Forum AS

10 PM Current Affairs Quiz Compilation

23rd May to 28th May, 2022

MODERN HISTORY

Q.1) Consider the following statements:

- 1. He was a polyglot.
- 2. Rabindranath Tagore called him a Bharatpathik.
- 3. He assisted Alexander Duff to set up the General Assembly's Institution, which later became the Scottish Church College.

Which of the following personalities is being referred to in the statements given above?

- a) Ishwar Chandra Vidyasagar
- b) Raja Ram Mohan Roy
- c) Swami Dayanand Saraswati
- d) Jyotiba Phule

Answer: B

- A polyglot, Roy knew Bengali and Persian, but also Arabic, Sanskrit, and later, English.
 His exposure to the literature and culture of each of these languages bred in him a
 scepticism towards religious dogmas and social strictures. For instance: practices
 such as Sati.
- Rabindranath Tagore called him a 'Bharatpathik' by which he meant to say that Rammohun combined in his person the underlying spirit of Indic civilisation, its spirit of pluralism, tolerance and a cosmic respect for all forms of life," says historian Amiya P Sen.
- In 1817, he collaborated with Scottish philanthropist David Hare to set up the **Hindu** College (now, Presidency University).
 - O He followed it up with the **Anglo-Hindu School** in 1822 and, in 1830, assisted Alexander Duff to set up the General Assembly's Institution, which later became the **Scottish Church College**.



Q.2) Which of the following are potential benefits of Universal Basic Income (UBI)?

- 1. Social justice
- 2. Efficiency in government spending.
- 3. Promotes Equity

Select the correct answer from the codes given below:

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

Answer: A

- **Social justice**: A society that fails to guarantee a decent minimum income to allcitizens will fail the test of justice. Hence UBI, by guaranteeing a minimum unconditional income, promotes social justice.
- Promotes efficiency in government spending and better targeting: UBI seeks to
 replace the existing myriad subsidies given by the government under its social welfare
 schemes, riddled with misallocation, leakagesand exclusion of the poor, with a universal
 direct cash transfer.
- UBI, if distributed among rich and poor alike, defeats the idea of equity and state welfare for the poor.

Source: Article

Q.3) Export of which of the following leads to virtual export of India's water?

- 1. Rice
- 2. Sugar
- 3. Buffalo meat

Select the correct answer from the codes given below:

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

Answer: D

• The maximum export of virtual water of India is mainly through rice, maize and buffalo meat



Q.4) With reference to Nuclear Fusion, consider the following statements:

- 1. It powers our Sun.
- 2. Fusion process causes no poisonous radiation.

Which of the statements given above is/are correct?

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

Answer: C

Both statements are correct.

- Nuclear Fusion reactions power the Sun and other stars. In a fusion reaction, two light nuclei merge to form a single heavier nucleus.
- Nuclear fusion is a potentially inexhaustible source, and it has no dangerous side effects.
- Fusion causes no poisonous radiation. There are no emissions of carbon compounds, or any other pollutants.

Q.5) With reference to Myopia, consider the following statements:

- 1. It is caused by the misalignment between the length of the eyeball and its power to refract light.
- 2. Prevalence of Myopia is high among rural children as compared to their urban counterparts.

Which of the statements given above is/are correct?

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

Answer: A

- Statement 1 is correct: Myopia is commonly found in children. As they grow and their bodies change, the length of the eyeball and its power to refract light do not always align, leading to vision that is blurry.
- **Statement 2 is incorrect**: As urbanisation increases, so does the burden of myopia. Myopia can be twice as high among urban children when compared to rural ones. One study found a higher prevalence among South Asian children in the United Kingdom compared to those living in rural India.



Q.6) With reference to Pit Viper, consider the following statements;

- 1. Some pit viper species lay eggs; others produce live young.
- 2. Russell's Viper and Saw-scaled Viper are two most venomous vipers species found in India.

Which of the statements given above is/are correct?

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

Answer: C

Both the statements are correct.

Recently, a new venomous green snake named Trimeresurus mayaae or Maya's Pit viper was discovered from Umroi Military station in Ri-Bhoi district of Meghalaya.

