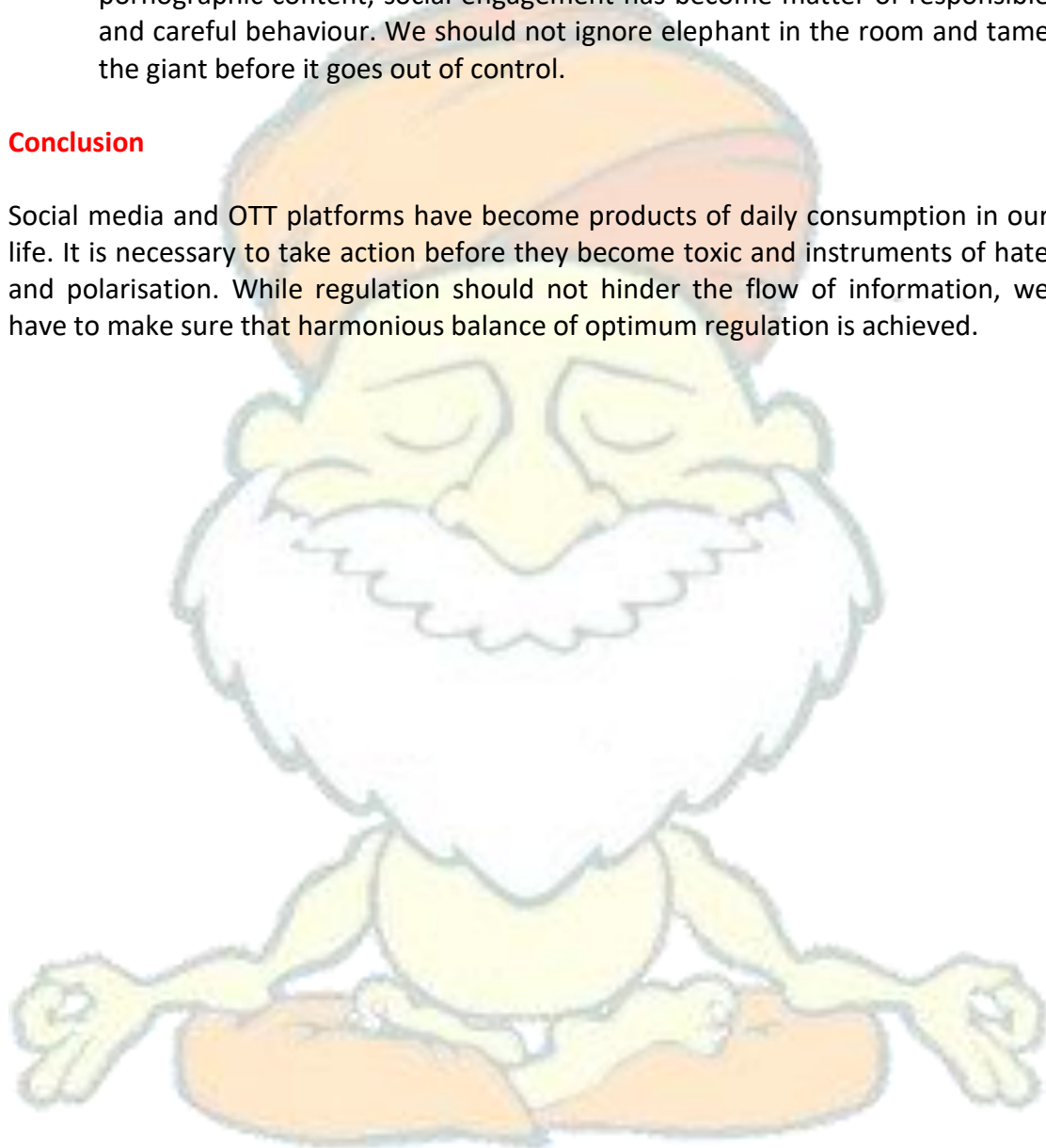
4. What are the key areas that require immediate reforms to improve the efficacy of agricultural marketing in India? Discuss.

Approach

A straightforward question where in you need to discuss the key areas that require immediate reforms to improve the efficacy of agricultural marketing in India.

Introduction

Agriculture is a primary activity in India and is the largest source of employment in India, where food accounts for about half of consumer expenditures. Moving agricultural products from the farm to consumers more efficiently could result in large gains to producers, consumers, and India's overall economy, which clearly highlights the need for improving this sector.

Body

Agricultural marketing refers to process which involves moving the agricultural produce from place of origin to that of consumers. An efficient marketing system is essential for developing and also maximizing returns from agricultural production but there are many challenges in this regard, where the key areas that require immediate reforms to improve the efficacy of agricultural marketing include –

1. Movement, storage, and pricing restrictions on food commodities: The Essential Commodities Act allows central and state governments to administratively impose movement, storage, pricing, and quality restrictions on most food commodities. These restrictions are a major source of policy risk for agribusiness investment, particularly in larger scale firms that hold relatively large stocks or operate across state borders.
2. Middlemen Menace: Presence of too many middlemen result in higher cost of marketing of agriculture produce. As per a study, the share of middlemen in case of rice was 31 per cent, in case of vegetable was 29.5 per cent and in case of fruits was 46.5 per cent.
3. Agricultural marketing restrictions: State agricultural marketing laws have historically required all farm produce to be sold in government regulated markets and prohibited private investment in markets and vertical coordination or integration between agribusinesses and farmers.
4. Lack of storage facilities in markets: There is no proper storage or warehousing facilities for farmers in the villages where they can store their agriculture produce. Thus causing farmers to sell their surplus produce at very low and un-remunerative price.
5. Scale limitations on agricultural processing firms: Although most scale restrictions have been removed, agricultural marketing and processing remain dominated by small-scale firms.

6. Inadequate Transportation facilities: Poor road transportation facilities and links in rural areas affect movement of agriculture produce. Indian farmers cannot reach nearby mandis to sell their produce at a fair price.

7. Credit policies: The high cost and limited availability of credit likely restricted new investment in agriculture and agribusiness during the 1990s. Terms and availability for institutional credit have improved significantly since 2000, but a large share of farmers and agribusinesses still depend on high-cost credit from traditional moneylenders.

8. Absence of grading and standardisation as well as market information: Lack of knowledge of grading affects Indian farmers to fetch good price Indian farmers. Also, there is absence of market intelligence or information system in India. Indian farmers are not aware of the ruling prices of their produce prevailing in big markets.

9. Adulteration of Commercial Crops: Adulteration i.e., mixing of inferior produce freely with superior produce is very common. Adulteration in cash crops and food-crops has assumed tremendous proportion in India.

Measures by Government to overcome the Challenges –

- The three farm laws which were recently brought in to overcome the challenges of agro-marketing. These include: The Essential Commodities (Amendment) Act, 2020 (ECA), The Farming Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 (FPTC), The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020.

- The Department of Agriculture & Cooperation formulated a Central Sector scheme for Promotion of National Agriculture Market through Agri-Tech Infrastructure Fund (ATIF) through provision of the common e-platform.

- Electronic National Agriculture Market (e-NAM) to connect all APMC mandis across states through an electronic portal, thus benefitting both farmers and consumers.

- Agriculture export policy, 2018 which aims to double agriculture exports from $30 billion to $ 60 billion by 2022.

- Development and Strengthening of Grading and Standardization System: Assigning 'AGMARK' to graded products which ensure good quality and also command a better price in the market.

- PM Kisan SAMPADA Yojana for creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet.

Conclusion

As NITI Aayog's three year agenda focuses on reforming the agricultural market so that farmers are empowered to sell their produce to whomsoever they wish. The recent measures are taken by the government in this light will be helpful to create an efficient nation-wide market and will also ensure rise in income of farmers in turn contributing to achieve the target to double farmers income by 2022.

5. The government must stop depending on petrol, diesel taxes to bridge its fiscal deficit. Do you agree? Substantiate your views.

Approach

Candidate is required to outline the current scenario of petrol price hikes and management of fiscal balance sheet. With a way forward answer can be concluded with alternative sources.

Introduction

Retail prices of petrol and diesel have been rising over the past several weeks. In some parts of the country, the retail selling price of petrol has crossed Rs 100 a litre. Globally, oil prices have been rising because of resurgence in demand, and an increase in the retail prices of petrol and diesel is an outcome of that.

Body

Why prices of petrol and diesel are high?

- Taxes constitute a high proportion of the retail price of petrol. When tax revenues were hit hard by the Covid-19 pandemic, the government raised the excise duty on petrol and diesel in March 2020 and again in May 2020 to garner revenues. Households did not feel the pain of the rise in excise duties because global crude oil prices had crashed.
- Despite a slump in international crude oil prices due to the pandemic, the prices of petrol and diesel did not decline. The gains were adjusted against the excise duty hike to provide a cushion to the government's tight fiscal situation.

What is the impact?

- There are two consequences of the high duty. First, it hurts consumer pockets and can be inflationary. The rise in crude oil prices in recent weeks, amid the elevated excise duties, is causing retail prices of petrol and diesel to rise. High fuel prices will feed into higher inflation.
- Second, it creates excessive fiscal dependence on petroleum products. Petrol and diesel have been easy targets for raising revenues for the government. The government needs to diversify its sources of revenue and reduce its dependence on oil for bridging its fiscal deficit.
- The RBI's MPC has raised concerns over the inflationary impact of rising crude oil prices and high indirect taxes on petrol and diesel. The MPC has called for a calibrated reduction in high indirect taxes on petrol and diesel to contain the build-up of inflationary pressures in the economy.

Oil prices mechanism in India –

- The share of tax revenues from oil in the government's gross tax revenue has shown a steady increase. Between 2014 and 2016, when global crude oil prices were declining, the government raised the excise duty on petrol and diesel on multiple occasions.
- In the long run, India has been shifting away from petrol price controls. India imports nearly 85 per cent of its oil needs and since the domestic prices are benchmarked to international rates, retail prices are increasing.
- The system of price controls put stress on the finances of oil marketing companies as well as of the government. In 2010, on the recommendations of the expert group on a viable and sustainable system of pricing of petroleum products, petrol prices were made market determined.

Alternative energy sources –

- Environmentalists concerned about global warming may not object to high taxes on petrol and diesel as they constitute a carbon tax and discourage greater use. Studies indicate that India's oil needs will be more than any other country by 2040.
- But carbon taxes are inadequate to move towards renewable sources of energy. There is also a need to incentivise the use of alternate energy sources like natural gas and solar power.
- Excessive fiscal dependence on oil can discourage the move towards renewable sources of energy. Further, until public transport that depends on renewable power is created, increasing fuel prices by higher excise is only going to pinch pockets without offering a long-term solution.

Fiscal calculation –

- A cut of Rs 5.8 per litre in petrol and diesel taxes to offset rising crude oil prices would result in a loss of revenue to the tune of Rs 87,200 crore, which is nearly 0.39 per cent of GDP. The Barclays report suggested that this would raise inflation by around 56 basis points, given the current level of inflation and size of the fiscal deficit.
- The government's priorities are firmly in favour of supporting the post-COVID recovery and it would thus be more likely to opt for lower inflation and a higher fiscal deficit in the short term.
- If the government reduces taxation on petrol and diesel, its revenue will be impacted. To compensate, the government could have to increase direct tax on sectors that saw growth during the Covid-19 pandemic. But a direct tax may become politically counter-productive.
- Secondly, any further reduction in revenue would widen the fiscal deficit gap. In a year, when the government is ready to borrow money for its capital expenditure, a widening fiscal deficit would ultimately make borrowing more expensive.

Conclusion

It is necessary to look out for alternative mechanisms to bridge gap of fiscal deficit. But that can be achieved only in the long run. In the uncertain times of global recession government is heavily relying on petrol for revenues. With GST still taking shape it will be possible with strong GST and more tax compliance to reduce dependence on petrol duties.

6. What is the recent debate over minimum support price (MSP)? What are your views on the same? Discuss.

Approach

A simple and straightforward question where in the candidate needs to explain Minimum support Price (MSP) and debate surrounding it in India's agricultural sector. Further, you need to discuss your views with regards to the MSP debate.

Introduction

Minimum Support Price (MSP) is a form of market intervention by the Government of India to insure agricultural producers against any sharp fall in farm prices. The minimum support prices are announced by the Government of India at the beginning of the sowing season for certain crops on the basis of the recommendations of the Commission for Agricultural Costs and Prices (CACP).

Body

- The MSP system was started in 1966-67 for wheat and was expanded further to include other essential food crops, which was then sold to the poor under subsidised rates under the public distribution system (PDS). In 1966, wheat's MSP was Rs 54 per quintal. Currently, it is at Rs 1,975 per quintal.
- The Centre currently fixes MSPs for 23 farm commodities — 7 cereals, 5 pulses, 7 oilseeds and 4 commercial crops. The CACP considers various factors such as the cost of cultivation and production, productivity of crops, and market prices for the determination of MSPs.
- The National Commission on Farmers (Chaired by Prof. M. S. Swaminathan) in 2006 had recommended that MSPs must be at least 50% more than the cost of production. This is the first debate with regards to MSP where farmer's organisations and protestors are demanding implementation of these recommendations.
- The CACP calculates cost of production at three levels: (i) A2, which includes cost of inputs such as seeds, fertilizer, labour; (ii) A2+FL, which includes the implied cost of family labour (FL); and (iii) C2, which includes the implied rent on land and interest on capital assets over and above A2+FL.
- The government claims the A2+FL as the cost of production and decides MSP 50% above this price whereas farmers consider C2 as cost of production and demand MSP based on it. Even the National Commission on Farmers (NCF) is not clear on the definition of cost of production and thus there is need to bring in more clarity in this regard.
- Next debate surrounding the MSP issue is with regards to provide legal guarantee for the minimum support prices (MSPs) that the Centre declares for various crops every year. Currently, there is no statutory backing for these prices or any law mandating their implementation.

- There are two ways it can be done. The first is to force private buyers to pay it. In this case, no crop can be purchased below the MSP like sugarcane procurement and the second route is the government itself buying the entire crop that farmers offer at the MSP. Many argue that the government undertaking to buy at MSP is definitely better than forcing private players.
- But the entire proposition of legal guarantee for MSP is fraught with numerous challenges and also issues with the concept of MSP itself. Increasingly, procuring farm produce at an MSP is seen more of an appeasement strategy to cultivate a vote-bank.
- Data show that procurement of food grains by the Food Corporation of India (FCI) in January 2021 has overshot the buffer-stock limit and the country's food grains reserves are more than 2.7 times the norm. This is more than the country's demands for food security and welfare schemes such as distribution of free wheat and rice under the PM Garib Kalyan Ann Yojna.
- The economic cost of excess rice and wheat with the FCI beyond the buffer-stock norm is a whopping ₹1,50,000 crore. Further, the losses borne by the FCI due to mountains of wheat and rice spoiling as the stocks exceed its total capacity protected and scientific storage capacity needs to be considered too.
- Further, there has been large scale imbalance in procurement due to historical factors. E.g. - Procurement of wheat from Punjab at the MSP amounts to 99.5 per cent of the total stocks offered by farmers for sale.
- There is also waste of tax payer's money due to continuous raising of MSP for political gains and farmers producing wheat and paddy regardless of what the market actually demands. Also, the entire PDS system can be jeopardized due to issues arising out of legally assured MSP and thus affecting the vulnerable poor the most.
- There are also the environmental costs, especially due to depleting water-table and stubble burning. E.g. - Punjab's current cropping pattern of growing paddy, which is a water guzzler (one kg of rice requires 2500-5500 litres of water), is economically unsustainable and groundwater depletion is a serious concern (the groundwater level on 92 per cent of Punjab farms has depleted by over 0.60 metres annually). Flawed MSP system encourages such abuse of resources.
- Last, but not the least, data show that hardly 6 per cent of farmers are able to benefit from the MSP. Thus, making it a law will keep a substantial section of small and marginal farmers outside this privilege and lead to socio-economic inequality apart from geographical imbalance.

Way Forward –

- Farmer awareness about the benefits of crop diversification so as to produce more pulses to ensure nutritional security and prevent supply-side shocks.
- Impetus to improve the agriculture infrastructure should be provide such as cold storage building, warehouses for perishable production, so in case of surplus production they will not be wasted. For instance, in this light a new

pan India Central Sector Scheme-Agriculture Infrastructure Fund is established.

- NITI Aayog is working on alternative mechanism. A counterpart of the MSP is the Market Intervention Scheme (MIS), under which the state government procures perishable commodities like vegetable items.
- Price Deficiency Payment (PDP): Niti Aayog also proposed PDP; PDP is to support the farmers in case the market price falls below Minimum Support Price (MSP) is called, "Price Deficiency Payment". This system aims to provide a part (for example, 70-75 %) of the difference between the MSP and the market price to the farmers.
- Some states like, Haryana government launched Bhavantar Bharapai Yojaan for vegetables, the government pays the farmers the difference between model rate (the average prices in major mandis) and the minimum support prices (MSPs). It can be better alternative.

