

DAY 27

SUBJECT – INDIAN GEOGRAPHY

TOPICS:

FOCUS ON:

Indian Geography – Cropping (Agriculture)

- **Cropping Pattern:** Example: Rice, Wheat, Pulses, Sugarcane, Millets, Coffee, Tea etc.
- **Where(states) are they are grown?; Climatic conditions suitable for their growth**
- **Classification of crops– Kharif crops, Rabi and Zaid crops with examples.**
- **Irrigation – New irrigation methods like Micro-irrigation, Drip-irrigation their usage, advantages and disadvantages**
- **Farming – Shifting cultivation, Terrace cultivation, Crop Rotation, Mixed and Multiple farming – where are these methods practiced; advantages and disadvantages.**

PRELIMS MCQ's:

Q.1) Consider the below statements:

1. Paddy cultivation requires leveled fields.
2. Highly rarified air, low-pressure and low-temperature at high altitudes makes it conducive in keeping dairy cattle.
3. Orchards of coconut are found at low altitudes, preferably closer to the sea level.
4. Tea plantations perform well in the undulating topography.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 1, 2 and 4 only
- c) 1, 3 and 4 only
- d) 1, 2, 3 and 4

Q.1) Solution (c)

The agricultural patterns are strictly dependent on the geo-ecological conditions; terrain, topography, slope and altitude.

While paddy cultivation requires leveled fields, tea plantations perform well in the undulating topography in which water does not remain standing.

Orchards of coconut are found at low altitudes, preferably closer to the sea level, while the apple orchards in the tropical and sub-tropical conditions perform well above 1500 metres above sea level. Moreover, cultivation of crops is rarely done 3500 m above sea-level in the tropical and sub-tropical latitudes. The highly rarified air, low-pressure, low-temperature and shortage of oxygen at high altitudes are the serious impediments not only in the cultivation of crops, but also in keeping dairy cattle. Hence, statement (2) is wrong.

Q.2) Which of the statements given below is/are correct in regard to Jute, considered as the golden fibre of India?

1. The crop cannot be grown in both moisture stress and water stagnating condition.
2. Warm, humid weather and acidic soil result in good yeild.
3. Jute grows well on the new alluvial soils having higher silt content.
4. Jute is predominantly grown as a rainfed crop.

Choose the correct answer from the code given below:

- a) 2 and 3 only
- b) 1, 2 and 4 only
- c) 2, 3 and 4 only
- d) 1, 2, 3 and 4

Q.2) Solution (c)

Jute is considered as the golden fibre of India. It is the commercially available natural fibre which is utilized mostly as packaging material, nowadays facing a steep competition from cheap synthetics in packaging sector. Besides the traditional packaging sector, jute has been used in both textile and non-textile sectors in large and small industries.

Jute is eco-friendly, biodegradable and has much higher CO₂ assimilation rate which is creating an opportunity for the survival and growth of jute industry in the era of environmental concern. Global production of jute and allied fibres is around 3.0 million tonnes, 92.5% of which comes from India and Bangladesh alone. India ranks first in area and production of jute followed by Bangladesh and earns approximately Rs. 1400 crores/annum through export of jute goods mainly Jute diversified products (JDPs).

Climatic requirement and soil

Jute requires a warm and humid climate and can be grown within a temperature range of 24 to 37°C and a relative humidity of 57 to 97%. Jute crop thrives well with alternate rains and sunshine. The crop can grown in both moisture stress and water stagnating condition.

The amount of rainfall and its distribution have marked effects on the growth of crop and ultimately yield of fibre. In the ideal situation, 120-150 mm pre monsoon rain followed by a dry period of 30-40 days and 1200 to 1500 mm of precipitation over last 75-80 days is considered to be the most ambient condition for growth of jute crop.

Jute grows well on the new alluvial soils having higher silt content but can also grow on various other types of soil. In India, it is grown in mainly colluviums, red and lateritic, calcareous soils. Acidic to neutral soils are suitable for jute cultivation. Jute cultivation is mainly concentrated in the eastern and north eastern India.

Q.3) Which of the statements given below is/are correct?

1. All crops need moisture.
2. The excess of water in the soil leads to stunted growth of plants.
3. Soil drought is a condition in which the amount of water needed for transpiration and direct evaporation exceeds the amount of water available in the soil.