Pit vipers are found from deserts to rainforests. They may be terrestrial, arboreal, or aquatic. Some species lay eggs; others produce live young.

Russell's Viper and Saw-scaled Viper are two most venomous vipers species found in India and member of big four poisonous and deadliest snakes in India. These snake species are responsible for the majority of snake bites in India.

Source: The Hindu

Q.7) Consider the following kinds of organisms/factors:

- 1. Bat
- 2. Bee
- 3. Water

Which of the above is/are pollinating agent/agents?

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

Answer: D

Pollination is the transfer of pollen from the male part of a plant to the female part of a plant, thus, enabling fertilisation and production of seeds, most often by an animal or by wind. Pollinating agents are animals such as insects, birds, bees and bats; water; wind; and even

plants themselves, when self-pollination occurs within a closed flower.

Source: PIB



Q.8) With reference to Look Out Circular, consider the following statements;

- 1. The LOCs can be modified; deleted or withdrawn only at the request of the Initiating autority/individual.
- 2. The government has to serve a copy of the LOC to the affected person and provide a "post-decisional opportunity".

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: Bureau of Immigration (BOI) under the MHA is only the executing agency. They generate LOCs based on requests by different agencies. Similarly, the LOCs can be modified; deleted or withdrawn only at the request of the originator.

Statement 2 is incorrect: The Punjab and Haryana High Court asked to serve a copy of the LOC to the affected person, state the reasons for issuing the LOC "as soon as possible" and provide a "post-decisional opportunity". But the apex court has stayed the particular paragraph of the High Court order.

At present, no accused or subject of LOC can be provided with any opportunity of hearing before the issuance of the LOC since it defeats the purpose of LOC.

Source: The Hindu

Q.9) With reference to Polio, consider the following statements;

- 1. The virus is transmitted by person-to-person, spread only through the faecal-oral route.
- 2. For a country to be declared polio-free, the wild transmission of all three kinds has to be stopped.
- 3. India was declared polio-free in January 2014, after three years of zero cases.

Which of the statements given above is/are correct?

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

Answer: B



- **Statement 1 is incorrect**: The virus is transmitted by person-to-person, spread mainly through the faecal-oral route. However, the virus also spreads through a common medium such as contaminated water or food.
- **Statement 2 is correct**: There are three variants of the poliovirus, numbered 1 to 3. For a country to be declared polio-free, the wild transmission of all three kinds has to be stopped.
- **Statement 3 is correct**: India was declared polio-free in January 2014, after three years of zero cases. The last case due to wild poliovirus in the country was detected on January 13, 2011. The WHO on February 24, 2012, removed India from the list of countries with active endemic wild poliovirus transmission.

Source: Indian Express

Q.10) With reference to Deep Neural Networks (DNNs), consider the following statements;

- 1. DNN is a completely different concept from machine learning and AI.
- 2. DNNs combine a series of computer commands or algorithms that stimulate activity and brain structure.

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is incorrect: DNN is a subset of machine learning and comes under the broader umbrella of AI.

Statement 2 is correct: DNNs combine a series of computer commands or algorithms that stimulate activity and brain structure.

Source: The Hindu



SCHEMES AND PROGRAMMES

Q.1) With reference to Accredited Social Health Activists (ASHA) worker program, consider the following statements:

- 1. It is based on Chhattisgarh's successful Mitanin program.
- 2. ASHA workers are paid a fixed salary like government servants.

Which of the statements given above is/are correct?

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

Answer: A

- **Statement 1 is correct:** The ASHA programme was based on Chhattisgarh's successful Mitanin programme, in which a Community Worker looks after 50 households. The ASHA was to be a local resident, looking after 200 households.
- **Statement 2 is incorrect**: ASHA workers get performance-based payments, not a fixed salary like government servants

Source: Article

Q.2) With reference to the Permanent Court of Arbitration, consider the following statements:

- 1. It has an observer status with the UN.
- 2. It is the only principal organ not located in New York.
- 3. Its rulings are binding in nature

Select the correct answer from the codes given below:

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

Answer: C

- Statement 1 is correct: PCA has an observer status with United Nations.
- **Statement 2 is incorrect:** International Court of Justice (ICJ) is the only principal organ of UN not located in New York.
- **Statement 3 is correct:** Its rulings are binding in nature although it has no power to enforce them.