Conclusion

Along with market reforms for agricultural marketing envisaged through new farm acts, government should also increase the public farm infrastructure which will pose a tough competition in the free market and help ensure healthy environment of public private cooperation towards the major of goal of doubling farmer's income by 2022.
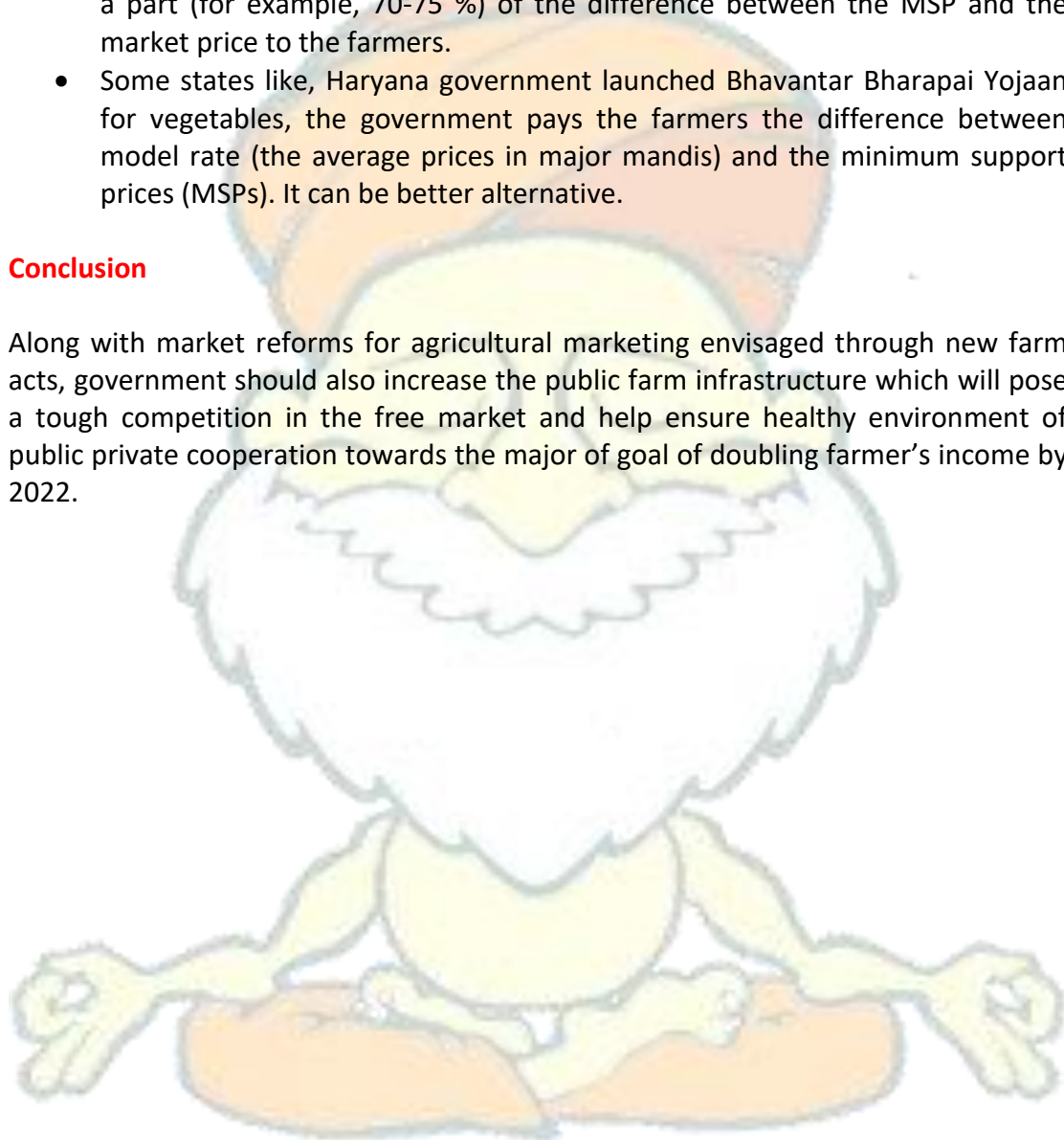
7. What has been the recent trend of employment in the country? What factors can be attributed to the current employment scenario in India? Discuss.

Approach

Candidate is required to outline the employment trend in context of pandemic and recession and can discuss the scenario of future employment trends in India and factors responsible for it.

Introduction

With thousands of national and multinational companies using India as a facilitator for expansion into the global economy, the country has acquired an image of a new global player on the world stage. These companies enjoy business presence spanning diverse clusters; from IT, Healthcare, Automobiles, Telecommunications, Hospitality, Construction to Education, Logistics, and Manufacturing and are known to create a massive number of jobs.

Body

Employment trend in India –

- Population in India is at its all-time high and growing. As per Wikipedia, the youth literacy rate is 91.2%.
- Yet India's employment situation is bad, especially with the current ongoing fight against coronavirus. The unemployment rate as of 03 May 2020 stands high at 24.1%, according to CMEI unemployment data.
- In the year 2019, there was a predictable slowdown in the economic growth and labour market, leading to employers of major companies racking their brains to overcome this crisis.
- The Indian marketplace, although witnessing the worst at the moment, sees a range of opportunities and employment trends in the offing.

What the factors driving employment scenario?

- **Skilled employees –** One major employment trend thought by major companies is to upskill their existing staff as hiring new recruits would increase their budget, which they could ill afford and be counterproductive. The recruitment experts concluded that a major percentage of industries did not wish to increase the strength of the workforce but made sure to retain the right people for the required role.
- **Technological growth** - In simple terms, it can be defined as the unification of two technological concepts that we are already aware of for quite some time now — Artificial Intelligence and Automation. By using this combination of artificial intelligence and automation, an organization can automate processes end to end. A typical end-to-end process involves developing and

testing products, personalizing products and services, managing customer interactions and many more.

- **Work from home -** A report published in the Harvard Business Review says employees felt that commuting to their workplace was more stressful than their jobs itself. With the current pandemic that the world is facing, work from home is one trend that will definitely stand out. Many studies have been conducted on remote working and suggest that it helps employees to have a work-life balance, thus reducing stress and increasing productivity.
- **Contractual employment -** Almost half the Indian population is engaged in agriculture, dairy farming, horticulture and many related occupations. With millions of migrant workers, most of them into agriculture, they lack stable employment. Recently, the Indian labour workforce suffered due to low productivity growth and widening income inequality. Slowdown in the construction jobs, mounting educated youth unemployment and also lack of quality jobs have resulted in an increased Indian labour market.
- **Jobs in demand -** With the advanced technology available at our disposal, the jobs to look for in the coming decade are Digital Marketing, Artificial intelligence, Data Scientist, Cyber Security, Drone Handling. Besides the above mentioned jobs, careers as Dieticians, Robot Engineers, and Event Managers are in great demand and will continue to do so.

Conclusion

The employment trends in India looks upward but the nation has to be ready with their talent pool for the new employment demands and the skills that employers are seeking for. Reskilling and upskilling will turn out to be the winner in order to stay competent and updated with the always-hungry-for-skilled-talent workplace.

8. You must be closely following the ongoing farmers' protests. Are the fears of corporate takeover of agriculture misplaced? Share your views.

Approach

As the question is asking you to share your views so you have to give your thoughts about the particular issue.

Introduction

Some of India's farmers are among the country's poorest people, but government policies have long protected them from the ravages of open market prices. But as per the farmers that is changing now. A set of three laws passed in September aims to deregulate India's enormous agriculture sector. Prime Minister Narendra Modi has said they will liberate farmers from the tyranny of middlemen. But many farmers fear that they stand to lose more than they could gain from the new regulations and that the main beneficiaries will be agricultural corporations with gargantuan financial firepower.

Body

ARE THE FEARS OF CORPORATE TAKEOVER OF AGRICULTURE MISPLACED?

India's new farm laws make it easier for farmers to bypass government-regulated markets (known locally as mandis) and sell produce directly to private buyers. They can now enter into contracts with private companies, a practice known in India as contract farming, and sell across state borders.
The new regulations also allow traders to stockpile food. This is a shift away from prohibitions against hoarding, which could make it easier for traders to take advantage of rising prices, such as during a pandemic. Such practices were criminal offences under the old rules.

THE FEARS OF CORPORATE TAKEOVER OF AGRICULTURE ARE NOT MISPLACED –

- The reform policies would only make farmers vulnerable to market forces. The deepening of capitalist market forces has already ruined agriculture, agricultural communities, farmer's lives and livelihoods in India. The market-led industrial approach to agriculture has already been driving farmers out of business and reinforces agrarian crisis, forcing them to commit suicide.
- In the United States of America, farmers today are exposed to corporate exploitation and abuse because of similar reform policies. Liberalised agricultural policies have aided the growth of very few corporations that control American agriculture today. Such deepening penetration of market forces and the growth of industrial agriculture have led to the rise of four corporations that control around 40% of the agricultural market in the USA. It has destroyed the livelihood of small and medium farmers, rural communities

and swallowed family farms there. This is because corporations, while suppressing the price of farm produce, have simultaneously increased its selling price.

- Many developed countries have witnessed land grabs by big corporations and farmers with the growth of corporatisation of agriculture. In India, the congress-led governments introduced such practices in the name of special economic zones (SEZS).

- Now with agricultural policy reforms, the current government plans to liberalise land laws further by which corporate takeover of land from the small and medium farmers in India will be easy. The corporate-led industrial agriculture in India will create conditions of industrial feudalism and corporate landlordism on the one hand, and consumerist individualism on the other.

- The corporatisation of agriculture will simply destroy the social fabric of agricultural and rural communities. Cooperative culture is converted into a competitive culture that would ruin rural communities with the growth of individualist consumerism. Market forces do not believe in diversification and they promote economies of standardisation dangerous for diversity within Indian agriculture.

- Market-led industrial agriculture dominated by corporations can never be an alternative for India and Indian farmers and the government needs to find ways to invest in agricultural cooperatives to empower farmers and generate employment by diversifying it. India and Indian farmers need socially responsible, environmentally sustainable and economically rewarding agricultural policies, and egalitarian land reforms to increase their income and where agricultural producers can directly interact with their consumers. Such an agricultural market economy would be really open, free and fair.

Conclusion

Farmers have some genuine concerns. A big one is that the new rules remove many of their safeguards. More than 86 percent of India's cultivated farmland is controlled by smallholder farmers who own less than two hectares (five acres) of land each.

They fear that they just do not have enough bargaining power to get the kinds of prices they need for a decent standard of living when they negotiate to sell their produce to larger companies. They feel that the government has left them at the mercy of big corporations. Without strong institutional arrangements, the free market may harm lakhs of unorganised small farmers, who have been remarkably productive and shored up the economy even during a pandemic hence there is a need for strong institutional arrangements before unleashing the laissez-faire policy in Indian agriculture.

9. What are the advantages of direct benefit transfers (DBT)? Critically evaluate the performance of DBT in recent years.

Approach

Students are expected to write answer in two parts. In the first part advantages of the DBT are to be mentioned and in the second part critical evaluation of the DBT over the years has to be given with appropriate examples.

Introduction

Direct Benefit Transfer or DBT is a part of the Indian government's anti-poverty programme launched in 2013. Here, the government is trying to alter the method of transferring subsidies. Under the DBT, subsidies are transferred to the people directly through their bank accounts. The primary aim of this Direct Benefit Transfer program is to bring transparency and terminate pilferage from the distribution of funds sponsored by the Central Government of India. In DBT, benefit or subsidy will be directly transferred to citizens living below the poverty line. The Central Plan Scheme Monitoring System (CPSMS), being implemented by the Office of Controller General of Accounts acts as the common platform for routing DBT. CPSMS can be used for the preparation of the beneficiary list, digitally signing the same and processing of payments in the bank accounts of the beneficiary using the Aadhaar Payment Bridge.

Body

Advantages of direct benefit transfer –

- The primary aim of DBT program is to bring transparency and terminate pilferage from distribution of funds sponsored by Central Government of India. The program will lead to simpler and faster flow of information/funds and ensure accurate targeting of the beneficiaries, de-duplication and reduction of fraud.
- DBT scheme allows time-bound transfers hence avoids delays in transferring money, which is one of the biggest problems' beneficiaries are facing.
- This scheme eliminates intermediaries and rents for 'fair price shops' because subsidies and benefits of welfare schemes are transferred directly. This will help Indian economy in the long run as the structural expenditure will be reduced.
- As everyone can purchase goods at market price, there will be healthy competition between the sellers in the market. The problem of middlemen diverting subsidized grains to markets will be eliminated.
- PAHAL is the first major programme in India that provided subsidies through DBT. With nearly 150 million registered beneficiaries, it is probably the world's largest DBT programme ever. The goal of the DBT is subsidy reform

and not doing away with subsidies. It targets beneficiaries effectively so that they flow only to the intended beneficiaries.

Critical evaluation of DBT –

- Cash transfer: Under this scheme, cash is directly transferred from the government to the individual beneficiaries. For instance, some of the examples are the National Social Assistance Programme (NSAP) and MGNREGA.
- In-kind benefits from the government to beneficiaries: Components of the schemes or the schemes itself are a part of this category. The government provides beneficiaries with in-kind benefits via an intermediate agency.
- The government usually bears the cost to buy the goods that can be used for public distribution as well as for providing them to the beneficiaries that they have targeted. The beneficiaries then get these services or goods for a very low price or for free. e.g., Manufacturers of fertilizers receive 100% of subsidy after fertiliser is delivered to the farmer.
- Other forms of transfers: Incentives, allowances, etc., that are provided to Non-Government Organisations (NGOs) and community workers come under this category. They are provided such allowances because of the service they provide to other beneficiaries and to the community. e.g., NABARD agri-loan mechanisms.
- Hence, the flexibility of offering DBT via different methods ensures the scalability of the DBT, as DBT can be modified or moulded as per need of different sectors.
- The government has been able to save as much as ₹28,699 crore in the current fiscal, between April and December, official data showed. In 2018-19, as many as many as 590 million individuals gained from the government's DBT scheme, under which subsidy is directly transferred to the beneficiaries' bank account.
- With the outbreak of the COVID-19 pandemic and the imposition of lockdown and social distancing norms, DBT emerged as a boon in providing succour and relief to millions of citizens whose livelihood was impacted. As the crisis loomed large, a lockdown was imposed by the Government for 21 days. PFMS recorded the highest number of transactions in a single day on 30th March, 2020 of 2.19 crore transactions largely driven by DBT payments. Cash amounts were transferred using the digital payments technology vehicle, Public Financial Management System (PFMS) under Central Schemes (CS) and Centrally Sponsored Schemes (CSS).
- Between March 24 and April 17, the DBT payments under all the central sector/centrally sponsored schemes through PFMS amounted to Rs 27,442.08 crore in the accounts of 11.42 crore beneficiaries through schemes like PM-KISAN, Mahatma Gandhi National Employment Guarantee Scheme (MGNREGS), National Social Assistance Program (NSAP), Prime Minister's Matru Vandana Yojana (PMMVY), National Rural Livelihood Mission (NRLM), National Health Mission (NHM), scholarship schemes of various ministries

through the National Scholarship Portal (NSP). In addition, states like UP, Bihar, Madhya Pradesh, Tripura, Maharashtra, Jammu & Kashmir, Andhra Pradesh also leveraged on the DBT platform of PFMS.

However, there are still issues associated with the working of DBT which are as follows –

- Aadhar registrations presently covered around 91% of population. Since DBT is linked with Aadhar for schemes, there is need to improve Aadhar linkage to 100% so that not a single person can be left out.
- Low level of digital literacy in the rural areas poses one of the major challenges in implementing this mechanism.
- India has reached 81% financial inclusion and this will potentially exclude people from the rural background. Lack of banking facilities will exclude people to access facilities. Here, governments PM- Jan Dhan Yojana will play a pivotal role.
- Bank Correspondents face numerous challenges to reach people, who do not have bank account. Banking correspondents also struggle with connectivity and technical problems. Banking services at rural level needs to be improved to reach benefits to all.

Conclusion

DBT played a major role in sustaining life especially of the under-privileged segments of the society impacted by the COVID-19 crisis, helping millions in providing immediate relief in tiding over the turbulent period. Hence, in a heterogeneous country like India different sectors have different objectives and challenges. Here, DBT mechanism due to its scalability and reliability can play a major role by fulfilling & addressing sector specific objectives and challenges to ensure good governance for all.

10. How are social media platforms changing societal norms and values? Explain with the help of suitable examples.

Approach

Question is very straight forward in its approach students are expected to write about role of social media platforms in changing societal norms and values and explanation with appropriate use of examples as demanded by the question explicitly.

Introduction

Social norms are the rules governing acceptable behaviour within a group. Society is governed by social norms, however, the law has yet to catch up to the speed at which the Internet—and particularly social media—has developed. Prior research suggests that social media influences through two effects: the individual or direct effect (private) or the social or indirect effect (public). In the individual effect, media information about new norms may persuade individuals to accept them. In the social effect, the information creates common knowledge of a norm and enhances social coordination as individuals more readily accept the information if they believe others have also accepted it. Platforms like facebook, twitter,watsapp Instagram etc have played a big role in influencing individuals and groups in order to bring a change in the collective as well as individual behaviour.

Body:

How social media platforms change societal norms and values –

- The traditional social norm of Privacy is completely changed, people aren't worrying to post confidential Information because of the LIKE-Hunger or Peer pressure or both. Also values of empathy and compassion have become redundant e.g. filming road accident victims rather than helping them has been one of the most ill effects of social media platforms. Recently a fight between two groups in Bagpat Uttar pradesh was filmed by people watching them rather than helping them to end fight this incident was highlighted by every media group all around the world. This shows lack of good Samaritan ship and role of social media in it.
- Social norm of face to face meetings have been completely changed people prefer texting and virtual meetings rather than face to face meetings thus creating overall change in the values of weness, brotherhood etc. found mostly among young people.
- Social media has created a new breed of 'influencers' – social media users with established credibility in a specific industry, these influencers typically have a larger audience and often persuade others through their content. It is through these influencer profiles, a recentralization of corporate influence

was discovered. Companies are investing in influencers to generate content that can shift social norms.

- Social movements have been tied to the Internet as a space for launching or reinforcing their activities and interactions, and the Internet has been found in many cases to be useful to achieve their objectives, especially emphasizes the potential influence of people coming together in digital social networks and forming against government and corporations which formerly controlled channels of communication. These networked social movements born in the digital age have power because they are autonomous, free from institutional control, and operate in different venues, such as online as well as offline social networks and public space. Yellow vest movements in France, recent toolkit case in India.

- Social media has altered the way people generally vote or buy. The recent Cambridge Analytica scandal of 2016 US elections is the best example. Recent Hook-up apps are changing the whole fabric of relationship norms like the way they meet, the course of relation, etc.

- Parents generally spend some time on their children's academics and growth. Now both of them are busy on social media, leading to neglect of child behaviour in crucial formative years.

- According to a survey an individual was willing to give a wrong answer just to conform to the majority view. This explains the impact of fake news online, which contributes to a polarised society. People are lacking Pure judgments, trying to imitate the group leading to a severe value crisis in the society. The trolling of women has brought to the fore the disturbing reality of online violence and abuse women face in India. Exposure of hatred to children at a young age because of cyber bully in New ethical issues are emerging because of privacy concerns, social injustice and ignorance, effects on family values etc.

Conclusion

Social media is an open road, with bumps and turns all in our way. Its use is inevitable in this digital world, so protecting oneself from its Negativity and focussing more on real-life than our social life is the best way ahead.

11. Certain political parties have floated the idea of giving remuneration to women homemakers. What are your views on this? Discuss.

Approach

Question is straight forward in its approach students are expected to express their views about the idea of remuneration to women by the political parties by giving a detailed explanation with examples as well.

Introduction

The expanding role of freebies in Indian Politics in the last decade has become an intriguing question in the Indian political economy. Freebies have become a strategy to woo voters later. The Election Commission, earlier 2019, has revealed an analytical emphasis on the distribution of freebies and attractions to voters by almost all the political parties. Recent announcement by a political party of giving remuneration to homemakers is an election freebie promise but it has a larger perspective through ideological and economic aspects as well.

Body

Remuneration to homemakers has been advocated by feminist groups from a long time. It involves paying homemaker against the work done in home such as cooking, looking after the elderly, washing clothes etc. so as to bring them in parity with those working outside home and giving recognition to their efforts as well. In these times where societies are largely patriarchal efforts of homemakers usually go unnoticed and is not considered work at all.