Choose the correct answer from the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 only
- d) 1, 2 and 3

Q.3) Solution (d)

All crops need moisture. Within wide temperature limits, moisture is more important than any other climatic factor in crop production. There are optimal moisture conditions for crop development just as there are optimal temperature conditions.

The excessive amount of water in the soil alters various chemical and biological processes, limiting the amount of oxygen and increasing the formation of compounds that are toxic to plant roots. Therefore, the excess of water in soil leads to stunted growth of plants.

Drought has devastating consequences on the crops, their yields and production. Soil drought has been described as a condition in which the amount of water needed for transpiration and direct evaporation exceeds the amount of water available in the soil. Drought damages the crops when plants are inadequately supplied with moisture from the soil.

Q.4) Consider the following crops of India:

1. Alfalfa
2. Fenugreek
3. Sorghum
4. Cowpea

Which of the above is/are used as pasture or forage crops/grasses?

- a) 1, 2, 3 and 4
- b) 1, 3 and 4 only
- c) 3 and 4 only
- d) 4 only

Q.4) Solution (a)

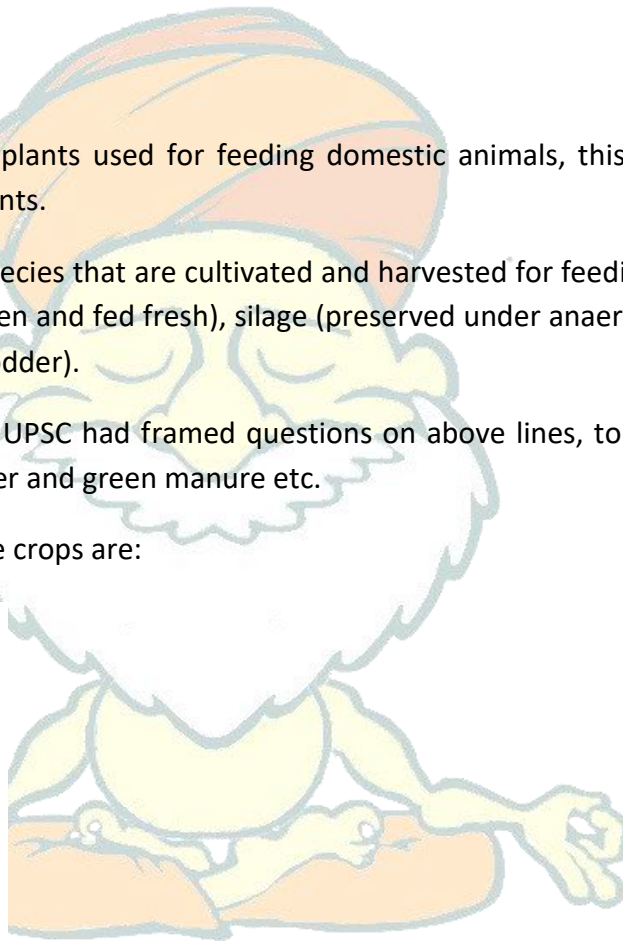
The term forage means the plants used for feeding domestic animals, this includes both fodder plants and pasture plants.

Fodder crops are the plant species that are cultivated and harvested for feeding the animals in the form of forage (cut green and fed fresh), silage (preserved under anaerobic condition) and hay (dehydrated green fodder).

In previous question papers, UPSC had framed questions on above lines, to identify which crops are used as pulse, fodder and green manure etc.

Some of the pasture or forage crops are:

- Berseem (Egyptian clover)
- Lucerne (Alfalfa)
- Senji (Sweet clover)
- Shaftal (Persian clover)
- Metha (Fenugreek)
- Lobia (Cowpea)
- Guar (Clusterbean)
- Rice bean
- Jai (Oat)
- Jau (Barley)
- Jowar/Chari (Sorghum)
- Bajra (Pearl millet)
- Makka (Maize)
- Makchari (Teosinte)
- Chara sarson
(Chinese cabbage)



Q.5) Consider the statements below in regard to “Four Water Concept”, which was recently in news:

1. It is an indigenous watershed development technology.
2. It is a low-cost technology that can increase recharge of groundwater by four times and provide thrice the benefit than conventional models.
3. The concept evolved by integrating the 'Four Waters' - rain water, soil moisture, ground water and surface water.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 only
- d) 1, 2 and 3

Q.5) Solution (d)

'Four Waters' concept was designed and developed by T. Hanumantha Rao, who passed away recently. He was a well-known irrigation engineering expert and was the brain behind the 'Four Waters' concept.