Q.3) Which of the following vaccines are provided under the Universal Vaccination Programme of Government of India?

- 1. Bacillus Calmette-Guerin vaccine
- 2. Hepatitis-B vaccine
- 3. Pneumococcal Conjugate Vaccine

Select the correct answer using the code given below:

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

Answer: D

- All of the above are covered under the Universal Vaccination Programme. Immunization Programme in India was introduced in 1978 as 'Expanded Programme of Immunization' (EPI) by the Ministry of Health and Family Welfare, Government of India. In 1985, the programme was modified as 'Universal Immunization Programme' (UIP) to be implemented in phased manner to cover all districts in the country by 1989-90 with the one of largest health programme in the world.
- Vaccines provided under UIP: BCG vaccine; Pentavalent Vaccine (covering Diphtheria, Tetanus, Pertusis, Haemophilis influenza type b infection and Hepatitis B), Rotavirus Vaccine, Pneumococcal Conjugate Vaccine, Measles vaccine, Japanese encephalitis, DPT booster (a combined vaccine; it protects children from Diphtheria, Tetanus and Pertussis), Tetanus and adult diphtheria (Td) vaccine.

Q.4) Trimeresurus mayaae sometimes seen in news is a species of?

- a) Snake
- b) Bat
- c) Frog
- d) Spider

Answer: A

- Meghalaya, the land of the mythical evil spirit that takes the form of a giant serpent called U Thlen, has yielded a new-to-science, venomous green snake.
- Recorded simultaneously in Mizoram, the snake has been named Maya's Pit Viper after the deceased mother of an Army officer, one of seven authors of a study on it. The name





of the pit viper, recognised as **Trimeresurus mayaae**, is also believed to allude to maya,

meaning the supernatural powers, or the illusion related to local legends.

Source: Article

Q.5) With reference to the legislative powers of the Parliament, consider the following

statements:

1. Parliament has the power to legislate on treaties.

2. The power of the Parliament to implement treaties by enacting domestic laws extends to

topics that are part of the state list.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: C

In the Constitution, entry 14 of the Union list contains the following item — "entering into

treaties and agreements with foreign countries and implementing of treaties, agreements and

conventions with foreign countries".

According to Article 246, Parliament has legislative competence on all matters given in the Union

list.

Thus, Parliament has the power to legislate on treaties.

This power includes:

- deciding how India will ratify treaties and thus assume international law obligations.

- Parliament's competence to give effect to treaties within the domestic legal regime by enacting

laws.

Article 253 elucidates that the power of Parliament to implement treaties by enacting

domestic laws also extends to topics that are part of the state list.

Q.6) With reference to vitamin D, consider the following statements;

- 1. Vitamin D is needed for a process known as calcium homeostasis which is the maintenance of a constant concentration of calcium ions in the body.
- 2. Vitamin D can be obtained only from the exposure of humans to ultraviolet B (UVB) light.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: Vitamin D is needed for a process known as calcium homeostasis which is the maintenance of a constant concentration of calcium ions in the body.

Statement 2 is incorrect: Provitamin D3 is a precursor from which humans can make vitamin D. The chemical name of Provitamin D3 is 7-dehydrocholesterol, or 7-DHC. Humans can synthesise vitamin D from 7-DHC when they are exposed to ultraviolet B (UVB) light.

Vitamin D3 is also present in fish and dairy products.

Source: The Hindu

Q.7) With reference to People's Biodiversity Register (PBR), consider the following statements;

- 1. A PBR comprehensively documents traditional knowledge of local biological resources..
- 2. Delhi became the first major metropolitan city in India to prepare PBR.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: The People's Biodiversity Register (PBR) entails complete documentation of biodiversity such as flora, fauna medicinal sources, land use and human activities etc. within a particular place such as a city.

A PBR comprehensively documents traditional knowledge of local biological resources.

Statement 2 is incorrect: Kolkata became the first major metropolitan city in India to prepare a PBR. Chandigarh and Indore are other important cities that have prepared the document.