Idea of giving remuneration to homemakers is a drastic step towards change in following ways –

- One extremely significant dimension that has gone largely ignored in the purview of the measurement of economic activity – is household unpaid work by women. This is the flip side of women's low labour force participation, which is among the lowest in the world in India. Women who are not in the workforce are not sitting at home enjoying leisure time – they're engaged in child and parent care, cooking, cleaning and performing other household chores. The fact that women's household work is unpaid and therefore goes unrecorded as part of the GDP understates women's contribution to the economy. According to research by the International Monetary Fund, raising women's participation in the labour force to the same level as men can boost India's GDP by 27 percent. One way to do this is by giving homemakers, the majority of whom are women, a salary.
- As a matter of public policy, schemes targeted at economically vulnerable households can and should be fine-tuned by recording the value of women's work. Finally, as a matter of macroeconomics, capturing women's unpaid

labour would give a truer picture of GDP and, therefore, a more realistic assessment of the size of the economy and of economic growth.

- This will help shatter the stereotypical image of Indian women who are portrayed as domestic and social parasites living on their husbands' earnings and contributing nothing.
- A large number of women live with domestic violence and cruelty because they are economically dependent on others, mainly their husbands. Time-use data from 2019 gathered by the National Sample Survey Organisation revealed that only about a quarter of men and boys above six years engaged in unpaid household chores, compared to over four-fifths of women paying remuneration to homemakers will ensure their financial independence to a large extent and is thus an inclusionary measure as well.
- Supreme Court also advocated that value of the work of homemaker must be at par with the office going individual and fixing renumeration and recognising the value of the labour of homemaker is the acceptance of the idea that these activities contribute to the economic condition of the family in a real way.
- Once recognised as work, this arena of unpaid domestic labour that is dominated almost entirely by women can become one where women can demand some degree of parity in terms of time and energy expended on it.
- It moves us towards a more holistic understanding of labour: Labour isn't purely tied to the exchange value of a service on the market, and recognises an extremely intimate form of labour that has proved essential to keeping the unit of the family intact and functional

However there are some challenges as well which are as follows –

- Paying home-makers would disincentivize even the educated women to stay indoors and receive some sort of salary. This would impact the overall LFPR of women which is already low.
- In rural areas, where patriarchal mind-set exists women would serve as proxies to their husbands. The amount they would receive would directly be spent by their husbands leaving them disempowered (financially).
- It would burden the already curtailed fiscal space of the state governments which are currently reeling under the high fiscal deficit in the post-Covid scenario and would therefore have far-reaching impact on the state-exchequer.

Conclusion

Needless to say, women constitute almost half the population and their needs and issues have to be addressed. A homemaker doesn't need any favours. She is already contributing to the economy. A salary for her work at home would be a tool towards her empowerment, give her a life of dignity. Idea of remuneration isn't new it needs a serious thought on part of policy makers to bring equality in the society which has been marred by discrimination from quite a long time now.

12. What are your views on the idea of domicile-based reservation in private jobs? Substantiate your views.

Approach

Candidate is required to give context of the question and then provide the constitutional argument and Supreme Court judgements on the same. Citing some global examples answer can be concluded with the future of workforce in globalised world.

Introduction

The Haryana State Employment of Local Candidates Act, 2021 provides for reservation for a local candidate, which has been defined under the law as someone "domiciled in State of Haryana". Under the law, every employer is required to employ 75% local candidates for posts where the gross monthly salary is not more than ₹50,000.

Body

What constitution says?

- Article 16(2) states that "no citizen shall, on grounds only of religion, race, caste, sex, descent, place of birth, residence or any of them, be ineligible for, or discriminated against in respect or, any employment or office under the State".
- However, Article 16(3) of the Constitution provides an exception by saying that Parliament may make a law "prescribing" a requirement of residence for jobs in a particular state. This power vests solely in the Parliament, not state legislatures.

Is domicile based reservation justified?

- When the Constitution came into force, India turned itself into one nation from a geographical unit of individual principalities and the idea of the universality of Indian citizenship took root.
- India has common citizenship, which gives citizens the liberty to move around freely in any part of the country, the requirement of a place of birth or residence cannot be qualifications for granting employment in any state.
- Equality enshrined in the Constitution is not mathematical equality and does not mean all citizens will be treated alike without any distinction. To this effect, the Constitution underlines two distinct aspects which together form the essence of equality law non-discrimination among equals, and affirmative action to equalise the un equals.
- While issue of domicile based reservation in public employment is widely discussed, and as a state instrument can be used for public welfare. But the

private sector is highly competitive and in a global emerging market this step stands regressive.

- India in past protested against the same law, which makes it mandatory for firms to employ locals in Kuwait. This led to massive job loss for Indians. If we apply the same logic, state has to make sure that meritocracy be basis of any private job, and not the privilege of being born in particular state.
- We live in highly integrated world. Free flow of goods, services and labour forms basis of future. With this step we might be closing our gates to new talent and innovative ideas.

What is the view of Supreme Court?

- The Supreme Court has ruled against reservation based on place of birth or residence. In 1984, ruling in Dr Pradeep Jain v Union of India, the issue of legislation for "sons of the soil" was discussed. The court expressed an opinion that such policies would be unconstitutional but did not expressly rule on it as the case was on different aspects of the right to equality.
- In a subsequent ruling in Sunanda Reddy v State of Andhra Pradesh (1995), the Supreme Court affirmed the observation in Pradeep Jain to strike down a state government policy that gave 5% extra weightage to candidates who had studied with Telugu as the medium of instruction.
- Some of the States are adopting 'sons of the soil' policies prescribing reservation or preference based on domicile or residence requirement for employment or appointment…Prima facie this would seem to be constitutionally impermissible, said the court.
- Though the argument presented is in relation to public employment, the same logic can be applied to private sector. Private sector is strength of our emerging economy, these reservations will ultimately limit the options and is against the fundamental rights.

Conclusion

India has one of the largest working population in the world. The demographic dividend India enjoys, if not utilised well will turn into disaster. In the chronic unemployment scenario we have to create an environment of competent, skilled and secure employment opportunities. India as integrated market will emerge only when we address this inward looking attitude. Indian Citizen from any corner of country enjoys fundamental right of equality and shall not be deprived of opportunities at any level.

13. Does India really need a population control bill? Share your views.

Approach

A simple and straightforward question where in the candidate needs to share his/her views regarding the necessity of population control bill in India, where the views should be properly substantiated.

Introduction

India's population is going to overtake China in 2026, according to a UN report 'World Population Prospects 2019'. This ever-increasing rate of population in India is considered as the root of most of the problems the country faces. In this light, the recent private member bill introduced in Rajya Sabha i.e. Population Control Bill, 2020, becomes an important point of discussion.

Body

- Population control is a policy of attempting to limit the growth of a population in numbers, focusing especially in the poor and densely populated parts of the world where people are not aware of the consequences of overpopulation.
- In this regard, Prime Minister Narendra Modi, in his 2019 Independence Day speech, raised concerns regarding population explosion and its ill-effects. Consequently, the need for a population control bill can be seen from the following points –

1. India accounts for about 17 per cent of the world population with only 2.2 per cent of the world's land mass. The increasing population has resulted in an increasing pressure on the country's limited natural resources.
2. Despite the decrease in fertility rate, according to United Nations World Population Prospects report India's population will continue to increase up till 2050.
3. As the population increases, the demand for new cars and houses also increases leading to effect on the air quality due to the emission of harmful gases like carbon dioxide and carbon monoxide. This leads to global warming, a rise in sea levels, and changing climate patterns as well as more waste generation and associated issues.
4. In India, there already exists great amount of income and wealth inequality (Oxfam report). Overpopulation also leads to increase in the unemployment of the country as the number of people exceeds the number of jobs available in India.
5. Overpopulation might create tensions between the States or even among a few countries for the demand of resources leading to conflicts and probably war. Since vast sections of population are dependent on unsustainable resources, grave consequences can be seen across vulnerable sections.

- Indeed, India's rapid increase in population is becoming a threat to the resources and its people, affecting the social, economic, and cultural spheres of the country. However, as of data until August 2019, India had no contemporary 'population explosion'. Thus, population control bill is not considered a necessity for India due to the following factors –

1. According to the 2018-2019 Economic Survey, India's population grew 1.3% a year from 2011 to 2016, down from 2.5% a year from 1971 to 1981. The TFR was 2.2 in 2017 – close to the replacement level fertility of 2.1. The survey estimated the TFR in 2021 could be 1.8. Thus, population growth rate is declining at a faster rate.

2. The International Convention on Population and Development or Cairo Convention is a bar in bringing legislation for population control. The convention was against forced sterilizations and thus Indian government, being a signatory to it, can't bring in forceful means of population control.

3. Researchers argue that it remains difficult to establish a robust connection between population growth and development. Countries like South Korea and Taiwan experienced rapid population growth throughout the second half of the 20th century without it negatively impacting their per capita income. Instead, between 1960-80, the average per capita income in South Korea and Taiwan was 6.2 per cent and 7 per cent respectively.

4. The biggest victims of the Population control Bill will be Indian women. Many women already can't choose to refuse marriage or to reproduce, and are forced to undergo non-voluntary birth control measures. These 'habits' may only intensify. Female infanticide will also likely worsen, from the current skew of 909 female births per 1,000 male births.

5. Further, according to an affidavit by the Ministry of Health and Family Welfare in SC, mentions that international experience shows that any coercion to have a certain number of children is counter-productive and leads to demographic distortions.

6. Also, analysis of the government's newly-released health data showed that such population control laws are unnecessary: in 19 of the 22 states and Union Territories for which data were released, women have fewer than two children, on average, which is less than the replacement level for population.

Instead of framing any law or legislation on population control, there are other measures that can be and are being taken by the Government to limit the population of the country. These measures are as follows –

- Raising the status of women is an important social measure for population control as it will end the gender discrimination and improve child health.
- Educating the masses is another important aspect of controlling population as the people have to be made aware of the harmful consequences of overpopulation as well as the benefits of using contraceptive methods.
- The option of adoption should be popularized as there are many children who do not have families to take care of them. They have to live in

orphanages or organizations that only help these children to stay alive and survive and also stabilize the population.

• The government should provide families with incentives and financial aid for the adoption of birth control measures. Also, focus should be on specific districts with high population growth rates to tackle the problem effectively.

Conclusion

In a post-COVID-19 India, there is a need for increased spending on public health – and not bills that punish people for crimes they didn't commit. This will safeguard women's rights and contribute to a healthy population. Instead of population control Bills, India should consider a 'population investment bill' that takes the health, wellbeing and education of its citizens seriously.
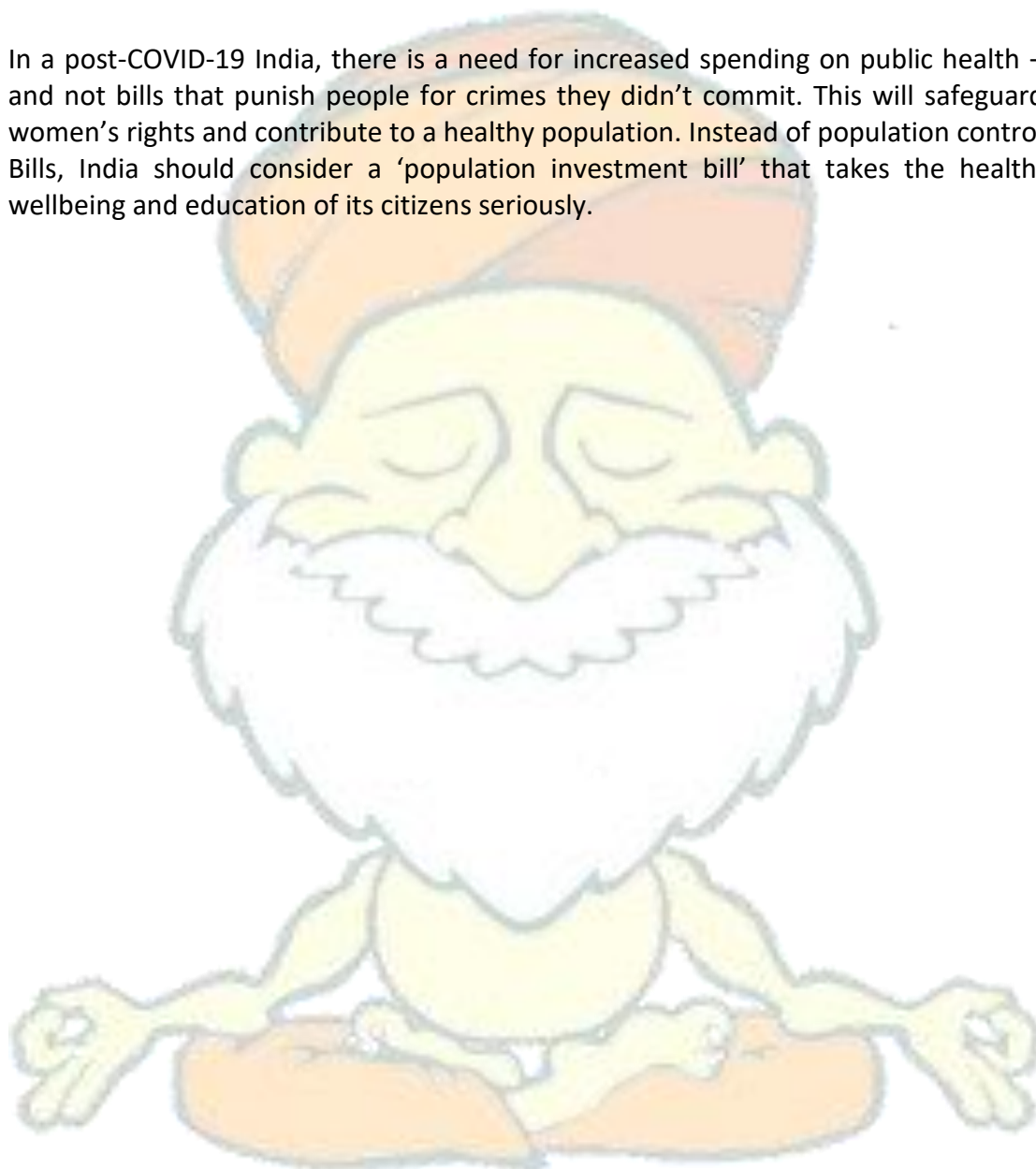
14. Should OTT platforms be regulated by the government? Critically comment.

Approach

Candidates are expected to explain what the OTT platforms are. And then critically comment whether government should regulate OTT platforms in light of recent regulations rules.

Introduction

For the first time, the government, under the ambit of the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021, has brought in detailed guidelines for digital content on both digital media and Over the Top (OTT) platforms.

Body

Over-The-Top Platforms: OTT platforms are audio and video hosting and streaming services such as Netflix, Amazon Prime Video, Hotstar etc, which started out as content hosting platforms but soon branched out into the production and release of short movies, feature films, documentaries and web series themselves.

In India, there was no law or autonomous body to monitor and manage the digital contents provided on these OTT platforms and it was made available to the public at large without any filter or screening. Therefore government tightened its control over digital news media and OTT introducing a "soft-touch regulatory architecture."

- The idea is to create a level-playing field for all media, since print and television already worked under certain restriction.
- The new IT rules will lead to the empowerment of citizens. Since there is a mechanism for redressal and timely resolution of their grievances.
- It will ensure that social media platforms have to keep better checks and balances over their platforms. This will ensure the data is not shared unlawfully. This will ensure adherence to the rule of law.
- OTT platforms has to come up with a code of self-regulation, last draft of code of self-regulation had not allowed for a third-party intervention. Government has taken care of freedom of the press with certain responsibility and reasonable restrictions.
- The new IT rules enhance government regulation over social and digital media. This will enhance accountability and prevent arbitrary actions by digital platforms like the recent one by Twitter.
- These guidelines are on expected lines and are really quite mild compared to the kind of pre-censorship of content many were fearing,". The rules, had stemmed from the industry's failure in formulating a code of self-regulation that the government found satisfactory.

- Platforms will be required to implement parental locks for content classified as U/A 13+ or higher, and reliable age verification mechanisms for content classified as "A". This move will lead to consolidation in the OTT industry or shutting down of niche apps which have relied on obscene content.
- Disinformation (Fake and wrong information) of data can be controlled. Since there is proper regulatory mechanism, disinformation can be removed easily. This will reduce instances of fake news, violence, the spread of defamatory content and disruption of public order.
- Publishers of news on digital media will have to observe the norms of journalistic conduct of the Press Council of India and the Programme Code under the Cable Television Networks Regulation Act.
- Giving due notice before removing content will prevent arbitrary removal of content. The imposition of print and electronic code of conduct on digital news media would ensure a level playing field for every media.

The legal architecture and new rules for OTT raise important concerns for free speech and fair regulation such as –

- The players and creators will have to probably re-look at the kind of content they want to make since these ratings will directly impact the storytelling and the commercials involved.
- The IT Act doesn't cover content authors and creators like news media. But rules have included them. This provides discretionary powers to the government.
- There are various categories of ratings now which may become more cumbersome for the content creator as well as the platform. Except animated films or series, all content currently on OTT platforms may fall into the U/A 16+ or the A category.
- Also, there will be ambiguity regarding certain films which may have already received CBFC certification. It is unclear whether the platform would need to incorporate the same certification or re-determine it based on these rules, which would lead to increasing compliance procedures.
- The rules allow the government to enforce a traceability mechanism. This simply means a threat to the user's privacy. It will hamper the end-to-end encryption of platforms like WhatsApp.
- As the new rules curtail free speech on digital platforms, there will be a sense of fear among the creators and hamper creativity.

Conclusion

Regulations are necessary to ensure that the content that gets featured on online streaming platforms remains within the scope of Article 19(2) of the constitution. A fine balance between freedom of speech and the need to curb the misuse in digital platforms have to be maintained. Both the government and the digital platforms will have to work together and fulfil this responsibility.

15. What challenges did urban India face during COVID-19? Discuss. What has been the overall efficacy of the response? Critically examine.

Approach

Student can discuss the issues urban population faced during the lockdown, with the help of some examples efficacy of response can be stated. In the conclusion way forward can be given to avoid such crisis in future.

Introduction

The state of our cities has been a matter of concern for decades. Be it air quality and unsafe drinking water, or now, the virus, the precarious nature of urban living has never been more pronounced. Covid pandemic has compelled us to think of new policy formulations our urban spaces.

Body

What challenges urban India faced during the pandemic?