Link:

https://www.google.co.in/search?q=%E2%80%98Four+Waters%27+concept&num=100&source=lnms&tbn=nws&sa=X&ved=0ahUKEwiYy_2Vlb_TAhWKvY8KHxi6CWQQ_AUICygE&biw=1094&bih=547

Q.6) Consider the below statements about Wheat and choose the incorrect statement:

- a) It can be grown not only in the tropical and sub-tropical zones, but also in the temperate zone and the cold tracts of the far north, beyond even the 60 degree north altitude.
- b) It requires a fairly warm temperature and the period of heat should be comparatively long.
- c) Soils with a clay loam or loam texture, good structure and moderate water holding capacity are ideal for wheat cultivation.
- d) It can be cultivated from sea level to as high as 3300 meters.

Q.6) Solution (b)

Climate requirement:

Wheat is the main cereal crop in India. Wheat crop has wide adaptability. It can be grown not only in the tropical and sub-tropical zones, but also in the temperate zone and the cold tracts of the far north, beyond even the 60 degree north altitude.

Wheat can tolerate severe cold and snow and resume growth with the setting in of warm weather in spring. It can be cultivated from sea level to as high as 3300 meters. The best wheat are produced in areas favoured with cool, moist weather during the major portion of the growing period followed by dry, warm weather to enable the grain to ripen properly.

The optimum temperature range for ideal germination of wheat seed is 20-25 C though the seeds can germinate in the temperature range 3.5 to 35 C. Rains just after sowing hamper germination and encourage seedling blight. Areas with a warm and damp climate are not suited for wheat growing.

Wheat requires a fairly warm temperature, but the period of heat should not be long as grains can ripen quickly. When temperatures are high, too much energy is lost through the process of transpiration by the plants and the reduced residual energy results in poorer grain formation and lower yields. Wheat is mainly a rabi (winter) season crop in India. Hence, statement (d) is wrong.

Soil requirement:

Wheat is grown in a variety of soils of India. Soils with a clay loam or loam texture, good structure and moderate water holding capacity are ideal for wheat cultivation. Care should be taken to avoid very porous and excessively drained soils. Soil should be neutral in its reaction. Heavy soil with good drainage are suitable for wheat cultivation under dry conditions. These soils absorb and retain rain water well. Heavy soils with poor structure and poor drainage are not suitable as wheat is sensitive to water logging. Wheat can be successfully grown on lighter soils provided their water and nutrient holding capacity are improved.

Q.7) Pick up the incorrect statement from the following:

- a) In check method of irrigation, the field is divided into smaller compartments and water is admitted to each in turn
- b) In free flooding irrigation, water is admitted at one corner of a field and is allowed to spread over the entire area
- c) In furrow irrigation water is admitted between the rows of plants in the field
- d) None of these.

Q.7) Solution (d)

Refer this link for more details: <http://www.yourarticlelibrary.com/irrigation/top-3-methods-of-irrigation-with-diagram/60659/>

Q.8) The intensity of irrigation means –

- a) percentage of culturable commanded area to be irrigated annually
- b) percentage of gross commanded area to be irrigated annually
- c) percentage of the mean of culturable commanded area and the gross commanded area to be irrigated annually
- d) total depth of water supplied by the number of watering

Q.8) Solution (a)

Gross command area (GCA): This is defined as total area that can be irrigated by a canal system on the perception that unlimited quantity of water is available.

It is the total area that may theoretically be served by the irrigation system. But this may include inhibited areas, roads, ponds, uncultivable areas etc which would not be irrigated.

Culturable command area (CCA): This is the actually irrigated area within the GCA.

Cultivable Command Area is that part of Gross Command Area, which is fit for cultivating crops. So, cultivable area excludes forest and barren land from the Gross Command Area. What is left is uncultivable area.

Intensity of irrigation is defined as the percentage of the irrigation proposed to be irrigated annually. Usually the areas irrigated during each crop season (Rabi, Kharif, etc) is expressed as a percentage of the CCA which represents the intensity of irrigation for the crop season. By adding the intensities of irrigation for all crop seasons the yearly intensity of irrigation to be obtained.