Source: DTE



Q.8) Which of the following is/are the ways to address 'invisible' hunger?

- 1. Providing micronutrient supplements in the form of tablets.
- 2. Food fortification.
- 3. Genetically modifying plants to produce biofortified leaves and fruit.

Select the correct answer from the codes given below;

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

Answer: D

The term 'invisible' hunger is used for diseases caused by a deficiency of vitamins and minerals in the diet. This is a major problem in developing countries. Some of the methods to alleviate micronutrient hunger are a) Providing micronutrient supplements in the form of tablets or capsules, b) Fortify food products such as flour or salt by enhancing micronutrient in them, and c) genetically modifying plants to produce biofortified leaves and fruit.

Source: The Hindu

Q.9) Which of the following countries is/are the members of Indo-Pacific Economic Framework for Prosperity (IPEF)?

- 1. The United States
- 2. Myanmar
- 3. Vietnam
- 4. China
- 5. India

Select the correct answer from the codes given below;

- a) 1, 2 and 3 only
- b) 2 and 4 only
- c) 1, 3 and 5 only
- d) 1, 2, 3 and 5 only

Answer: C

The US President has launched the Indo-Pacific Economic Framework for Prosperity (IPEF). The grouping includes seven out of 10 members of the Association of South-East Asian Nations (ASEAN), all four Quad countries, and New Zealand represents about 40% of global GDP.



Three ASEAN countries considered closer to China — Myanmar, Cambodia and Laos — are not members of the IPEF, however.

Source: The Hindu

Q.10) With reference to the Inter-State Council, consider the following statements;

- 1. It is a statutory body formed by the Inter-State Council Act.
- 2. The standing committee of the council is headed by Union Home Minister.

Which of the statements given above is/are correct?

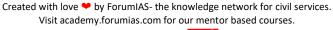
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: B

Statement 1 is incorrect: Article 263 of the Constitution of India provides for the establishment of an Inter-State Council. It is a constitutional body that has representatives of the Union government as well as chief ministers of states.

Statement 2 is correct: A standing committee of the council was set up in 1996 for continuous consultation and processing of matters for the consideration of the council. The chairman of this standing committee is Union Home Minister.

Source: The Hindu





PRELIMS

Q.1) With reference to Registration of Births and Deaths Act 1969, consider the following statements:

- 1. Birth under this act includes both live and still birth.
- 2. After 21 days, birth/death can be registered under the Act with an order of a First-Class Magistrate.

Which of the statements given above is/are correct?

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

Answer: C

Both statements are correct.

- Statement 1 is correct: Under the act "birth" means live-birth or still-birth.
- Statement 2 is correct: A birth/death should be registered within 21 days. After 21 days, birth/death can be registered under the RBD Act with an order of a First-Class Magistrate issued after verifying the facts about the birth or death.

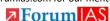
Source: Article

Q.2) Daulat Singh Kothari commission sometimes seen in news related to?

- a) Development of education in India
- b) Preventing stubble burning
- c) Setting parameters for Loan Restructuring
- d) Formulating food policy in the long term

Answer: A

• Kothari commission was established to examine all aspects of the educational sector in India



Q.3) With reference to Public Distribution System (PDS) in India, consider the following statements:

- 1. The supervision of the Fair Price Shops (FPSs) under the PDS rests with the Central government.
- 2. One of the objectives of the PDS is to control the price rise of essential commodities in the open market.

Which of the statements given above is/are correct?

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

Answer: D

- **Statement 1 is incorrect:** The supervision of FPSs under the PDS is done by the state government.
- **Statement 2 is correct:** Apart from protecting the low-income groups by guaranteeing minimum quantity of food grains at affordable price, and controlling the price rise of essential commodities in the open market.

Source: Article

Q.4) Which of the following factors is/are responsible for land degradation in India?