- The growth of large cities can be attributed to their role as economic engines in a rapidly globalising world. Urban development programmes such as the Jawaharlal Nehru National Urban Renewal Mission (2005-2014) allocated the bulk of funds to large cities (70 per cent to large cities and 30 per cent to smaller towns).
- One of the most important problem we encountered is that the overburdened cities and containment. The congestion that plagues large cities has turned out to be their worst enemy during this crisis.
- This congestion is most evident in slums in large cities and poses a grave health and environmental challenge. The risk of contagious diseases is more potent in these areas as residents also suffer from a lack of basic services such as safe drinking water and sanitation.
- To ask them to navigate congestion and practise social distancing seems most ironic. It is no surprise then that many slums in Mumbai and Delhi have become COVID-19 containment zones.
- The health systems in megacities like Delhi and Mumbai are also overburdened and face a shortage of hospital staff and beds. Class I cities (more than a lakh population) have 1.4 beds per 1,000 people. Delhi has 1.5 beds per 1,000 people whereas Mumbai has one bed per 1,000 people.
- However, the urban support under the National Health Mission is just three per cent of the total allocation, while 97 per cent of the funds are set aside for rural areas.
- While the Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) provides employment opportunities to rural households, there is no equivalent scheme for the poor in urban areas.

- The state of our cities has been a matter of concern for decades. Be it air quality and unsafe drinking water, or now, the virus, the precarious nature of urban living has never been more pronounced.
- Small towns that are urban in nature but rural in character are the most neglected in the current policy environment. They are forced to exist with poorer services and policy neglect while having to meet the demands of a large population.

What has been the response to this challenge?

- India focused on saving lives and livelihoods by its willingness to take short-term pain for long-term gain, at the onset of the COVID-19 pandemic.
- Response stemmed from the humane principle that: Human lives lost cannot be brought back GDP growth will recover from the temporary shock caused by the pandemic
- An early, intense lockdown provided a win-win strategy to save lives, and preserve livelihoods via economic recovery in the medium to long-term.
- But the health infrastructure of the urban spaces, which was already abysmal was upgraded to face the challenge of increasing cases. Lockdown created a massive unemployment crisis in urban areas, which was poorly handled.
- The labour migration and their struggles to reach their hometown will haunt our memory in years to come. The migrant crisis could have been handled in more sophisticated manner with more number of trains and mode of transportation available instantly.
- Testing and isolation infrastructure was ramped up with an effective pace, but the testing facility could achieve its potential only after the four months after the lockdown.
- Containment of infections in some areas like Dharavi in Mumbai presents us an example of what efficient surveillance and strict social distancing can achieve. After 3 weeks on intense lockdown, zero case was reported from Dharavi.
- Healthcare infrastructure from ventilators to extra beds were made available with an average speed in urban areas. Pandemic exposed the fragile condition of our urban healthcare facilities.
- Response to the pandemic has affected millions of people being exposed to unemployment, chronic poverty, malnutrition and crisis of food security. Urban areas failed to take the adequate measures in this aspect.

Conclusion

Covid-19 pandemic worsened already deteriorating unemployment situation in urban areas. Absence of employment guarantee schemes left daily wage labourers helpless and were compelled to migrate. Policy response was ill prepared but the resilient economy has started to show some good signs of v shaped recovery. Economic incentives will make an impact but we need to ramp up our healthcare system with lightning speed to avoid such a suffering of vulnerable.

16. Discuss the merits of mass rapid transit (MRT) systems? How is the current status of development of MRTs in Indian urban centres? Comment.

Approach

Question is asking you to comment therefore it is important to pick out the main points/core and give one's opinion based on the information or the arguments originated from the reading.

Introduction

MASS rapid transit (MRT) system is a rail system which is used for transporting passengers in urban areas. It is known by various other names such as mass transit, subway, underground railway or metro. The main characteristic of an MRT system is the ability to carry large numbers of people efficiently and forms the backbone of a city's public transport system together with other rail-based modes such as the light rail transit (LRT) systems, trams, monorails and commuter trains.

Body

THE MERITS OF MASS RAPID TRANSIT (MRT) SYSTEMS –

- Mass transit may be based on fixed route system such as subway trains, metros or non-fixed route system such as buses. It is potentially more economical, eco-friendly and less time consuming.
- In addition, it is the most competent way of reducing the ever-growing traffic congestion of the developing city.
- Mass transit also has the advantage of smaller rights of way and developing lesser amount of infrastructure required for highways and roads.
- Mass transit system is believed to be more environmentally friendly than other public transport facilities. Private vehicles emit about twice as much carbon monoxide and other volatile organic compounds than public vehicles.
- Mass Rapid Transit plays an important role in alleviating poverty or increasing the standard of living of the poor. It is the poorest people who most depend upon public transit for access to jobs and services.
- Mass transit development can both improve the usefulness and efficiency of the public transit system as well as result in increased business for commercial developments and thus serves to improve the economy of the country.
- Transit systems also have an indirect positive effect on other businesses. Mass transit systems offer considerable savings in labour, materials, and energy over private transit systems.
- Also, mass transit allows a higher amount of load to be transported to far away destinations in lesser time because of its reasonable capacity than private vehicles. Because of their larger capacity offering them to carry highly efficient engines they also help in saving fuels.

- The main idea behind mass transit is to reduce the number of vehicles on the road by providing a larger facility which carries higher number of passengers thus eliminating congestion.

THE CURRENT STATUS OF DEVELOPMENT OF MRTS IN INDIAN URBAN CENTRES –

- An efficient urban transport is also critical for raising economic productivity and consequently making Indian enterprise competitive. Admittedly, Mass Rapid Transportation systems (MRTS) is one of the modes of urban mobility, its importance, especially when cities are seen as a growth node of an economic region rises significantly as inclusive growth is determined not only by the state of transport system within a city limit, but its connectivity to its periphery, rather is entire zone of influence. A clear appreciation of the urban context in India at this stage of her development has the potential to inform our decision on prioritizing investment towards MRTS, a sector which is under-invested.

- For inclusive and environmentally sustainable growth process, an efficient urban transport system including Mass Rapid Transportation System (MRTS) is vital. By and large, MRTS segment, like the entire urban transport sector remains hopelessly under-invested which is imposing a huge social cost on this country. However, such basic realizations are often lost in nitty-gritty of project details, apparent lack of finances and consequently, inability to roll out project. This is all the more ironic as India's Public-Private Partnership (PPP) regime, anchored by Department of Economic Affairs, especially its arrangement to offer up to 40 per cent of viability Grant Funding is perhaps one of the most nuanced regulatory and enabling frameworks to attract private investment in the world.

- The private sector on its part needs to show its willingness to invest. While there can be many innovative methods of raising finances, public authorities in India, especially in larger cities have a unique opportunity to generate revenue for infrastructure through land-based instruments, especially by commercially utilizing inefficiently used or vacant land in the heart of city. Value capture where the laying down of a trunk infrastructure has given rise to an enhancement of value of real estate around it is another important channel for getting finances.

- The deteriorating environmental condition in larger Indian cities is another concern which needs to be brought centre stage. While much attention has been devoted to emerging technologies like hyperloop, pods etc., it is raising the share of electric mobility exponentially which is of great relevance. While one increasingly speaks of electric mobility, however, the attention generally remains confined to either hybrid or electric car and with occasional reference to electric buses. Rail based MRTS systems, including sub-urban rails, like elsewhere in the worlds should be accorded focus in the emerging agenda of electric mobility.

Conclusion

With rapid urbanization, the pressure is mounting on the public transport system from the people living in cities and towns across the country. Mass Rapid Transport System, MRTS has emerged as one of the most effective means of mobility for the citizens in tier-1 and tier-2 cities and Metro has been a major player. Metro Projects have not only added to connectivity, it has reduced the travel time and hence enhanced the ease of living substantially in the urban areas. It has also led to creation of direct and indirect employment opportunities. It is expected that with the expansion of Metros in the cities, local and intercity travel will be easier, mobility and connectivity will be enhanced giving a fillip to local business as well.
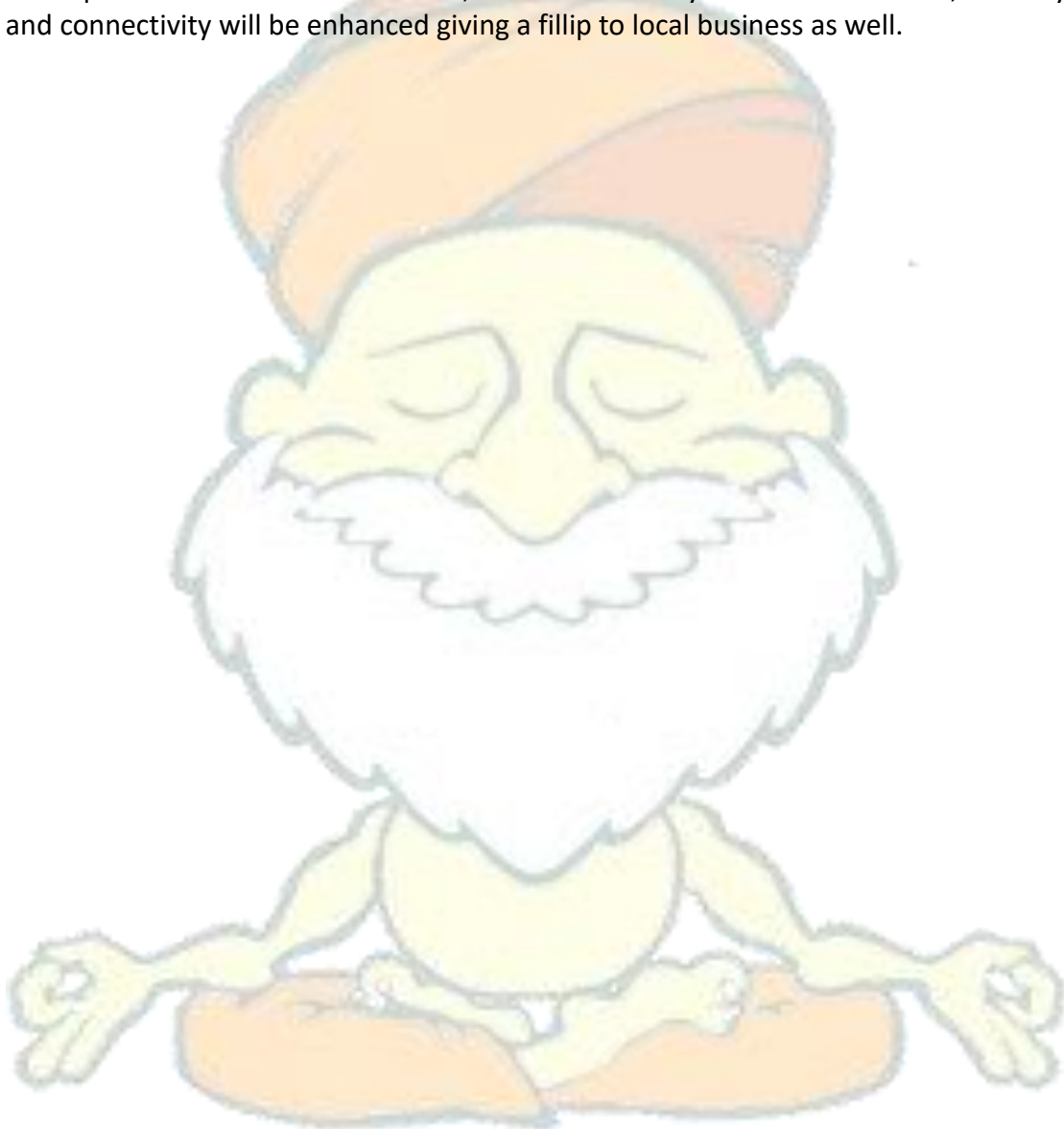
17. Should a city like New Delhi bid for hosting the Olympics? Discuss the pros and cons.

Approach

Candidates are expected to write about whether New Delhi should host Olympic. Then discuss about its pros and cons.

Introduction

India has hosted several multi-sports events, including the Asian Games (1951, 1982) and the Commonwealth Games (2010), but the Olympics has been a pipe dream. The Indian Olympic Association (IOA), from time to time, explained how the country is keen to bring the 2032 or post 2032 Olympics to India.

Body

New Delhi a candidate for hosting Olympics games –

- Hosting the Olympic Games offers manifold benefits and opportunities to a Candidate City and the host region and country. Many years of careful and precise planning around New Delhi is required to host successful Olympic Games, with all of the relevant organisations, authorities and stakeholders working together as one united team, to ensure that the Games leave a positive, long-term and sustainable legacy.
- Recently Delhi government in Budget 2021-22 proposed to host the 2048 Olympic Games to mark 100 years of India's independence. To achieve that goal it will build adequate infrastructure and create an atmosphere where sports flourishes.

Hosting the Olympics and bidding for it is a huge task that needs so much preparation let us explore the advantages of hosting Olympics –

- There are many reasons why hosting the Olympic Games is attractive to a city or country. The expectations that the event will have a positive impact, both tangible and intangible, on local communities is alive and well.
- From developing an underserved part of a New Delhi and expanding much-needed infrastructure to boosting the local economy and increasing tourism, hosting such a large-scale event can bring about great opportunities.
- Delhi government should make the most of this opportunity to tackle issues of the environment, pollution and waste management.
- Drastic strategies must be adopted to control air pollution around Delhi, environmental obliteration, augmenting water, food and sustainability. It can be a stepping stone for tackling public health and sanitation issues, eventually ensuring clean and safe facilities in New Delhi for the Olympic athletes.

- It's not just the infrastructure of New Delhi that will get a boost. The Rio Olympics took place in 4 other Brazilian cities and all of them got business too. Cities surrounding New Delhi that is Noida, Gurgaon, Ghaziabad can be natural magnet for a plethora of investors, experts and global stakeholders.
- Expect a huge boost in the medals tally if India hosts the Olympics. Sports wise vibrant states Punjab and Haryana in close proximity to New Delhi can get enhanced world class sporting culture and infrastructure. That's always the case with any home country. Brazil came out with its best ever performance of 7 golds and 19 total medals at Rio.
- There is too much focus on cricket in India. It is time we broadened the horizon. The Olympics cover a huge number of sporting events and it will give a fillip to all of them.

With serious corruption and delays in finishing off construction work in the venues along with compromising on the quality of the infrastructure, the mishandling of the CWG 2010 and COVID 2019 Pandemic led to raise questions over organising the event.

- However, cost overruns, questions over resource use and perceived corruption among other challenges have left some populations hesitant about their Delhi city's bid to host the Olympic Games.
- Bidding for the 2020 Olympics alone cost Tokyo $75 million in fees, with the hosting cost is over $26 billion - more than the $7.3 billion that was originally set aside for the Games. London paid around $16.6 billion for the 2012 event, while Beijing spent a mammoth $42 billion to host the 2008 Olympics.
- In most cases, the infrastructure and stadiums that have been built for the CWG are not used as planned. Further, certain sports like rowing have their own requirements which, when, combined, can lead to great stress on a New Delhi city's resources.
- Beyond monetary impacts, the Olympic Games can have variety of collaterals from the demolishing of historic buildings in New Delhi to the wiping out of acres of forests, or the displacement of under-privileged neighbourhoods, threats to indigenous communities, human rights infringements, etc.

Conclusion

The call of the hour, thus, is to encourage, train and systematically scout talent without political bias or corruption, which will help create world-class facilities in India. Creating top infrastructure to hone athletes and then bidding for the Olympics should be the way forward rather than bidding for it first and then preparing the sportsmen to make a mark.

18. There has been an enhanced impetus on making available potable water through various central and state level schemes. What are your views on their performance?

Approach

Question is asking you to simply give your views so write your views in a well-structured manner covering all angles.

Introduction

As per estimation of UNICEF, less than 50 per cent of the population in India has access to safely managed drinking water. Chemical contamination of water, mainly through fluoride and arsenic, is present in 1.96 million dwellings. One of the challenges is the fast rate of groundwater depletion in India, which is known as the world's highest user of this source due to the proliferation of drilling over the past few decades. Groundwater from over 30 million access points supplies 85 per cent of drinking water in rural areas and 48 per cent of water requirements in urban areas.

Body

VIEWS ON AN ENHANCED IMPETUS ON MAKING AVAILABLE POTABLE WATER THROUGH VARIOUS CENTRAL AND STATE LEVEL SCHEMES –

- In 2019, after Prime Minister Modi's re-election, the Ministry of Drinking Water and Sanitation (MDWS) was restructured under a new ministerial organogram, under which the MDWS's mandate became one of two pillars under a new ministry named Jal Shakti (meaning "power of water").
- With UNICEF's continued advocacy, technical assistance and engagement with Ministry of Jal Shakti, safe drinking water and sanitation remain high on the agenda of India's new government. UNICEF is currently working closely with the Ministry of Jal Shakti on the Jal Shakti Abhiyan and Jal Jeevan Abhiyaan.
- UNICEF focuses on community-managed drinking water, including water safety and security planning, in support of the NRDWP which is a centrally sponsored scheme funded on 90:10 basis by Central & State Govt.
- At the institutional level, UNICEF focuses on developing improved water quality monitoring systems and strengthening operation and maintenance of water supply infrastructures.
- One current initiative is Swajal, which seeks to enable communities to self-manage safe water sources within their habitations, and is supported by UNICEF through policy development, training of trainers, and communication campaigns.
- The Ministry of Jal Shakti launched "Swajal" as a pilot project that is designed as a demand-driven programme involving the community to provide sustainable access to safe drinking water to people in rural

areas. The Swajal programme is empowering communities to plan, design, implement and monitor single village drinking water supply schemes, and organize community ownership for operation and maintenance.

- The target population for Swajal in 117 aspirational districts across 28 states is about 0.5 million a year.
- This Programme has helped in prioritizing integrated water safety planning, behaviour change and community participation in most deprived aspirational districts, and Water Quality Monitoring (WQM). This contributed to achieving 18.6 million people gaining access to safe drinking water.
- Jal Jeevan Mission (JJM) is the Centre's flagship programme which aims to provide piped drinking water to all rural households by 2024. Besides providing piped water supply to all households, JJM emphasises on augmenting local water sources and recharging existing ones. It also promotes water harvesting and desalination.