Q.9) The prerequisite condition for the formation of artesian well are -

1. Layer of permeable rock lying between two impermeable rock layers so that water does not get escape.
2. The permeable rock should be exposed at the ground surface, so that rock can soak rainwater.
3. Structure of rock strata must be synclinal.

Select the correct code:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Q.9) Solution (d)

The geologic conditions necessary for an artesian well are an inclined aquifer sandwiched between impervious rock layers above and below that trap water in it. Water enters the exposed edge of the aquifer at a high elevation and percolates downward through interconnected pore spaces.

Q.10) With reference to the various multipurpose projects in India, which one among the following statements is not correct?

- a) Mayurakshi project is a joint venture of Odisha and West Bengal
- b) Machkund project is a joint venture of Andhra Pradesh and Odisha
- c) Parambikulam Aliyar project is a joint venture of Kerala and Tamil Nadu
- d) Chambal Valley project is a joint venture of Madhya Pradesh and Rajasthan

Q.10) Solution (a)

Mayurakshi Major Irrigation Project does not involve Odisha. Mayurakshi project is an irrigation project on the river Mayurakshi in West Bengal.

Q.11) The Tank irrigation is practised mainly in the peninsular region due to which of the following reasons?

1. The undulating relief and hard rocks make it difficult to dig canals and wells in peninsular region.
2. There is little percolation of rainwater due to hard rock structure and ground water is not available in large quantity.
3. The clustered nature of population and agricultural fields also favours tank irrigation there.
4. There are several streams which become torrential during rainy season and way to make best use of this water is to impound it by constructing bunds and building tanks.

Select the correct code:

- a) 1, 2 and 3 only
- b) 1, 2 and 4 only
- c) 2, 3 and 4 only
- d) 1, 2, 3 and 4

Q.11) Solution (b)

Mostly prevalent in uneven and relatively rocky plateau of peninsular India, tanks are a popular method of irrigation in the states of T.N., Karnataka, Andhra Pradesh and Maharashtra. The scattered nature (not clustered nature) of population and agricultural fields also favours tank irrigation.

Q.12) Consider the following pairs and select the correct answer:

- 1) Koteswar Dam/Tehri Reservoir : : Bhagirathi River
- 2) Ranjit Sagar Dam : : Chambal River
- 3) Daudhan dam : : Ken-Betwa River
- 4) Gobind Vallabh Pant Sagar : : Sutlej

Choose the appropriate code:

- a) 3 and 4 only
- b) 1 and 3 only
- c) 1, 3 and 4 only
- d) All of the above

Q.12) Solution (b)

Gobind Sagar is a man-made reservoir situated in Bilaspur District, Himachal Pradesh. It is formed by the Bhakra Dam. The reservoir is on the river Sutlej. The dam has been named in honour of Guru Gobind Singh, the tenth Sikh guru.

Gobind Vallabh Pant Sagar is a man-made lake situated in southern region of Sonbhadra named after Bharat Ratna Pandit Govind Ballabh Pant.

Ranjit Sagar Dam - The Ranjit Sagar Dam, also known as the Thein Dam, is part of a hydroelectric project constructed by the Government of Punjab on the Ravi River in the state of Punjab.

The **Ranapratap Sagar Dam** is built on the Chambal River at Rawatbhata in Rajasthan in India.

Q.13) Select the incorrect pair from the below:

- a) Cropping pattern : : proportion of area under different crops at a given point of time.
- b) Crop concentration : : variation in the density of any crop in a region at a given point of time.

- c) Cropping intensity : : raising of a number of crops during one agriculture year by expanding the net area under cultivation.
- d) Crop combination : : quantum or diversity of crops entering a region in a given period.

Q.13) Solution (c)

Cropping intensity refers to the raising of a number of crops from the same field during one agriculture year. This also implies higher productivity per unit of arable land during one agricultural year.

Q.14) Match List I with List II and select the correct answer using the code given below the Lists:

List I
(Textile industry)

List II
(Place)

- A. Woolen textile
- B. Cotton textile
- C. Silk textile
- D. Jute textile

- 1. Saalkuchi
- 2. Rishra
- 3. Ludhiana
- 4. Davangere

Code:

A – B – C – D

- a) 3 – 4 – 1 – 2
- b) 2 – 1 – 4 – 3
- c) 2 – 4 – 1 – 3
- d) 3 – 1 – 4 – 2

Q.14) Solution (a)

Self-explanatory.