- 1. Soil salinity in agricultural fields
- 2. Practice of Shifting cultivation
- 3. Wind erosion in the areas that have lost their vegetative cover

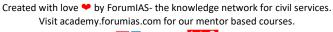
Select the correct answer from the codes given below:

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

Answer: D

Among the major factors responsible for land degradation, the most significant ones are -

- soil salinity and water-logging in agricultural fields due to flawed agronomic practices, and
- water and wind erosion in the areas that have lost their vegetative cover.
- In the Northeast, a hilly region, the continuation of the **practice of shifting cultivation**, also known as slash-and-burn agriculture or jhum, is the main cause of land degradation. Under this





system, the farmers clear the forested land, cultivate it for a few years, and then move to another spot, leaving the old patch **barren**.

Source: Article

Q.5) Consider the following statements:

- 1. Around half of the installed renewable energy in India, comes from the states of Gujarat and Madhya Pradesh.
- 2. In India, Only Small Hydro power projects have renewable energy status.

Which of the statements given above is/are correct?

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

Answer: D

• Tamil Nadu, Karnataka and Gujarat are the top three status in terms of installed renewable energy capacity. Large hydel projects also have 'renewable energy status'.

Q.6) With reference to Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act, consider the following statements;

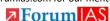
- 1. According to the Act, construction is prohibited within a 100-metre periphery of a protected area.
- 2. Permission from the National Monument Authority is required if construction has to be undertaken in the regulated or prohibited area.
- 3. The term "construction" in the Act include the construction of public toilets, urinals, and "similar conveniences".

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: As per the Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act (AMSAR), construction is prohibited within a 100-metre periphery of a protected area.



Statement 2 is correct: The area extending to 200 metres around the monument in all directions is called a regulated area. Permission from the National Monuments Authority (NMA) is required if construction has to be undertaken in the regulated or prohibited area.

Statement 3 is incorrect: The term "construction" as defined in the AMSAR Act does not include the construction of public toilets, urinals, and "similar conveniences".

Source: The Hindu

Q.7) With reference to the iRASTE project, consider the following statements;

- 1. It is a unique AI approach that uses the predictive power of AI to identify risks on the road and collision alert system to improve road safety.
- 2. The project is being implemented in Nagpur.

Which of the statements given above is/are correct?

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

Answer: C

Statement 1 is correct: It is a unique AI approach that uses the predictive power of AI to identify risks on the road and collision alert system to improve road safety.

Statement 2 is correct: The project is being implemented in Nagpur. While the initial rollout of iRASTE is in Nagpur, the eventual goal is to replicate the solution in other cities. Currently, talks are on with the Telangana government to adopt the technology in a fleet of buses that ply on highways.

Source: PIB

Q.8) With reference to the Swachh Survekshan, consider the following statements;

- 1. So far, the Swachh Survekshan surveys are limited to cities only and not for rural areas.
- 2. The Swachh Survekshan 2023 is designed with the theme of 'Waste to Wealth' as its driving philosophy.

Which of the statements given above is/are correct?

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

Answer: B



Statement 1 is incorrect:

Ministry of Housing and Urban Affairs (MoHUA) along with its implementation partner Quality Council of India (QCI) is conducting the surveys in Urban areas.

Ministry of Jal Shakti has launched Swachh Survekshan Gramin in 2021. As part of the survey, 17,475 villages in 698 Districts across the country will be covered.

Statement 2 is correct: The Swachh Survekshan(SS) 2023 is designed with the theme of 'Waste to Wealth' as its driving philosophy.

SS 2023 is curated towards achieving circularity in waste management. The survey would give priority to the principle of 3Rs – Reduce, Recycle and Reuse.

Source: PIB

Q.9) Which of the following statement explains the term "Front Running"?

- a) Domination of few private players in production of goods
- b) Scientific trail of medicines before rolling out the medicine for human consumption
- c) Advancement in socio-economic indicators by developed countries in comparison to developing and Least Developed Countries
- d) A dubious market practice in which a dealer, trader or employee places big orders before the official trade to get profits.

Answer: D

Front-running is a dubious market practice in which a dealer, trader or employee gets wind of a big order for buying or selling shares that will be placed by a fund or big investor and get 'in front' of the trade.

Large orders usually move a stock's price. By buying shares just before the big order hits the market and selling them once the price moves up, the front-runner pockets illegal gains from his advanced knowledge.