Conclusion

Around 2 lakh people die in India every year because of the immense water shortage and 600 million people of this country don't have access to clean drinking water. Every individual in India has the right to clean water and basic sanitation. The ultimate aim of present government's work in water, sanitation and hygiene is to ensure that all everyone fulfil this right, and that no one is left behind.
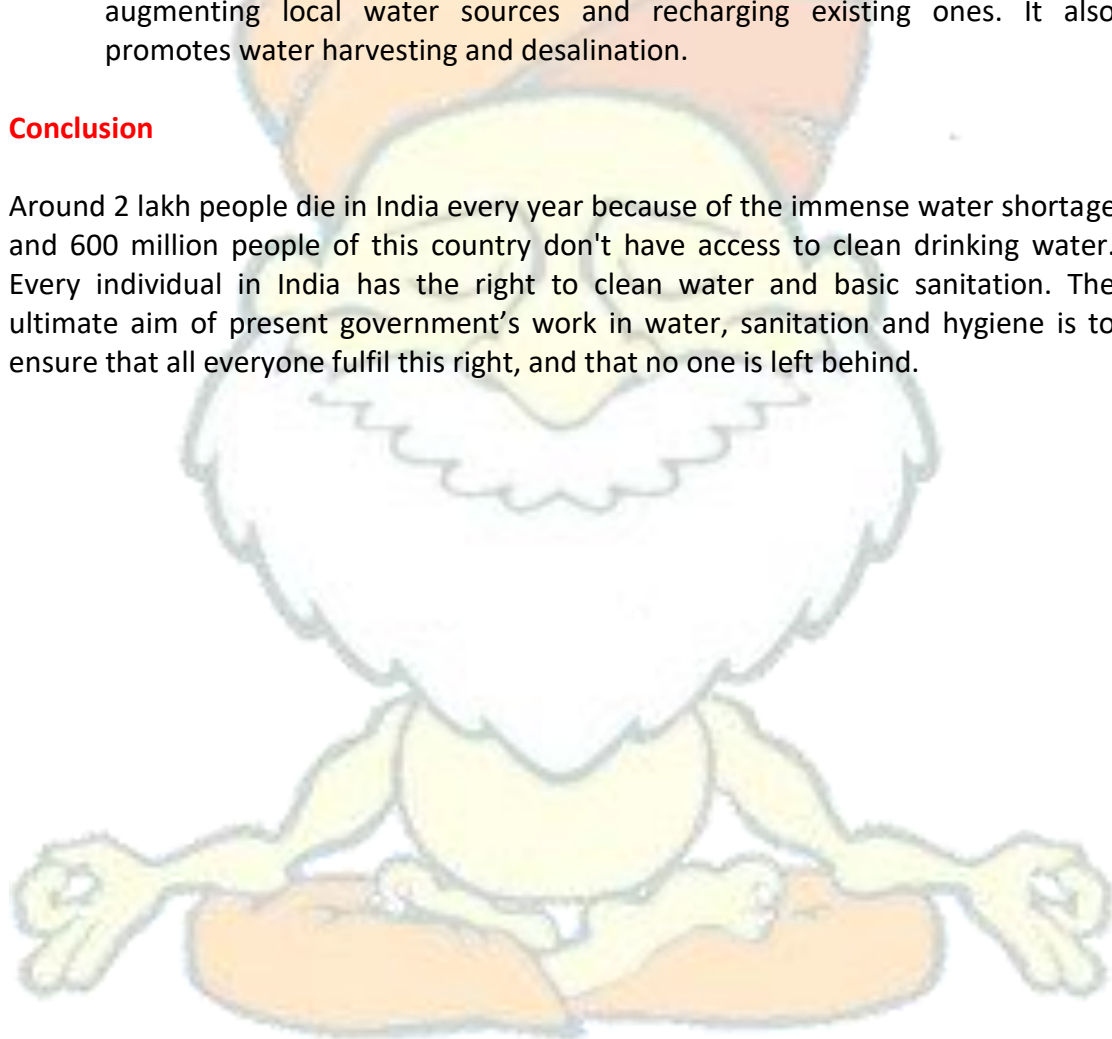
19. What are the ongoing insurance schemes of the central government? Do they provide an adequate safety net to the populace? Examine.

Approach

The student is expected to write the major insurance schemes of the central government and analyze their importance in providing the adequate insurance penetration in India for the population. The students should write the reasons of low insurance penetration and then conclude with the measures needed to improve the insurance penetration in India.

Introduction:

Insurance is the main element in the operation of national economies throughout the world today. It protects health and assets of the people and stimulates business activities to operate in a cost-effective manner. Citing this, the Insurance Regulatory and Development Authority (IRDA) has released guidelines for the insurance sector i.e. Saral Jeevan Bima (SJB). Saral Jeewan Bima provides for broad contours of a standard individual term life insurance product which must be adhered by insurance companies.While India's insurance sector has been growing dynamically in recent years, its share in the global insurance market remains abysmally low

Body:

Various government schemes in the insurance sector are –

• Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) and Pradhan Mantri Suraksha Bima Yojana (PMSBY): Launched on 9th May, 2015, these schemes are offered/administered through both public and private sector insurance companies, in tie up with scheduled commercial banks, regional rural banks and cooperative banks.

• Pradhan Mantri Jeevan Jyoti Beema Yojana: It offers a renewable one-year term life cover of Rupees Two Lakh to all account holders in the age group of 18 to 50 years, covering death due to any reason, for a premium of Rs. 330/- per annum per subscriber, to be auto debited from subscriber's bank account.

• Pradhan Mantru Swasth Beema Yojana: It offers a renewable one-year accidental death cum disability cover to all subscribing bank account holders in the age group of 18 to 70 years for a premium of Rs. 12/- per annum per subscriber to be auto debited from subscriber's bank account. It provides a cover of Rs. Two Lakh for accidental death or total permanent disability and Rs One Lakh in case of permanent partial disability. The above schemes are on self-subscription basis and involves no Government contribution.

• Pradhan Mantri Fasal Bima Yojana (PMFBY): Ministry of Agriculture implements PMFBY and Restructured Weather Based Crop Insurance Scheme (RWBCIS). It

provides comprehensive crop insurance cover against non-preventable natural risks at an affordable rate to farmers. It is compulsory for loanee farmers availing crop loans for notified crops in notified areas and voluntary for non-loanee farmers. Uniform maximum premium of only 2%, 1.5% and 5% of the sum insured to be paid by farmers for all Kharif crops, Rabi crops and commercial/horticultural crops. The difference between premium and the rate of insurance charges payable by farmers is provided as subsidy and shared equally by the Centre and State.

- Pradhan Mantri Jan Arogya Yojana (PMJAY) – Ayushman Bharat: A centrally sponsored and entitlement based scheme. It covers poor and vulnerable families based on deprivation and occupational criteria as per SECC data. It provides health coverage up to Rs. 5 lakh per family, per year for secondary and tertiary hospitalization to over 10.74 crore poor and vulnerable families. It provides cashless and paperless services for the beneficiary at the point of service in any (public and private) empaneled hospitals across India. The ratio of premium under PMJAY is 60:40 between Centre and State except North Eastern States and 3 Himalayan States where the ratio is 90:10 with an upper limit for Centre. In the case of Union Territories, the Central contribution of premium is 100% for UTs without legislature, while it is 60:40 for those with legislature.

Do they provide adequate safety net in India?

There are many underlying issues which affect the insurance sector in India such as low penetration and density rates, inadequate investment in insurance products, and the dominant position and deteriorating financial health of public-sector players. Therefore, the goal of making insurance accessible to all will remain difficult to achieve, until the above mentioned issues are addressed.

- Prevalence of Insurance Gap: The insurance penetration (ratio of total premium to GDP (gross domestic product)) and density (ratio of total premium to population) stood at 3.69% and US$ 73, respectively for FY18 (fiscal year 2017-18), which is low in comparison with global levels. These low penetration and density rates reveal the uninsured nature of large sections of population in India, and the presence of an insurance gap.
- Public Sector Dominated: The insurance sector has transitioned from being an exclusive State monopoly to a competitive market, but public-sector insurers hold a greater share of the insurance market even though they are fewer in number.
- Nascent Non-life Insurance: Life insurance dominates the sector with a huge share of 74.7%, with non-life insurance accounting for the remaining 25.3%. In the non-life insurance sector, motor, health, and crop insurance segments are driving growth. India's non-life insurance penetration is below 1%.
- In addition, insurance products catering to speciality risks such as catastrophes and cyber security are at a nascent stage of development in the country.

- Rural-Urban Divide: Low insurance penetration and density rates prevail in India. However, Rural participation of insurers remains deficient, and life insurers, especially private ones, gravitate towards the urban population.
- Capital Starved Insurers: Insurers in India lack sufficient capital, and their financial health, particularly that of the public-sector insurers, is in a precarious state. Further, investment in the insurance sector got dwindled due to the crisis in banks and NBFCs (non-banking financial companies) sector.

Conclusion

Insurance companies in India will have to show long-term commitment to the rural sector as well, and will have to design products which are suitable for rural people. In this context, government insurance schemes such as Pradhan Mantri Jan Arogya Yojana, Pradhan Mantri Fasal Bima Yojana, Pradhan Mantri Suraksha Bima Yojana, and Pradhan Mantri Jeevan Jyoti Bima Yojana are notable steps in right direction. There is a need for complementary thrust to spread awareness and improve financial literacy, particularly the concept of insurance, and its importance. Another area that necessitates regulatory scrutiny is that of application of technology in insurance. An example is the emergence of 'InsurTech', designed to make the claim process simpler and more comprehensible. The regulator needs to exercise vigilance on three other aspects. Demographic factors, coupled with increasing awareness and financial literacy, are likely to catalyse the growth of the sector. An enhanced regulatory regime that focuses on increasing insurance coverage is the need of the hour.

20. What is the current approach of the US in terms of its engagement in Afghanistan? How is India going to get impacted in the long run? Discuss.

Approach

The candidate needs to address the question in two parts where the first part explains the current approach of the US in terms of its engagement in Afghanistan while the second part discusses its impact on India in the long run.

Introduction

Afghanistan was elevated as a significant U.S. foreign policy concern in 2001, when the United States, in response to the terrorist attacks of September 11, 2001, led a military campaign against Al Qaeda and the Taliban government that harboured and supported it. Recently, the process for withdrawal of NATO forces is in process and the emerging dynamics will have far reaching effects on the region.

Body

- In the intervening 18 years, an elected Afghan government has replaced the Taliban, and most measures of human development have improved, although future prospects of those measures remain mixed.
- According to a June 2020 U.S. Department of Defence report, "The vital U.S. interest in Afghanistan is to prevent it from serving as a safe haven for terrorists to launch attacks against the U.S. homeland, U.S. interests, or U.S. allies."
- After months of delays, on September 12, 2020, Afghan government and Taliban representatives officially met in Doha, Qatar to begin their first direct peace negotiations, a significant moment with potentially dramatic implications for the course of the ongoing Afghan conflict.

The Joe Biden administration has proposed a new peace plan to the Afghan government and the Taliban, seeking to bring violence to a halt and form an interim government through the following means –

1. Involving other Stakeholders: US has proposed an UN-led conference of representatives of Russia, China, Pakistan, Iran, India and the U.S. "to discuss a unified approach to support peace in Afghanistan".
2. Written Proposal to enhance Trust: US will share written proposals with the Afghan leadership and the Taliban to accelerate talks.
3. Comprehensive Ceasefire and Inclusive government: US has urged both sides to reach a consensus on Afghanistan's future constitutional and governing arrangements; find a road map to a new "inclusive government"; and agree on the terms of a "permanent and comprehensive ceasefire".

4. Negotiations in third country: US has also proposed a senior level meeting of the Afghan government and the Taliban in Turkey to discuss power sharing, reduction of violence and other specific goals.

Here, India's inclusion in the regional conference format is a positive development. Overall, impact on India in the long term can be seen from the following points –

- India would be part of the regional conference, but the UN-led forum's role and its relationship with the intra-Afghan dialogue have not been spelt out. In the 2001 Bonn conference, regional players had been part of the actual negotiations in the same venue. Similar role can be considered in this time.
- Among all the regional states, India has been the only nation that has never been comfortable with the peace process advocated by the US, as New Delhi believes that it is predicated on the notion of providing "comfort to the Pakistanis".
- Indian assets in Afghanistan have been targeted by the Haqqani group, a major Taliban faction. India has also been able to invest in Afghanistan's future partially because of the presence of U.S.-led troops and the relative stability it brought. With this stability at risk, India needs to urgently reposition its priorities.
- Further, India needs to come out of its traditional approach towards assessment of Taliban and engage with them actively, considering the ground situation and imminent withdrawal of NATO forces. This will help in denying Pakistan gain a strategic depth in the region, to be used for anti-India purposes.
- The growing tentacles of China through its belt and road initiative are also a long term threat for Indian interests in Afghanistan as China seeks to deepen its role with the help of Russia and Pakistan. Countering these efforts in the long run, would need a strategic approach to leverage India's strengths.

Way Forward –

- Broader Diplomatic Engagement: India should consider appointing a special envoy dedicated to Afghan reconciliation.
- Continued Training and Investments: India should provide more military training to Afghan security forces and invest in longer-term capacity-building programs. India should expand its development assistance.
- Working With and Through Others: India should look to broaden its engagements with Iran and Russia, explore opportunities for cooperation.

Conclusion

Addressing Afghanistan's challenges requires a comprehensive approach, involving civilian and military actors, aimed not only at providing security but also at promoting good governance, the rule of law and long-term development where regional stability is prioritised through multilateral approach.

21. What are the challenges of development in tribal pockets of India? Discuss the recent government initiatives for ensuring inclusive growth of tribal areas.

Approach

Question is asking you to discuss, it requires you to write a debate where one has to use your skill at reasoning, backed up by deliberately selected evidence to make a case for and against an argument.

Introduction

The greatest challenge that the Government of India has been facing since independence is the proper provision of social justice to the scheduled tribe people, by ameliorating their socio-economic conditions. Scheduled Tribes, Scheduled Castes and denotified tribes constitute the weakest section of India's population, from the ecological, economic and educational angles. They constitute the matrix of India's poverty. Though the tribals are the sons of the same soil and the citizens of the same country, they born and grow as the children of the nature. From the historical point of view, they have been subjected to the worst type of exploitation social. They are practically deprived of many civic facilities and isolated from modern and civilized way of living since so many centuries.

Body

THE CHALLENGES OF DEVELOPMENT IN TRIBAL POCKETS OF INDIA –

- Loss of Control over Natural Resources: Before the coming of the British, the tribals enjoyed unhindered rights of ownership and management over natural resources like land, forests, wildlife, water, soil, fish, etc. With the advent of industrialisation in India and the discovery of mineral and other resources in tribal inhabited areas, these pockets were thrown open to outsiders and state control replaced tribal control.
- Lack of Education: According to the 1991 Census, nearly 70 per cent of the tribals are illiterates. Although it cannot be denied that education can act as the instrument for betterment of the tribals ensuring greater participation for them in the development process, still there are certain factors which inhibit the tribals from taking to education.
- Neglect and lack of special attention of tribal and scheduled areas inspite of constitutional provision
- Very inadequate allotment of fund in both general and special sectors to cover all aspects of development of the tribals areas.
- Displacement and Rehabilitation: After independence, the focus of the development process was on heavy industries and the core sector. As a result, huge steel plants, power projects and large dams came up—most of them in the tribal inhabited areas. The mining activities were also accelerated in these areas. Acquisition of tribal land by the government for these projects

led to large scale displacement of the tribal population. The tribal pockets of Chhotanagpur region, Orissa, West Bengal and Madhya Pradesh suffered the most.

- Inadequate administrative machinery to integrate all the sec- toral programme coupled with the lack of co-ordination and integration at inter and intra departmental levels within the state as well as state vs. central sectoral levels.
- Lack of effective personnel policy of the government which finds reflected in frequent transfer of key personnel in administration, inadequate incentive to work in and for tribal areas, lack of specialized training in tribal culture as well as the inculcation in them the spirit of social service.
- Problems of Health and Nutrition: Because of economic backwardness and insecure livelihood, the tribals face health problems, such as prevalence of disease, like malaria, cholera, tuberculosis, diarrhoea and jaundice, problems associated with malnutrition like iron deficiency and anaemia, high infant mortality rates, low levels of life expectancy, etc.
- Lack of reliance on the part of the government to adopt scientific planning and ensure implementation based on research findings.
- Excessive politicization of the tribal issues and failure on the part of the tribal societies to throw in dedicated, articulate, and enlightened local leaders.
- Erosion of Identity: Increasingly, the traditional institutions and laws of tribals are coming into conflict with modern institutions which create apprehensions among the tribals about preserving their identity. Extinction of tribal dialects and languages is another cause of concern as it indicates an erosion of tribal identity in certain areas.

**RECENT GOVERNMENT INITIATIVES FOR ENSURING INCLUSIVE GROWTH OF TRIBAL AREAS –**

- There was considerable progress in digital mechanisms and online monitoring systems especially for scholarship schemes and expenditure of funds for tribal welfare.
- Tribal medicine emerged as another priority area along with tribal research. Expansion of eklavya model residential schools was stepped up this year while empowerment of tribals through schemes like van dhanyojana and aadi mahotsavas also remained on the forefront.
- Affirmation of tribal rights and their role in forest development was another important highlight this year.
- Ministry of tribal affairs launched the tribal health and nutrition portal swasthyaand opened national overseas portal and national tribal fellowship portal. The e-portal on tribal health and nutrition named swasthya, is a first of its kind e-portal, providing all health and nutrition related information of the tribal population of India in a single platform. Swasthya will also curate innovative practices, research briefs, case studies, and best practices collected from different parts of India to facilitate the exchange of evidence, expertise and experiences.

- The scheme of development of PVTGS covers 75 identified PVTGS in 18 states and UT of Andaman &Nicobar Islands for the activities like housing, land distribution, land development, agricultural development, animal husbandry, construction of link roads, installation of non-conventional sources of energy for lighting purpose, social security including janashreebima yojana or any other innovative activity meant for the comprehensive socio-economic development of PVTGS.
- Support to tribal research institutes (tris) and tribal festivals, research information and mass education

In the above schemes, the focus of the Ministry is to preserve and promote tribal culture and dissemination of information.