Q.15) Which of the following methods is/are suitable for soil conservation in hilly region?

- 1. Terracing and contour bunding
- 2. Shifting cultivation
- 3. Contour ploughing

Select the correct answer using the code given below:

- a) 1 and 3 only
- b) 2 only
- c) 3 only
- d) 1, 2 and 3

Q.15) Solution (a)

Shifting cultivation or slash and burn techniques - clearance of forest causes deforestation which accelerates soil erosion.

Burning of Jhum land can be considered as one of the worst impact on climate because it gives scope in high rate of soil erosion and soil erosion structural stability by runoff and winds. The availability of water in the soil for the crop production also decreases which is vulnerable to climatic variation.

Q.16) Consider the following statements about Public Financial Management System (PFMS)

1. It is a web-based online software application developed and implemented by the Office of Controller General of Accounts (CGA)
2. PMFS-CBS (Core Banking System) is operational with Public Sector Banks, Regional Rural Banks, major private sector banks, Reserve Bank of India, India post and Cooperative Banks

Select the correct statements

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Q.16) Solution (c)

The Public Financial Management System (PFMS), earlier known as Central Plan Schemes Monitoring System (CPSMS), is a web-based online software application developed and implemented by the Office of Controller General of Accounts (CGA). PFMS was initially started during 2009 as a Central Sector Scheme of Planning Commission with the objective of tracking funds released under all Plan schemes of GoI, and real time reporting of expenditure at all levels of Programme implementation. Subsequently in the year 2013, the scope was enlarged to cover direct payment to beneficiaries under both Plan and non-Plan Schemes. The latest enhancement in the functionalities of PFMS commenced in late 2014, wherein it has been envisaged that digitization of accounts shall be achieved through PFMS and the additional functionalities would be built into PFMS in different stages. Beginning

with Pay & Accounts Offices payments, the O/o CGA did further value addition by proposing to bring in more financial activities of the Government of India in the ambit of the project.

The primary objective of PFMS is to facilitate sound Public Financial Management System for Government of India (GoI) by establishing an efficient fund flow system as well as a payment cum accounting network. PFMS provides various stakeholders with a real time, reliable and meaningful management information system and an effective decision support system, as part of the Digital India initiative of GoI

The enhanced application is envisaged to cater to all Plan and Non Plan payments of GoI, all tax and non-Tax receipts and also functions such as a comprehensive HRMIS and self-contained pension as well as GPF modules. Futuristically, all the existing standalone systems currently catering to various functions in Government of India will be subsumed in PFMS.

The biggest strength of PFMS is its integration with the Core banking system in the Country. As a result, PFMS has the unique capability to push online payments to almost every beneficiary/vendor. At present, PFMS interface is having interface in addition to the Core Banking System (CBS) of all Public Sector Banks, Regional Rural Banks, major private sector banks, Reserve Bank of India, India post and Cooperative Banks.

Source: <http://pib.nic.in/newsite/PrintRelease.aspx?relid=133619>

Q.17) Consider the following statements about Pradhan Mantri Fasal Bima Yojana

1. It does not cover localised risks like inundation and hailstorms
2. It has uniform premium 2% to be paid by farmers for all Kharif crops and 1.5% for all Rabi crops
3. It provides post-harvest coverage in coastal regions only

Select the correct statements

- a) 1 and 2
- b) Only 2
- c) 1 and 3
- d) All of the above

Q.17) Solution (b)

It is open to all farmers but NOT mandatory to anyone. It is optional for loanee as well as non-loanee farmers. It has so far lowest premium.

The existing premium rates vary between 2.5% and 3.5% for kharif crops and 1.5% for rabi crops—but the coverage was capped, meaning farmers could, at best, recover a fraction of their losses.

The farmers' premium has been kept at a maximum of 2 per cent for food grains and up to 5 per cent for annual commercial horticulture crops. For rabi crops, it is 1.5%. The balance premium will be paid by the government to provide full insured amount to the farmers. Since there is no upper cap on government subsidy, even if the balance premium is 90 percent, the government will bear it.

This scheme provides full coverage of insurance. While NAIS had full coverage, it was capped in the modified-NAIS scheme. It also covers the localized risks such as hailstorm, landslide, inundation etc. Earlier schemes did not cover inundation.