Source: The Business Line



Q.10) With reference to sinkholes, consider the following statements;

- 1. Sinkholes are depressions formed in the ground when layers of the Earth's surface start collapsing into caverns.
- 2. Sinkholes are formed only due to natural process.

Which of the statements given above is/are correct?

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

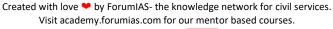
Answer: A

Statement 1 is correct: Sinkholes are depressions formed in the ground when layers of the Earth's surface start collapsing into caverns.

Statement 2 is incorrect: Sinkholes can be formed due to natural processes or human activity. **Natural process**: Typically, sinkholes form in areas of "karst" terrains, where the rock below the surface of the Earth can be easily dissolved by groundwater.

Human activities: This can happen due to broken land drains, water mains and sewerage pipes, and diversion of surface water, among other reasons.

Source: Indian Express





POLITY AND GOVERNANCE

Q.1) With reference to the National Human Right Commission (NHRC), consider the following statements:

- 1. It has the powers of criminal court and can grant interim relief.
- 2. Its recommendations are binding on the government

Which of the statements given above is/are correct?

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

Answer: D

- **Statement 1 is incorrect**: It has the powers of civil court and can grant interim relief. It also has the authority to recommend payment of compensation or damages.
- Statement 2 is incorrect: NHRC can only make recommendations, without the power to enforce decisions.

Q.2) Which of the following is/are consists of the Economic Cost of food-grains to Food Corporation of India (FCI)?

- 1. Pooled cost of grains
- 2. Procurement incidentals
- 3. Cost of distribution

Select the correct answer using the code given below:

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

Answer: D

• The Economic Cost of food-grains consists of three components, namely, pooled cost of grains, procurement incidentals and the cost of distribution. The pooled cost of food grains is the weighted MSP of the stock of food-grains available with FCI at the time of calculating the economic cost.



Q.3) With reference to Folic Acid, consider the following statements:

- 1. It is water-soluble.
- 2. Deficiency of folic acid and Vitamin B12 can cause anemia.

Which of the statements given above is/are correct?

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

Answer: C

- **Statement 1 is correct**: Folic acid is water-soluble
- Statement 2 is correct: A diet which does not contain enough iron, folic acid or vitamin B12 is a common cause of anemia.

Source: Article

Q.4) Arrange the following countries in the decreasing order of their export of carbon emissions-embodied products:

- a) USA
- b) Russia
- c) China

Select the correct answer from the codes given below:

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

Answer: D

• China is the largest exporter of carbon emissions-embodied products, followed by the U.S., Russia and India.



Q.5) With reference to the National Supercomputing Mission (NSM), consider the following statements:

- 1. Supercomputers under the mission will also be networked on the National Supercomputing grid over the National Knowledge Network (NKN).
- 2. Param Shakti was the first indigenously assembled supercomputer in India.

Which of the statements given above is/are correct?

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

Answer: A

- **Statement 1 is correct**: These supercomputers will also be networked on the National Supercomputing grid over the National Knowledge Network (NKN). The NKN connects academic institutions and R&D labs over a high-speed network.
- **Statement 2 is incorrect:** Param Shivay is the first supercomputer assembled indigenously.

Source: Article

Q.6) With reference to Pangong Tso lake, consider the following statements;

- 1. It is a landlocked lake located in India-China Border.
- 2. China has around 45 km of Pangong Tso under its control, while India has more than two-thirds of it.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: It is a landlocked lake located in India-China Border.

Statement 2 is incorrect: India has around 45 km of Pangong Tso under its control, while China has more than two-thirds.

Source: <u>Indian Express</u>



Q.7) With reference to the National Achievement Survey(NAS), consider the following

statements;

1. The survey covered students of Class 3rd, 5th, 8th and 10th standard from government,

government-aided and private schools.

2. The survey was conducted via an OMR (optical mark recognition)-based achievement test

comprising multiple-choice questions.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: C

The survey covered students of Class 3rd, 5th, 8th and 10th standard. It covered government,

government-aided and private schools.