Conclusion

The majority of the tribal people are not even aware of the development schemes implemented by government agencies. Without creating awareness among the tribal people, it is difficult to achieve better results. All these deficiencies in tribal affairs make us sad. If we really want to combat the problem of poverty prevalent among the tribal communities such an unimaginative, unscientific, and unsympathetic approach to tribal problems must go.
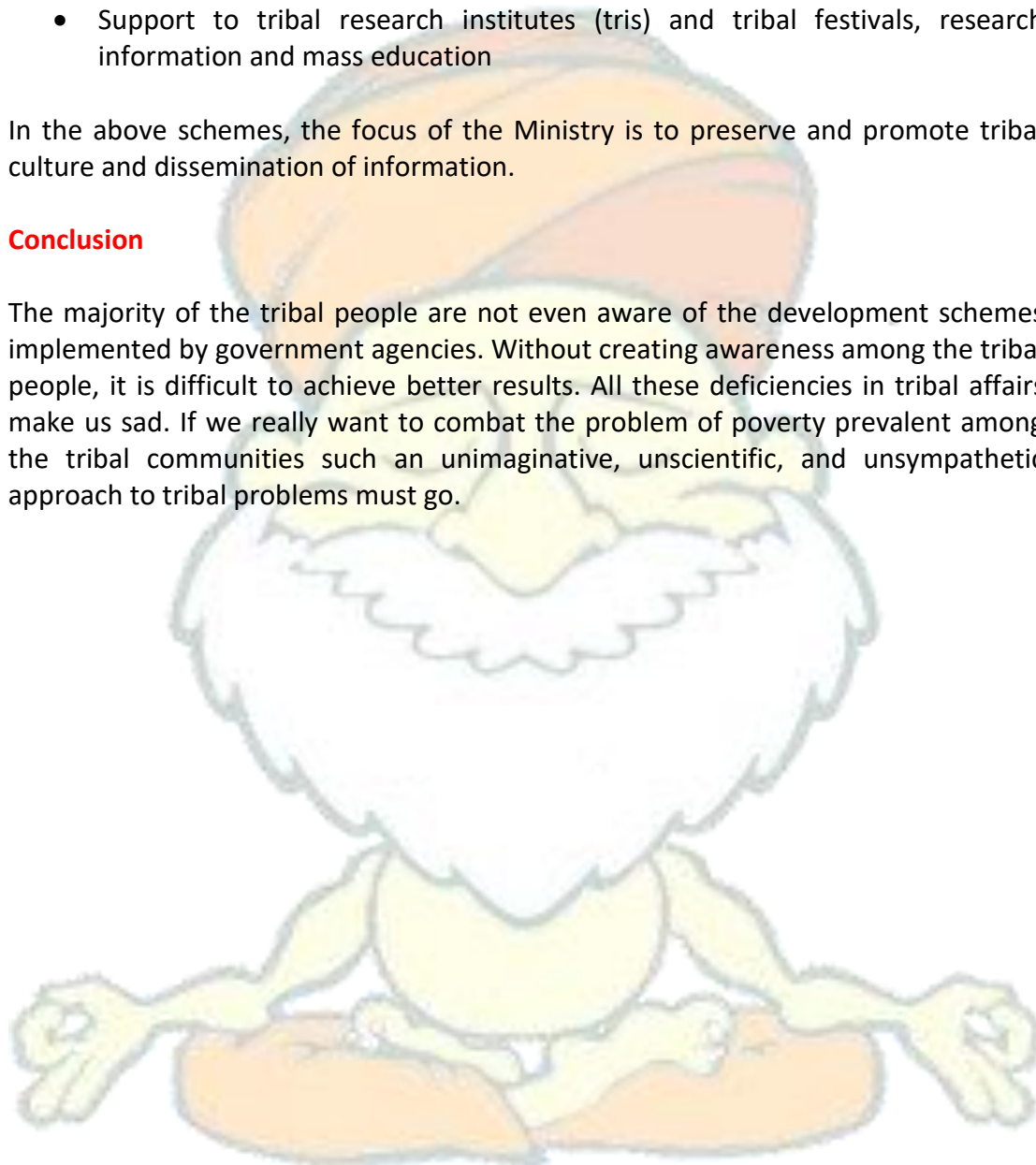
22. Sri Lanka has immense strategic importance for India. Do you agree? Comment in the light of the evolving geopolitics in the Indian Ocean region.

Approach

Students are expected to write about the strategic importance of Srilanka for India in context of evolving geopolitics in the Indian ocean region, also it is important to mention about the challenges in the relationship between India and Srilanka and India's historical and cultural connect also needs to be briefly mentioned.

Introduction

Sri Lanka, an island nation in the Indian Ocean, is separated from India by the Palk Strait – a bare 22 miles of water. It is of prime importance for India's security and the security of the Indian Ocean. This island nation lies astride the major sea lanes of communication from Europe to East Asia and the oil tanker routes from the oil producing countries of the Gulf to China, Japan and other Pacific countries. In the military sense it is important to the United States as these same sea routes are used for transference of naval power from the Pacific Ocean to the Indian Ocean and the Gulf. India too has a vital strategic stake in Sri Lanka for her own security interests. An unfriendly Sri Lanka or a Sri Lanka under influence of a power unfriendly to India would strategically discomfit India. Sri Lanka is also strategically important to India in terms of her Indian Ocean strategy and in terms of networking of partners for her aims of establishing an Indian Ocean Rim Community.

Body:

Strategic importance of Srilanka for India –

• The relationship between India and Sri Lanka is more than 2,500 years old. Both countries have a legacy of intellectual, cultural, religious and linguistic interaction. In recent years, the relationship has been marked by close contacts at all levels. Trade and investment have grown and there is cooperation in the fields of development, education, culture and defence. Both countries share a broad understanding on major issues of international interest. In recent years, significant progress in implementation of developmental assistance projects for Internally Displaced Persons (IDPs) and disadvantaged sections of the population in SriLanka has helped further cement the bonds of friendship between the two countries.

• Sri Lanka has by and large been friendly disposed towards India despite the complications caused by the minority Tamils of Northern Sri Lanka involved in a long insurgency and terrorism demanding an independent state of Eelam spearheaded by the LTTE. India too has in the past before the IPKF operations of the 1980s had on a number of occasion's extended military assistance to ward off security challenges to the Government of the day.

- To counter China, good relations with Sri Lanka and other countries in the Indian Ocean region are very essential. Therefore, strengthening multilateral organizations like SAARC, BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic cooperation) and IOR-ARC (Indian Ocean Rim Association for Regional Cooperation) is a necessity. Sri Lanka, being an important member of these organizations, can never be neglected or side-lined in the foreign policy.

- Sri Lanka has long been a priority destination for direct investment from India. Sri Lanka is one of India's largest trading partner in SAARC. India in turn is Sri Lanka's largest trade partner globally. Trade between the two countries grew particularly rapidly after the entry into force of the India-Sri Lanka Free Trade Agreement in March 2000. According to Sri Lankan Customs, bilateral trade in 2016 amounted to US $ 4.38 billion. Exports from India to Sri Lanka in 2016 were US$ 3.83 billion, while exports from Sri Lanka to India were US$ 551 million.

- Srilanka lies in the immediate vicinity of India and is strategically placed in the Indian ocean region which accounts for the most of the ocean trade thus its importance for India is a priority, Also in order to counter the Chinese spread and string of pearls manoeuvre co-operation with Srilanka gains more prominence.

- As the US is becoming more involved in South Asia, the question of its impact on India-Sri Lanka relations is one worth considering. Maldives and the US recently signed a Defence Agreement "to deepen engagement and cooperation in support of maintaining peace and security in the Indian Ocean."

- Though the US has continued to bring attention to humanitarian issues and "urge progress on reconciliation" in its conversations with members of Sri Lanka's new government, the emphasis of its equation with Sri Lanka has shifted to the Indo-Pacific, crucially 'a free and open Indo-Pacific.' In this respect they see Sri Lanka as a valuable partner, one that "will contribute to regional stability and prosperity as a hub of the Indo-Pacific region." This is reflective of the changed reality of a current and post-pandemic world.

Challenges on this front –

- Grumbling Chinese assistance to neighbourhood is because the Chinese combine investments with politics. Therefore, more important is to find alternative approaches that could combat both Chinese approaches. It is because China will not stop monetary and political interventions to dominate the global and regional order. In recent years, China has extended billions of dollars of loans to the Sri Lankan government for new infrastructure projects, which is not good for India's strategic depth in Indian Ocean Region.

- Fishermen issue-Given the proximity of the territorial waters of both countries, especially in the Palk Straits and the Gulf of Mannar, incidents of straying of fishermen are common. Indian boats have been fishing in the troubled waters for centuries and had a free run of the Bay of Bengal, Palk

Bay and the Gulf of Mannar until 1974 and 1976 when treaties were signed between the two countries to demarcate International Maritime Boundary Line (IMBL). However, the treaties failed to factor in the hardship of thousands of traditional fishermen who were forced to restrict themselves to a meagre area in their fishing forays.

- India and Sri Lanka have agreed to set up a Joint Working Group (JWG) on Fisheries between the Ministry of Agriculture and Farmers Welfare of India and Ministry of Fisheries and Aquatic Resources Development of Sri Lanka as the mechanism to help find a permanent solution to the fishermen issue.

Conclusion

India-Sri Lanka relations will no doubt be shaped by the dynamic nature of international relations and great power rivalry. Some of the anti-China rhetoric coming from the US will die down post US elections in November 2020, though current tensions are not all cyclical. Certain structural challenges are likely to persist regardless of the US election results and these will have a long-term impact on US-China bilateral relations but importantly on the political dynamics in the Indian Ocean region. In the meantime, India should take cautious comfort in Srilanka's acknowledgment that Indian Ocean is of strategic importance and must remain a zone of peace.
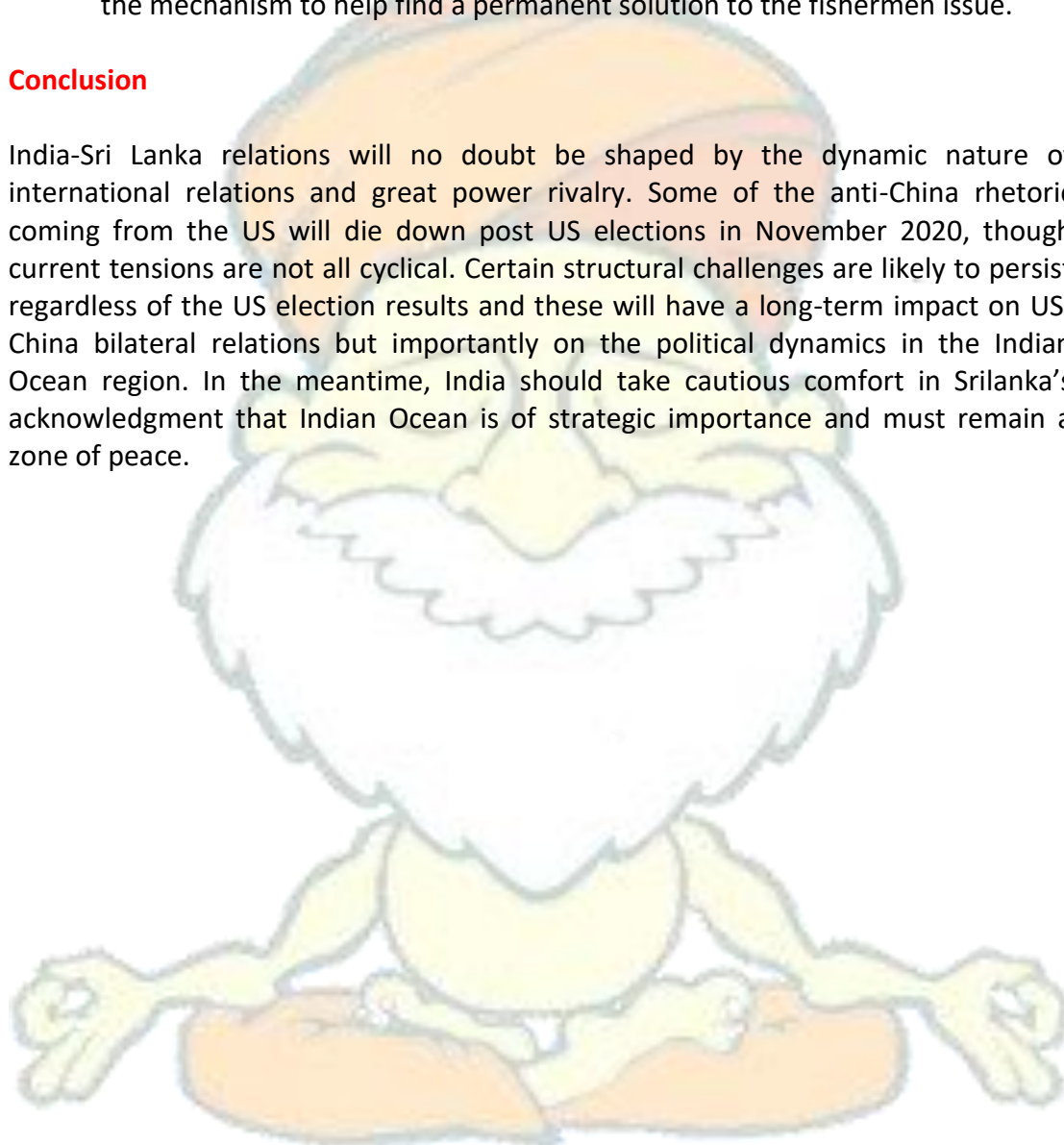
23. What are the factors responsible for the prevalence of a lower sex ratio in some of India's states? What recent measures have been taken to reverse this trend? Discuss.

Approach

Question has asked you to discuss so it requires an in-depth answer that takes into account all aspects of the debate concerning the topic. You must demonstrate reasoning skills with this type of question, by using evidence to make a case for or against a research topic/argument.

Introduction

According to the 2018 report on "vital statistics of India based on the Civil Registration System", Arunachal Pradesh recorded the best sex ratio at birth in the country while Manipur recorded the worst sex ratio at birth. Sex ratio at birth is number of females born per thousand males. It is an important indicator to map the gender gap of a population.

Body

Factors responsible for the prevalence of a lower sex ratio in some of India's states –

- Sex discrimination leading to death, experienced by them from womb to tomb in their life cycles.
- The distorted gender makeup of the entire population does reflect an adverse child sex ratio.
- Poor reach among young people for reproductive health education and services as well as poor cultivation of gender equity norms.
- According to information from the UNPFA, reasons for female infanticide include anti-female bias, as women are often seen as subservient to men, who often employ positions of power.
- In addition, parents believe they will be better taken care of in their old age by men, as men are perceived as the principal wage earners of the family.
- Social Practices: Parents of girls are usually expected to pay a dowry, which could be a massive expense, avoided by raising males.
- Counter Effect of Rise in Income: Contrary to popular perception, in India's sex ratio at birth declined even as per capita income increased nearly 10 times over the last 65 years, according to an IndiaSpend analysis of government data.
- Various patriarchal cultural factors contribute to male preference. While for some the onus of dowry makes a girl child a burden for others, the son preference may be related to the tradition of sons performing funeral rites. Sons carry on the family lineage, while daughters, after marriage, are understood to move away to become a member of another family. With

most women shifting out to live with the husband's house, old age care of the parents is usually provided by the son.

What recent measures have been taken to reverse this trend?

- Female education and economic prosperity need to be worked on to help improve the ratio.
- Rollout campaigns on sensitisation towards women and children, making women safety cells, ensuring the safety of women on public transport systems, making cyber-crime cells are some other initiatives that need to be taken.
- In view of the complexity of son preference resulting in gender-biased sex selection, government actions need to be supplemented by improving women's status in the society.
- Young people involvement in reducing the effect of population momentum and accelerate progress towards reaching a more normal sex-ratio at birth is important.
- Initiatives like the government's beti bachao beti padhao Campaign has achieved remarkable success in bringing behavioural change in the society. Such initiatives should be encouraged more.

Conclusion

India has created several impressive goals to reduce its population growth rates, India and the rest of the world has a long way to go to achieve meaningful population policy which are not only based on quantitative control but qualitative control as well. There is an urgent need to reach young people both for reproductive health education and services as well as to cultivate gender equity norms. This could reduce the effect of population momentum and accelerate progress towards reaching a more normal sex-ratio at birth. India's population future depends on it.
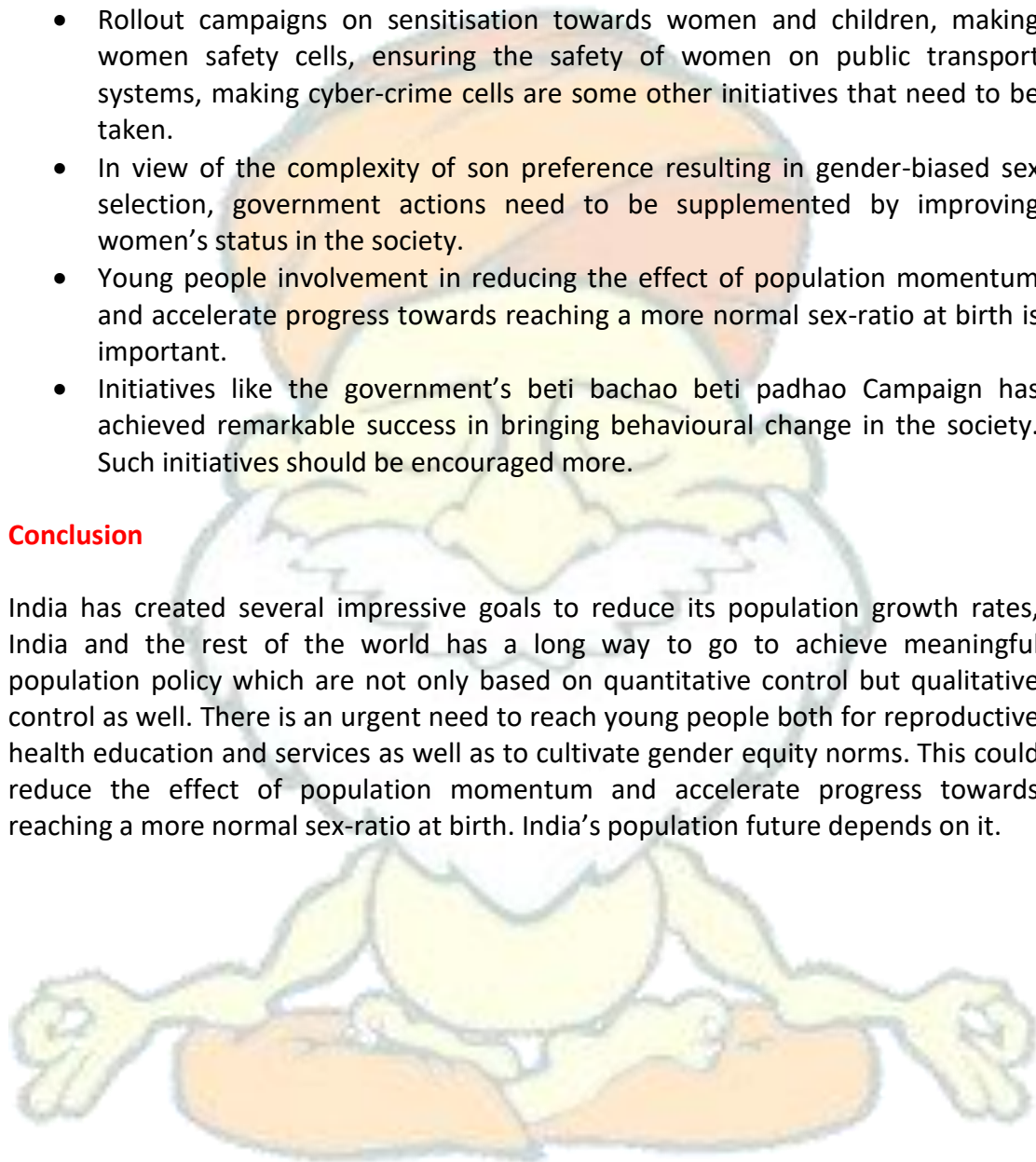
24. What are the issues with the trade and regulation of bitcoins in India? Do you agree with the proposal of criminalizing bitcoin trade?