It provides post-harvest coverage. The NAIS did not cover while the modified NAIS covered only coastal regions.

Read More - <http://vikaspedia.in/agriculture/agri-insurance/pradhan-mantri-fasal-bima-vojana>

Q.18) Ajal Tyagi Committee is associated with

- a) Financial Data Management Centre
- b) Insolvency and Wind up Laws
- c) Multi Agency Approach in Agricultural Finance
- d) Securities Transactions of Banks & Financial Institutions

Q.18) Solution (a)

Ajay Tyagi committee constituted under the Department of Economic Affairs recommended the creation of statutory body called Financial Data Management Centre

Govt proposed setting up of financial data management centre for managing the repository of financial regulatory data to ensure stability in the economy.

FDMC Functions -

- To establish, operate and maintain the financial system database, collect financial regulatory data and provide access to it
- Standardize data from all financial sector regulators in a single database
- To provide analytical support to the FSDC on issues relating to financial stability

Source: <http://www.livemint.com/Politics/b6HeuDflyYcf2hFrkM6EVP/Govt-proposes-setting-up-financial-data-management-centre.html>

Q.19) Consider the following statements about 'Budapest Convention'

1. It was drawn up by the Council of Europe
2. Recently India has acceded to the convention

Select the correct statements

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Q.19) Solution (a)

The Convention on Cybercrime, also known as the Budapest Convention on Cybercrime or the Budapest Convention, is the first international treaty seeking to address Internet and computer crime by harmonizing national laws, improving investigative techniques, and increasing cooperation among nations. It was drawn up by the Council of Europe in Strasbourg, France, with the active participation of the Council of Europe's observer states Canada, Japan, South Africa and the United States.

The Convention is the first international treaty on crimes committed via the Internet and other computer networks, dealing particularly with infringements of copyright, computer-related fraud, child pornography, hate crimes, and violations of network security. It also contains a series of powers and procedures such as the search of computer networks and lawful interception.

The Convention was signed by Canada, Japan, the United States, and South Africa on 23 November 2001, in Budapest. As of July 2016, the non-Council of Europe states that have ratified the treaty are Australia, Canada, Dominican Republic, Israel, Japan, Mauritius, Panama, Sri Lanka, and the United States.

Central Government has established Indian Cyber Crime Coordination Center (I4C) at National Level to deal with all types of cybercrime. The I4C can be utilized for investigation of Cyber-Crime including Child Pornography and Online Abuse. One of the priorities of I4C will be to thwart attempts by international cyber gangs to penetrate Indian Networks and hack them. I4C will act a nodal point in fight against Cyber Crime and also as Early Warning System for Law Enforcement Agencies. It will also set up a platform for victims to lodge

Cyber Crime complaints. I4C will also provide all necessary assistance to CBI and State police on Cyber Crime related issue.

Q.20) Consider the following statements about 'Agni V'

1. It has been developed by the Defence Research and Development Organisation under the Integrated Guided Missile Development Program.
2. It is an intercontinental ballistic missile with a range of 5,500 to 5,800 km

Select the correct statements

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Q.20) Solution (c)

The Agni V is an intercontinental ballistic missile with a range of 5,500 to 5,800 km.

Agni V is nuclear capable, with a payload capacity of 1,500 kg of high-explosive warhead.

It has been developed by the Defence Research and Development Organisation under the Integrated Guided Missile Development Program.

It is the fifth variant in the series of medium to long range Agni missiles. Agni I, II, III have already been inducted for military use.

The successful induction of Agni V will give India long-range strike capability.

The missile has previously been tested in 2012, 2013 and 2015.

Once the Agni-V is inducted, India will join the super exclusive club of countries with ICBMs (missiles with a range of over 5,000-5,500km) alongside the US, Russia, China, France and the UK.

Source: <http://www.thehindu.com/news/national/Agni-V-successfully-soars-yet-again/article16944774.ece>

Q.21) Recently, a seaweed 'Sargassum zhangii' was in news. It is endemic to

- a) India

- b) China
- c) Bangladesh
- d) None of the above

Q.21) Solution (b)

It is endemic to China but now found in India. It could be through spores transported in ballast water or through natural dispersion.