Approach

Question is very straight forward in its approach students are expected to write about the issues with the trade and regulation of bitcoins in India, also in the second part of the question students need to mention about the proposal of criminalising the bitcoin trade.

Introduction

Bitcoin is a digital currency that was created in January 2009. It follows the ideas set out in a whitepaper by the mysterious and pseudonymous Satoshi Nakamoto.The identity of the person or persons who created the technology is still a mystery. Bitcoin offers the promise of lower transaction fees than traditional online payment mechanisms and, unlike government-issued currencies, it is operated by a decentralized authority. Bitcoin is a type of cryptocurrency. There are no physical bitcoins, only balances kept on a public ledger that everyone has transparent access to. All bitcoin transactions are verified by a massive amount of computing power. Bitcoins are not issued or backed by any banks or governments, nor are individual bitcoins valuable as a commodity. Despite it not being legal tender, Bitcoin is very popular and has triggered the launch of hundreds of other cryptocurrencies, collectively referred to as altcoins.

Body

Issues with trade –

- Section 26 of the RBI Act states that, 'every banknote shall be legal tender at any place in India in payment or on account for the amount expressed therein, and shall be guaranteed by the Central Government'. The virtual currency is not guaranteed by the Central Government, so, in order for any virtual currency to be declared legal tender, it will have to be expressly guaranteed by the Central Government. In that case, parties are legally bound to accept it as a mode of payment. So, privately issued cryptocurrencies would not be safe.
- Security Issue: Instances like Mt Gox bankruptcy highlight some of the key risks associated with crypto exchanges pertaining to the safety and security of cryptocurrencies. Crypto-currencies are prone to cyber frauds, hacking and other network-related issues.
- Lack of Investor Protection: Due to the anonymous nature of crypto-currency transactions, there is a lack of investor/consumer protection in the form of recourse and quick and orderly access to their own funds/assets.
- Bitcoin's value, astronomical even now at about $8,300 but much below January 2018's stratospheric levels, is based on demand for a fixed supply of

Bitcoins in the future it cannot exceed 21 million in number, of which 18 million has already been mined. Cryptos are feared not just for their sheer speculative propensities, but also for their capacity to undermine sovereign currencies (the latter is an exaggerated apprehension).

Issues with regulation –

- Virtual currency is being traded anonymously over the Internet and used for a host of anti-national and illegal activities, from terror funding to illicit trade of arms and drugs and so on.
- The online use of this currency, was without any border restrictions or geographical constraints, resulting in danger to the integrity and sovereignty of the nation.
- However, it does not make sense to go overboard and criminalise merely adventurous crypto speculators. There are no official or other data available that point towards misuse of cryptocurrencies for illegal ends.
- Cryptocurrencies are much more prone to volatility. Cryptocurrencies are digital asset, not usually backed by a physical commodity or currency. This means that their value is completely dependent on faith. Their price follows the laws of supply and demand. In the absence of regulatory oversight, market manipulation can occur, which introduces volatility. This, in turn, discourages institutional investment in the market. Thus, a cryptocurrency may be a worth of a fortune today in the market and be utterly worthless tomorrow.

Is criminalising bitcoin trade the only option –

- Blockchains and cryptocurrencies have the potential to radically transform every industry that relies on contracts and transactions. It can facilitate irrefutable proof of ownership of digital art, or facilitate smart contracts that execute clauses automatically when certain conditions are met. It can improve accounting, banking, insurance, and nearly every other sector.
- Decentralised finance based on the blockchain is revolutionising how the financial industry works. A new business order, with digital currencies and blockchain technologies as its cornerstones, is emerging. Criminalising or even the use of such language will put off some of the brightest minds from India and leave us behind.
- Such a blanket prohibition would be disastrous on multiple levels. For one thing, enforcing the law would be even more difficult than under the License Raj. Raids once aimed at seizing dollars and gold bars would face the challenge of locating a password or seed phrase holding millions in Bitcoin. Nor can the government seize or even access the network of computers scattered across the world mining cryptocurrency and maintaining blockchain ledgers.
- To enforce a ban, authorities would have to develop an intrusive surveillance system that could track all digital and internet activity in the country.

Thankfully, India does not have the state capacity to pull that off. More likely, its efforts will only drive the cryptocurrency market underground.

- The ban would prevent Indians from capitalizing on crypto-asset appreciation, which blockchain evangelist Balaji Srinivasan has called a "trillion-dollar mistake." India receives the highest inflow of global remittances and using blockchain networks could save Indians billions in transfer fees. Meanwhile, elite Indians with options will flee the country, taking their wealth and innovations with them.

Conclusion

Instead of criminalizing digital currencies, the government should take a hard look at India's restrictions on financial transactions and bring them in line with the changing world. Liberalization in 1991 made India a world leader in IT. Opening up even further could place Indians where they belong — at the frontier of fintech innovation, not under suspicion.

25. How is unemployment measured in India? Discuss. What is the recent trend of unemployment in India's informal sector? Examine.

Approach

The candidate needs to address the question in two parts where the first part needs to discuss how employment is measured in India while in the second part should examine the recent trend of unemployment in India's informal sector.

Introduction

Unemployment occurs when a person who is actively searching for employment is unable to find work. Unemployment is often used as a measure of the health of the economy. The most frequent measure of unemployment is the unemployment rate, which is the number of unemployed people divided by the number of people in the labour force.

Body

The National Sample Survey Organization (NSSO), since its inception in 1950, does the measurement of unemployment in India. Its three different estimates include –

1. Usual status approach with a reference period of 365 days preceding the date of survey.
2. Current weekly status approach with a reference period of seven days preceding the date of survey.
3. Current daily status approach with each day of the seven days preceding date of survey as the reference period.

- The NSSO defines following three broad Activity Status i) Working (engaged in an economic activity) i.e. 'Employed' ii) Seeking or available for work i.e. 'Unemployed' iii) Neither seeking nor available for work.
- All those individuals having a broad activity status as i) or ii) above are classified as being in the Labour Force and those having activity status iii) are classified as outside the Labour Force. Thus labour force constitutes of both employed and unemployed.
- In other words, Labour force (also called work force) is the total number of people employed or seeking employment in a country or region. One is classified as 'not in labour force', if he or she was engaged in relatively longer period in any one of the non-gainful activities. Unemployment rate is the percent of the labour force that is without work.

Despite now being the fastest growing large economy in the world, India is still suffering from the damaging effects of policy-induced informality in the workforce from the initial decades after independence.

- The definition and percentage of unorganised labour in the informal sector are blurry and confusing. The Economic Survey of 2018-19 puts it at almost 93%" of the total workforce as "informal". But NITI Aayog's Strategy for New India at 75 puts it at approximately 85% of all workers.
- It has been realised that lack of reliable statistics on the size, distribution and economic contribution of the sector has been a major constraint in providing a realistic understanding of the significance of the informal sector to the Indian economy, leading to its neglect in development planning.
- There has been a shift in the pattern of employment in recent years with the process of casualization being stalled and self-employment going up both in rural and urban areas for men as well as women.
- Indicating a shift towards rise in self-employment over the last eight years in rural areas, the Periodic Labour Force Survey 2017-18 shows that the percentage of self-employed in rural India went up across both male and female as against that seen in 2009-10.
- While the introduction of the Unorganised Workers' Social Security Act, 2008 and The Code on Social Security, 2019 are conducive to the conservation of the rights of unorganized labourers, they have not been very effective. The constant influx of menial migrant labourers also makes the nation susceptible to the expropriation of its workers' surplus value.
- The Indian agricultural sector (largest employer of the informal sector) serves as an example of an industry which is tainted by disguised unemployment due to an oversupply of labourers; it employed 55% of the nation's labour force in 2017 but contributed a meagre 16% to the GDP.
- COVID-19 induced pandemic has led to an alarming expansion of informal sector, in recent times, has adversely affected employment and income security for the larger majority of the workforce, but governmental initiatives have helped in improving the scale of social welfare / security programme.
- The International Labour Organization (ILO 2020) report has indicated that as a result of COVID-19, an estimated 400 million informal sector workers are at risk of abject poverty in India. Women are likely to bear the brunt of job losses the most because much of their work is invisible, and they are more likely to work in informal work arrangements.

Conclusion

At present, the Indian economy is faced with a conundrum of simultaneously securing the future of an ever-increasing labour-force and sustaining high levels of economic growth through the adoption of capital-intensive technology in production. Inaction on these two fronts can have calamitous ramifications; without upskilling the working population and imparting necessary proficiency to young individuals, economic inequality will only rise and the working population with marginal financial stature may submerge into indigence. All these factors clearly necessitate governmental actions to mitigate the situation.

26. What are your views on the draft scrapping policy for vehicles? What are its intended benefits? Discuss.

Approach

A simple and straightforward question where in the candidate needs to give his/her views with regards to the draft scrapping policy for vehicles in the first part of the answer while discussing its intended benefits in the second part.

Introduction

Recently, the much-awaited draft policy on vehicle scrappage was released, which outlined the criteria for defining end-of-life vehicles and scrapping them. This is an important step forward towards building infrastructure for organised and scientific scrapping of old vehicles.

Body

- A scrappage policy is a government-funded programme to promote the replacement of old vehicles with modern ones and is expected to help in the reduction of pollution by scrapping older vehicles as well as create jobs in the auto sector.
- It also refers to the provision of financial incentives to the owners of vehicles to get them to scrap outdated models and replace them with newer vehicles.
- One of the provisions of the vehicle scrappage policy is to mandate fitness tests for commercial vehicles after 15 years. In case of failure to pass the fitness tests, the policy proposes de-registering commercial vehicles, which would then make it illegal to use these vehicles in the country.
- The policy also proposes that all vehicles used by the Central government, state governments, municipal corporations, panchayats, state transport undertakings, public sector undertakings, and autonomous bodies with the union and state governments be also de-registered and scrapped after 15 years from their date of registration.
- But the draft policy also misses an opportunity of designing an effective stimulus programme for green recovery in a post pandemic economy for the sector to achieve air quality benefits.
- Further, there is no stated commitment in the policy towards fiscal stimulus for renewal of ageing vehicles with BS-VI norms or linking with the electrification of vehicles. It places the onus of incentivising vehicle scrapping on state governments, which are already fiscally strained.
- According to a study by International Council on Clean Transportation, in Germany, replacing old cars with newer ones powered with internal combustion engine did not provide much effective emissions gains as replacing them with electric vehicles.
- Therefore, limiting the numbers of personal vehicles that can qualify for incentives and linking their voluntary replacement with electric vehicles can

contribute towards accelerating the target of 30-40 per cent electrification by 2030.

But overall, the draft scrapping policy for vehicles has many intended benefits, some of which are discussed below –

1. The policy is aimed at taking off the roads old, fuel-guzzling vehicles whose roadworthiness may be in doubt and replacing them with new ones in a potential boost to automobile sales and their manufacturers.
2. The post-Budget observations indicated that the broad outline of the policy expects to stimulate investment of Rs10,000 crore and create 50,000 jobs.
3. The policy will help in encouraging fuel-efficient, environment-friendly vehicles, thereby reducing vehicular pollution and the oil import bill as vehicles would undergo fitness tests in automated centres after 20 years in the case of personal vehicles, and after 15 in the case of commercial vehicles.
4. With India becoming an automobile hub, the industry turnover is expected to more than double in the years to come. The policy, it is being claimed, will boost new technologies with better mileage and promote green vehicles, strong hybrids, electric vehicles, and those running on alternative fuels like CNG/ethanol, etc.
5. It is estimated that one crore vehicles will be scrapped for harvested material like steel, plastic, rubber and aluminium used in the manufacturing of automobile parts, thereby reducing their cost by 30 to 40 per cent.
6. The other tangible benefits from the policy are scientific disposal and recovery of waste. Recycle and reuse can contribute towards import substitution and improve India's balance of payments.

Way Forward –

More effective leveraging of the policy is possible if the Government allows GST cuts for replacement vehicles including electric ones, and considers direct incentives for targeted fleet renewal of most polluting old trucks and buses based on BS6 standards.

Conclusion

Clearly, this first ever formal scrappage policy in India is urgently needed to help build infrastructure for safe disposal and material recovery to minimise environmental hazards. But India would be adopting scrappage policy during these unprecedented pandemic times, so it is necessary to leverage this targeted fleet renewal with well-designed central support for post-pandemic green deal.

27. Has there been a decline in the overall integrity and values of bureaucracy in India? Critically comment.

Approach

The candidate needs to comment upon whether there has been a decline in the overall integrity and values of bureaucracy in India and also give some counter arguments to the same for showcasing a balanced perspective.

Introduction

Bureaucrats need to maintain neutrality and impartiality in their working to ensure the triumph of democracy where upholding the values of bureaucracy becomes important to face the number of serious challenges from diminishing human capital in Indian bureaucracy.

Body

- Public administration has become a key agency for development in most of the developing countries where Bureaucracy contributes immensely to development by serving as adviser, inventor, and decision-maker.
- But over a period of time, Indian bureaucracy seems to be in decline in terms of overall integrity and values, which can be detrimental to the democratic institutions as well as constitutional ethos of the administration in India.
- Over the years, whatever virtues the civil servants possessed – integrity, political neutrality, courage and high morale – are showing signs of decay. Some civil servants are deeply involved in partisan politics. For example, Supreme Court even called CBI as caged parrot which speaks for its masters.
- Further, there has been a deviation from bureaucrat's professional ethics due to multiple factors like personal ambitions, security of tenure, lack of accountability, political interference, greed, etc. For example, recent incident involving API Sachin Waze in terror case.
- Here, political interference can be considered one of the major factors for the decline where transfers have been used as instruments of reward and punishment by politicians, as tools for controlling and taming the bureaucracy.
- Specialisation is an important facet of bureaucracy in the Weberian scheme, but in the Indian context the 'generalist' IAS officers are the ultimate mavens in all administration branches, which contributes to professional inadequacies leading to decline in values for compromise.
- Also, unprecedented security of tenure for Indian bureaucrats has led to a work culture where productivity and accountability are side-lined and lethargic work culture is imbibed which eventually is leading to decline in values.

At the same time, it is important to note that the above discussion is not an overall trend but refers to a section of civil servants, whereas the major section of bureaucratic structure sees mostly honest and upright officers with proper values and integrity.

- These civil servants are the "doers". For example, the Swachh Bharat Abhiyan led by the redoubtable Parameswaran Iyer is creating an impact. Fortunately, it is becoming visible as well.
- Further, the thrust on efficiency and integrity in the Indian Railways by its chairman Ashwani Lohani, is also yielding results. One can witness the impact of the changes he has brought about in the functioning of the Railways.
- The team of Indu Bhushan and Dinesh Arora, engaged in implementing the Pradhan Mantri Jan Arogya Yojana Abhiyan as part of Ayushman Bharat, provides another example of honest and efficient working.
- COVID-19 Pandemic also saw the recognition of bureaucrats work and their sacrifices as the frontline workers. For example, in Odisha, V. K. Pandian, private secretary to Chief Minister Naveen Patnaik, led Odisha to become the first state to go for a 40 per cent lockdown following an analysis of the geographical spread of people who came from abroad in March.
- These are honest and efficient bureaucrats committed to the cause for which they are paid for from the public exchequer. They are performing their tasks as professionals. Their crusading spirit is directed towards the tasks assigned to them.
- However, unfortunately, there are an equal numbers of bureaucrats who stop at just being honest, which also becomes an issue as professionalism is replaced with virtue signalling instead of completing the task at hand.

Way Forward –

- Implementing and popularising the All India Service (Conduct) Rules, 1968 for All-India Service officers of IAS, IPS and Indian Forest Service in its true sense.
- Coming up with more measures like Mission Karmayogi, in accordance with 2nd ARC's recommendations for improving the value system as well as work culture of bureaucrats.
- A government servant's promotion, career advancement and continuance in service should be linked to his actual performance on the job and the dead wood should be weeded out where the promotions should be merit based.
- Officers need to be motivated and empowered by giving them more responsibility and decision-making authority.

Conclusion

Bureaucrats should consider their role as public servants and maintain high standards of ethics as well as professionalism to serve the people in the true sense for striving towards achieving the ideals of 'New India'.

28. Discuss the contributions of contemporary Indian scientists in the field of space technology.

Approach

The candidate needs to discuss the contributions of contemporary Indian scientists in the field of space technology in the answer along with proper examples and substantiations.

Introduction

India owes a lot of its space success to the existing breed of excellent space scientists that are relentlessly pushing the boundaries of what is possible in the field of space technology which have brought laurels to the Indian space technology arena as well as led to establishment of India as one of the powerhouses of space exploration and technology.

Body

In this regard, the contributions of contemporary Indian scientists in the field of space technology can be seen from the following points –

- Jayant Vishnu Narlikar is an Indian astrophysicist. Narlikar is a proponent of steady state cosmology. He developed with Sir Fred Hoyle the conformal gravity theory, commonly known as Hoyle–Narlikar theory. It synthesises Albert Einstein's Theory of Relativity and Mach's Principle. It proposes that the inertial mass of a particle is a function of the masses of all other particles, multiplied by a coupling constant, which is a function of cosmic epoch. In cosmologies based on this theory, the gravitational constant G decreases strongly with time.
- Mars Orbiter Mission: India's first inter planetary mission, the Mars Orbiter Spacecraft was successfully launched on November 5, 2013 on-board PSLV-C25. Its success made India one of the four nations in the world to send space mission to Planet Mars. Mars Orbiter Mission is mainly intended to establish the Indian technological capability to reach Martian orbit and to explore Mars surface features, morphology, mineralogy and Martian atmosphere by indigenous scientific instruments.
- Thanu Padmanabhan is an Indian theoretical physicist and cosmologist whose research spans a wide variety of topics in Gravitation, Structure formation in the universe and Quantum Gravity. He has published more than 260 papers and reviews in international journals and ten books in these areas. Many of his contributions, especially those related to the analysis and modelling of dark energy in the universe and the interpretation of gravity as an emergent phenomenon, have made significant impact in the field.
- Remote Sensing and National Natural Resource Management System: The Indian Remote Sensing Satellites (IRS) System, with currently 11 satellites in

orbit, is one of the largest constellations of remote sensing satellites in operation in the world today. It provides inputs for management of natural resources and various developmental projects across the country using space based imagery. During the last decade, 13 remote sensing satellites have been launched and operationalized.

- Ritu Karidhal has been dubbed as the 'Rocket Woman of India', she was the Mission Director of the Chandrayaan-2 mission, and was feted for role in helming one of India's most ambitious lunar projects. She was responsible for detailing and the execution of the craft's onward autonomy system that independently operated the satellite's functions in space and responded appropriately to malfunctions.

- The successful flight testing of indigenous cryogenic stage on-board GSLV-D5 Flight on January 5, 2014. Geosynchronous Satellite Launch Vehicle (GSLV) is capable of placing 2 Tonne class communication satellite into Geosynchronous Transfer Orbit (GTO) and India is one among six countries in the world to demonstrate such launch capability to GTO with the use of complex cryogenic technology. It clearly demonstrated the capability of Indian scientists in complex space technologies.