Source: <http://www.thehindu.com/sci-tech/science/Invasive-algae-species-found-in-Tamil-Nadu/article16789620.ece>

Q.22) Consider the following statements

1. 'One China Policy' is the diplomatic acknowledgement of the Chinese position that there is only one China in the world and Taiwan is a part of that China
2. Hong Kong was returned to China in 1997 under "One Country, Two Systems"

Which of the following statements is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Q.22) Solution (c)

"One country, two systems" is a constitutional principle formulated by Deng Xiaoping, the Paramount Leader of the People's Republic of China (PRC), for the reunification of China during the early 1980s. He suggested that there would be only one China, but distinct Chinese regions such as Hong Kong and Macau could retain their own capitalist economic and political systems, while the rest of China uses the socialist system. Under the principle, each of the two regions could continue to have its own political system, legal, economic and financial affairs, including external relations with foreign countries.

Deng Xiaoping proposed to apply the principle to Hong Kong in the negotiation with the British Prime Minister, Margaret Thatcher over the future of Hong Kong when the lease of the New Territories (including New Kowloon) of Hong Kong to the United Kingdom was to expire in 1997. The same principle was proposed in talks with Portugal about Macau.

The principle is that, upon reunification, despite the practice of socialism in mainland China, both Hong Kong and Macau, which were colonies of the UK and Portugal respectively, can retain their established system under a high degree of autonomy for at least 50 years after reunification. What will happen after 2047 (Hong Kong) and 2049 (Macau) has never been publicly stated.

Source: http://www.business-standard.com/article/pti-stories/china-denies-money-diplomacy-to-enforce-one-china-policy-116122200812_1.htm

Q.23) The Department of Telecom (DoT) recently launched a portal called 'Tarang' for

- a) Mobile radiation
- b) Spectrum management
- c) INSAT Mobile Satellite Service (INSATMSS)
- d) None of the above

Q.23) Solution (a)

The Department of Telecom (DoT) is set to launch a portal — Tarang — with data on all mobile towers and transmitters across the country in a month that will allow a user to check the radiation compliance status.

Source: <http://www.thehindu.com/business/Industry/DoT-to-unveil-portal-on-mobile-radiation-in-a-month/article16895605.ece>

Q.24) Which of the following countries forms the part of Greater Mekong Sub region (GMS)?

- a) Vietnam
- b) Cambodia
- c) Myanmar
- d) All of the above

Q.24) Solution (d)

The Greater Mekong Subregion (GMS) is a natural economic area bound together by the Mekong River, covering 2.6 million square kilometers and a combined population of around 326 million.

The GMS countries are Cambodia, the People's Republic of China (PRC, specifically Yunnan Province and Guangxi Zhuang Autonomous Region), Lao People's Democratic Republic (Lao PDR), Myanmar, Thailand, and Viet Nam.

Source:

<http://www.livemint.com/Science/CG2CoO6hRmOLZ5EWwcOEQM/Rainbowheaded-snake-among-163-species-discovered-in-Greate.html>

Q.25) Kerala's State Board for Wildlife sought Union Government's approval for using deer antlers in Ayurveda drugs. Consider the following statements in this regard.

1. Deer antlers are mass of solid bone and are shed on regular intervals and regrow again
2. The Wildlife (Protection) Act, 1972, has included antler in the definition of wildlife trophy
3. All the three deer varieties found in Kerala, including spotted deer, sambar, and barking deer, shed their antlers annually and is listed by IUCN as 'Least Concern'

Which of the following statements is/are correct?

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Q.25) Solution (a)

Antlers

- Antlers are the extensions of the skull of the deer.
- Deer belongs to the Bovidae class but there are many distinctions which separates them from this class
- Deer antlers are mass of solid bone and are shed on regular intervals and regrow again, whereas in all other bovidae's the horns are permanent and are not shed.

Wildlife Trophy

- The Wildlife (Protection) Act, 1972, has included antler in the definition of wildlife trophy.
- A wildlife trophy is defined as the "whole or any part of any captive animal or wild animal".

- Wildlife and wildlife trophies are considered as owned by the government. The Act also prescribes imprisonment up to three years and fine of RS. 25,000 for offences involving wildlife trophies.

All the three deer varieties found in Kerala, including spotted deer (Least Concern), sambar (Vulnerable), and barking deer (Least Concern), shed their antlers annually.

Source: <http://www.thehindu.com/news/national/kerala/Antlers-could-end-up-in-medicines/article16952009.ece>