- Byrana Nagappa Suresh is an Indian aerospace scientist. He served as the Director of Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram during the period 2003–2007. He is known for his contribution to development of Indian launch vehicles and Space Capsule Recovery Experiments (SRE). Dr. Suresh also served as the founding Director of Indian Institute of Space Science and Technology (IIST), Thiruvananthapuram.

- Kamakshi Sivaramakrishnan is part of the team that developed a technology, which is now on-board NASA's New Horizon mission, which is probing Pluto. It is NASA's farthest space mission. She is responsible for building the algorithm and the chip that is responsible for bringing information from Pluto, whose existence as a planet was being questioned. The chip on board the spacecraft collects signals and sends them back to the space station which is three billion miles away.

Conclusion

Many people have contributed towards the expansion of scientific contemplation in modern India, especially in space technology, where contemporary Indians are raising the bar continuously towards rapid advancements in space technology as well as growth of a space based technology ecosystem in India which would help in overall scientific growth of the nation.

29. Examine the recent achievements of Indian scientists in building indigenous weapon systems.

Approach

Candidates are expected to write about Indian indigenous weapon system and then examine the recent achievements of Indian scientists in building the indigenous weapon system.

Introduction

Over dependence on the Soviet Union, brought about a change in India's approach to defence industrialisation from licence-based production to production based on indigenous design. From the mid-1980s, the government pumped resources into R&D to enable the DRDO to undertake high profile projects.

Body

Indigenisation of Defence and weapon system –

- Indigenisation is the capability of developing and producing any defence equipment within the country for the dual purpose of achieving self-reliance and reducing the burden of imports. India's defence R & D and industry mainly government and public sector so far have designed and developed a number of indigenous platforms and weapons systems over the years.

Recent achievements by Indian scientists in building indigenous weapon system –

- In 2016, DRDO successfully tested its first indigenously developed heavy duty drone, Rustom 2, an unmanned armed combat vehicle developed on the lines of the US's Predator drone.
- Third generation 'fire-and-forget' anti-tank missile with a range of 4-8km. HELINA (Helicopter Launched NAG) is the air-to-surface version of the NAG integrated into Dhruv Helicopters. DRDO developed Muntra, India's first unmanned tank for detecting mines and for operation in areas where there is a nuclear radiation or biological/chemical weapon risk.
- DRDO co-developed and operationalised India's first nuclear ballistic missile submarine, INS Arihant, with the development of which, India completed its nuclear triad and became capable of firing nuclear weapons from land, air and sea.
- DRDO announced its development of an electronic intelligence satellite, EMISAT which would be launched by ISRO (Indian Space Research Organisation). Weighing about 436 kg, EMISAT is based on ISROs Indian Mini Satellite-2 (IMS-2) bus platform and is intended for electromagnetic spectrum measurement.

- DRDO developed India's first anti-satellite system (ASAT) that made India the fourth nation in the world to possess this capability. India tested its first ASAT which is capable of destroying satellites in the low earth orbit.
- After several years of flight testing and four phases of dedicated testing, the LCA (Navy) Flight Test Team successfully executed a textbook arrested landing at the SBTF.

The Self-Reliance Index (SRI) which may be defined as the ratio of indigenous content of defence procurements to the total expenditure on defence procurements in a financial year is at an abysmal 0.3. Let us analyse the challenges in indigenisation of weapon system –

- Infrastructural deficit increases India's logistics costs thus reducing the country's cost competitiveness and efficiency.
- Lack of an institutional capacity and capability to take different policies aimed at indigenisation of defence to its logical conclusion.
- Land acquisition issues restrict entry of new players in the defence manufacturing and production.
- In a 2011 report to the Parliament, the Comptroller and Auditor General of India (C&AG) highlighted the 90% import dependency of Hindustan Aeronautics Ltd (HAL) for 'raw materials and bought out items' for the production of indigenous.
- CAG report also revealed that not all technologies developed by DRDO were suitable for use by the armed forces. The three services have rejected 70 per cent of the products developed at the ARDE Pune, because the products did not meet their standard and requirement.

Way forward –

- Preference to 'Buy (Indian)', 'Buy & Make (Indian)' & 'Make' categories of acquisition over 'Buy (Global)' category, thereby giving preference to Indian industry in procurement.
- DRDO former chief V.K. Saraswat has called for the setting up of a Defence Technology Commission as well as a bigger role for DRDO in picking production partners for products developed by the agency.
- Committee chaired by P. Rama Rao suggested DRDO should be restructured in a leaner organisation also recommended for setting up a commercial arm of the organisation.

Conclusion

Indigenisation in defence is critical to national security also. It keeps intact the technological expertise and encourages spin-off technologies and innovation that often stem from it. Strategic Capability increases with self-sufficient and self-reliant defence industry also it will place India among the top global powers.

30. What have been India's recent achievements on the space technology front? Discuss.

Approach

A simple and straightforward question where in the candidate needs to discuss India's recent achievement's in the field of space technology.

Introduction

The Indian Space Research Organization (ISRO) is one of the largest and most successful space agencies in the world. Since its inception back in 1969, the Indian space agency has achieved a number of milestones, from successfully launching Chandrayaan-2 to testing a critical technology for human spaceflight.

Body

Indian Space Research Organisation (ISRO) has come a long way since its formation from launching small rockets of just 30-70 kg payloads to carrying 4,000 kg payloads to the outer space. In this regard, some of India's recent achievements on space technology front include –

Launch Vehicles –

- Polar Satellite Launch Vehicle (PSLV): PSLV upper stage (PS4) restart capability has also been demonstrated which enables PSLV to inject multiple satellites in different orbits in same mission thereby making PSLV more versatile launcher.
- GSLV-Mark III: The first developmental flight was successfully launched, in which a 3136 kg communication satellite (GSAT19) was injected into the Geosynchronous Transfer Orbit. GSAT-19 is the heaviest satellite launched with Indian launch vehicle.
- Technology demonstration: The first experimental mission of ISRO's Scramjet engine towards the realization of an Air Breathing Propulsion System, was successfully conducted. With this test, India became the fourth country to demonstrate the flight-testing of a Scramjet engine.
- Towards developing essential technologies for a fully reusable launch vehicle to enable low cost access to space, ISRO successfully flight tested India's first winged body Reusable Launch Vehicle - Technology Demonstrator (RLV-TD) demonstrating Autonomous navigation, guidance and control & re-entry mission management.

Communication, Navigation and Earth Observation Satellites –

- The Indian space agency, scripted history by successfully launching RISAT-2B, a super surveillance satellite, from the Satish Dhawan Space Center. The

radar imaging satellite can take high-resolution images even in cloudy conditions. Further, South Asia Satellite was realized with the objective of providing communication services over South Asian countries.

- Recently, ISRO's PSLV-C43 lifted off with India's Hyper-Spectral Imaging Satellite (HysIS), the country's best high-resolution satellite ever, which can study the earth's surface in visible, near-infrared, and shortwave infrared regions of the electromagnetic spectrum.
- Seven more satellites of the Indian Regional Navigation Satellite System (IRNSS) constellation were successfully launched. The constellation is named as 'NavIC', and was dedicated to the nation by the PM.
- Recently, the Indian Space Research Organisation (ISRO) declared that it has successfully demonstrated free-space Quantum Communication over a distance of 300 metres, for the first time in the country.

Space Science Missions –

- ASTROSAT: India's first multi wavelength observatory capable of simultaneously viewing the Universe in the visible, Ultra-Violet and X-ray regions of the electromagnetic spectrum, with its 5 payloads, was successfully launched into its planned orbit.
- Mars Orbiter Mission (MOM): India's first inter-planetary mission MOM, far outliving its originally planned life, completed three years in its orbit, in September 2017. The Mars Colour Camera has, so far, produced around 940 images.
- Chandrayaan 1: It changed the course of India's space exploration. It was launched in October 2008 and was the first lunar probe under the Chandrayaan program. The mission had a lunar impactor and orbiter. It was launched to collect scientific information about the moon's mineralogy, geology and topography.

Human Space Flight –

- ISRO successfully carried flight test of the indigenous Crew Escape System, a crucial technology for launching astronauts into space. The Crew Escape System is an emergency escape measure that is designed to quickly pull the crew module and the astronauts away from the launch vehicle, to a safe distance, in case of a malfunction in the initial launch stage.
- Further, Isro's Vyommitra will ride to space in the first test flight of the human space mission, Gaganyaan. She is being called a half-humanoid since she will only have a head, two hands and will not have lower limbs. She will simulate human functions before real astronauts take off. She can detect and warn if environmental changes within the cabin get uncomfortable to astronauts and change the air condition.

Conclusion

The spirit of the nation's scientific community and inventor stayed undeterred even as the Covid-19 pandemic continued to create havoc throughout the last year, which is embodiment of the fact that Indian space research and technology field is robust and ready to take the nation to further heights.

31. What are the key challenges for tapping solar energy in India? What measures have been taken to address those? Examine.

Approach

Candidates are expected to write about the key challenges for tapping the solar energy in India and then suggest some measures to tackle the challenges.

Introduction

Debate of global warming and climate change is compelling the world to move from fossil based energy towards clean and green energy. India lying in tropical belt has an advantage of receiving peak solar radiation for 300 days. With its pollution free nature, virtually inexhaustible supply and global distribution, solar energy is very attractive energy resource.

Body

Solar energy in India –

* India's current installed solar power capacity, according to Central electricity authority, is 26025.97 MW which is 34% of total renewable energy sources. India's Intended Nationally Determined Contributions (INDC's) commitment include 100 GW of solar power out of 175 GW renewable energy by 2022.

Challenges for tapping solar energy –

* India's solar capacity is largely based on imported items. We are heavily dependent on China for PV cells, modules, and other associated products. The low-priced Chinese imports do not let Indian manufacturing to flourish. The dumping of low-cost equipment is a threat to the profitability of local manufacturers.
* Per capita land availability is a scarce resource in India. Dedication of land area for exclusive installation of solar cells have to compete with other necessities that require land. It is a space-intensive method of energy production. The more energy production you require, the more space you will need.
* The initial installation costs are very high as of now so they are not affordable to a large section of the population. The battery requirements, inverter, wiring, and installation takes up a large amount of cost.
* Solar energy storage is expensive and the storage technology is still evolving and the current storage scenario is costly.
* There is also an issue of toxic materials and hazardous products used during the PVs production that can indirectly affect the environment though in smaller amounts.

- Though India had added the DCR in its bid to improve the local manufacturing ecosystem, the WTO litigation and unsuccessful attempt to protect it is making the flowering of local manufacturing more difficult.
- Though the skilling of the workforce is included in the policy support measure for the solar sector, the skilling requirement for the sector is very high and India is not keeping up the pace.
- The COVID-19 has affected all the sectors of the economy which includes solar energy sectors too. The ongoing solar projects have been halted and the developers are concerned about the cost escalations due to domestic lockdown and production cuts in China.
- The impact of COVID-19 on the supply chain has also been a cause for the rising demand for cancellation of Power purchase agreements apart from the fact that there are no new takers for new Power supply agreements and auctions.

Measure to tackle the challenges –

- The solar-wind hybrid energy model is an emerging model that works on deficiencies of both the sectors and provides a more reliable source of power generation. Such innovative models can provide more cost-effective investment opportunities.
- The architecture more suitable for most of India would be a highly distributed, individual rooftop power generation systems, all connected via a local grid.
- There is a need to improve investment in the solar supply chain within India. As the conventional finance mechanisms are reeling under pressure, measures like green bonds, solar bonds, UNFCCC finance mechanisms can be tried.
- There should be fair tariff policies so that investments are not rendered profitless. The optimisation of the price-profit duo is of critical importance for India with a huge population in lower middle income.
- The R&D and skilling of the manpower aspect must be given the most thrust to. If we are to have a robust domestic manufacturing, local R&D and skills are most important.
- What India needs today is a dedicated solar manufacturing strategy that addresses all the aspects of solar manufacturing ranging from land, tariff, import to skilling, and behavioural aspects.

Conclusion

Growth of solar sector though halted due to pandemic, the pandemic itself is a critical opportunity for India to plan is own green deal on the lines of the European Union. Solar energy sector is a solution to most of our pressing issues such as equitable and sustainable development, social sector, employment generation, etc. Also it forms an important component of the quest for Atmanirbhar Bharat.

32. What are the parameters to measure innovation? What has been India's recent performance in innovation? Discuss.

Approach

Candidate is expected to define what innovation is and why it is necessary. With the help innovation index and its parameters, future of India's innovation can be stated.

Introduction

Innovation is the process of creating value by applying novel solutions to meaningful problems. Innovation is a process. It's not the result itself per se, but the path to get there. We know it's possible to innovate unsuccessfully—there's plenty of evidence that innovations often fail. What's key is that seeking to create value by applying a novel solution to a meaningful problem.

Body

What are the innovation metrics?

- Capabilities- Capabilities refer to the abilities, practical skills, unique insights and know-how of the people. In addition, it also covers the tacit knowledge, and other information capital, as well as financial capital needed to create innovation.
- Structures- By structures, we refer to the organizational structure, processes, resources and infrastructure of the organization that enable the effective use of the aforementioned capabilities. Structure metrics should support resource allocation, efficient innovation management and idea-to-launch process, as well as speed of testing of new ideas.
- Culture- Culture enables the organization to acquire the capabilities related to people. Although it might be relatively difficult to effectively measure direct impacts on culture, the right type of culture may have a tremendous effect on the innovativeness of an organization. An innovative company culture supports the process and need for always getting better, learning and experimenting at a fast speed, as well as balancing between freedom and responsibility.
- Leadership & Strategy metrics- Strategy is ultimately about making a deliberate choice between a number of feasible options to have the best chance of "winning". It is the high-level plan for the organization to achieve its goals and long-term success, whereas leadership is needed on the way there.

Innovation index and India's performance –

- Global Innovation Index-It provides detailed metrics about the innovation performance of 131 countries and economies around the world. Its 80

indicators explore a broad vision of innovation, including political environment, education, and infrastructure and business sophistication. It is published annually by Cornell University, INSEAD and the WIPO.

- Global Innovation Index 2020 was released by the World Intellectual Property Organisation (WIPO). India is at the 48th position in the list of top 50 innovative countries. India occupied the 52nd position in 2019 rankings.
- Switzerland, Sweden, the USA, the UK and Netherlands are the top five countries. With a group of Asian economies advancing up the rankings, the index indicates that "a gradual eastward shift in the locus of innovation" is underway.
- In Asian economies, China, India, the Philippines and Vietnam have made the most progress on the index in recent years, with all four now among the top 50.
- 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. China, which is the only middle-income economy among the top 30, now holds the 14th position.

India innovation index –

- Developed by NITI (National Institution for Transforming India) Ayog with the Institute for Competitiveness.
- The index has been developed on the lines of the Global Innovation Index (GII), to ameliorate the innovation ecosystem of Indian states and Union Territories (UTs) and to design policies to drive innovation across regions.
- The index goes beyond traditional approaches by considering the best parameters in measuring innovation such as patents per million of population, publication in scientific journals, and percentage of GDP spending on research.
- India Innovation Index Report 2020 was released by NITI Aayog in which Karnataka retained its top position in the major States category.
- The Index is calculated as the average of the scores of its two dimensions – Enablers and Performance. The Enablers are the factors that underpin innovative capacities, grouped in five pillars: (1) Human Capital, (2) Investment, (3) Knowledge Workers, (4) Business Environment, and (5) Safety and Legal Environment. The Performance dimension captures benefits that a nation derives from the inputs, divided in two pillars: (6) Knowledge Output and (7) Knowledge Diffusion.

Conclusion

India has a unique opportunity among its myriad challenges to become the innovation leader in the world. Cluster-based innovation should be leveraged upon as the focal point of competitiveness. The index is a great beginning to improve the environment of innovation in the country as it focuses on both the input and output components of the idea.

33. What is the economic and geostrategic significance of central Asia for India? Discuss the recent efforts to increase the outreach to central Asia.

Approach

Since question asking you to discuss so it necessitates a debate where reasoning is backed up with evidence to make a case for and against an argument and finally arriving at a conclusion. In simple terms an examiner expects one to discuss various perspectives and present a logical argument.

Introduction

The prospects of India-Central Asian relations is not a new one. Several facets of cultures, civilizations, and intellectual histories of the two regions suggest that they evolved not in isolation, but through reciprocal cultural enrichment. In modern times, however, the importance of Central Asia to India is not merely civilizational and historical, but also geostrategic and economic.

Body

Economic and geostrategic significance of central Asia for India –

- The geo-strategic location of the Central Asian Republics (CAR) has made this region extremely fundamental which has attracted the attention of various countries, including India.
- New energy sources from Central Asia will play an important role in the Indian energy strategy in the coming years. Peace and stability in CARs and Afghanistan seem to be the most significant factor for India's security.
- Central Asia is significant for India as it is well versed with energy resources as it has an abundance of oil and gas deposits. It contains vast hydrocarbon fields both on-shore and off-shore in the Caspian Sea which homes around 4 percent of the world's natural gas reserves and approximately 3 percent of oil reserves.
- Central Asia, located in the heart of Eurasia, forms a part of India's extended neighborhood. Its geographical proximity, strategic location, and historical linkages make it an important partner for India.

Recent efforts to increase the outreach to central Asia –

- A new impetus to India's connectivity project with Central Asia was added when India-Iran-Uzbekistan signed an agreement for the use of the strategically important chabahar port located in Iran.
- There is the Ashgabat agreement which India is part of and similarly, the North-South Corridor project along with the maritime connectivity project through the proposed "Chennai-Vladivostok" route (though it will connect Siberia through indo Pacific corridor.

- It can also be further connected to Kazakhstan because of land connectivity options as India is initiating major projects in recent years to give a strong boost to its 'Look North Policy'.
- The trilateral cooperation between New Delhi, Teheran, and Tashkent will have a geopolitical ramification on three counts. These are : a) It will facilitate India's growing connectivity with Central Asian countries which in turn will contribute to the fruition of trade and economic cooperation; b) over a couple of years other Central Asian countries may also join this endeavor. As has been reported, these Central Asian countries are also showing their keenness to become part of this Chabahar multilateral initiative for use of the port; c) studies suggest that Central Asian countries are also interested to reap maximum benefits (both geopolitically and geo-economically) from the emerging Indo-Pacific strategic corridor and are interested to use the Chabahar port as an entrepot.

Conclusion

Today Central Asia is the region that is considered a critical area in the foreign policy of the West, South, and East Asian countries. As India cements its position as one of the fastest-growing major economies of the world, its increased engagement with the Central Asian region can lead to mutually beneficial gains — both in economic and strategic terms.