The survey was conducted via an OMR (optical mark recognition)-based achievement test comprising multiple-choice questions along with questionnaires in 22 different languages. This

nationwide survey was administered by the Central Board of Secondary Education on one single

day at the same time.

Source: PIB

Q.8) Exercise 'Bongosagar' is a bilateral maritime exercise between India and which of the

following country?

a) Nepal

b) Sri Lanka

c) Bangladesh

d) Myanmar

Answer: C

Recently, the third edition of Indian Navy (IN) – Bangladesh Navy (BN) Bilateral Exercise

'Bongosagar' commenced at Port Mongla, Bangladesh.

Its first edition was held in 2019. The present one is the third edition of Bonosagar.

Source: PIB

Q.9) With reference to Prithviraj Chauhan, consider the following statements;

- 1. He belonged to Chahamana dynasty of Ajmer.
- 2. He defeated majority of the Chalukyas of Gujarat.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: He belonged to the Chauhan or Chahamana dynasty of Ajmer which emerged after the decline of the Pratihara empire in the 11th century AD.

Statement 2 is incorrect: He ascended the throne in 1177 or 1178, and very quickly expanded his kingdom, defeating many of the smaller Rajput states. He struggled against the Chalukyas of Gujarat and was forced to look towards the Ganga valley instead.

Source: <u>Indian Express</u>

Q.10) With reference to Qutub Minar complex, consider the following statements;

- 1. It was completed much later by Firoz Shah Tughlaq.
- 2. Quwwat ul-Islam Mosque and Alai Darwaza gate are located within the complex.
- 3. Tombs of Firoz Shah Tughlaq and Ibrahim Lodi are located within the complex.

Which of the statements given above is/are correct?

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

Answer: A

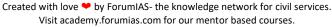
Statement 1 is **correct**: The Construction of the Qutub Minar "victory tower" in the complex was begun by Qutb-ud-din Aibak. He later became the first Sultan of Delhi of the Mamluk dynasty.

It was continued by his successor Iltutmish, and finally completed much later by Firoz Shah Tughlaq, a Sultan of Delhi from the Tughlaq dynasty (1320-1412) in 1368 AD.

Statement 2 is correct: Famous structures within Qutub Minar complex include Qutb Minar, the Quwwat ul-Islam Mosque, Alai Darwaza gate, the Alai Minar and the Iron pillar.

Statement 3 is incorrect: Only tombs of Iltutmish, Alauddin Khalji and Imam Zamin are located within the Qutub Complex.

Source: The Hindu





ECONOMY

Q.1) Which of the following statements correctly defines the endogenous growth model?

- a) Investment in human capital, innovation, and knowledge are significant contributors to economic growth.
- b) Real gross domestic product (GDP) per person will perpetually increase because of people's pursuit of profits.
- c) Every economy has a steady state GDP and any deviation off of that steady state is temporary and will eventually return.
- d) The output per worker (growth per unit of labor) increases with the output per capita (growth per unit of capital) but at a decreasing rate.

Answer: A

• The endogenous growth theory is the concept that economic growth is due to factors that are internal to the economy and not because of external ones. It holds that investment in human capital, innovation, and knowledge are significant contributors to economic growth.

Source: Article

Q.2) Which of the following is/are matched correctly?

Hydrogen color - Method of production

1. Blue Steam Methane Reforming (SMR)

Turquoise Pyrolysis
 Green Electrolysis

Select the correct answer from the codes given below:

a) 1 and 2 only

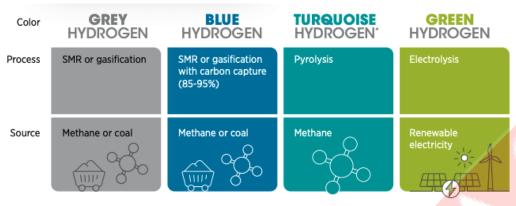
b) 2 and 3 only

c) 1 and 3 only

d) 1, 2 and 3

Answer: D





Note: SMR = steam methane reforming.

Q.3) Which among the following is/are cooling aerosols?

- a) Nitrates
- b) Black Carbon
- c) Sulfates

Select the correct answer from the codes given below:

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

Answer: C

- Black carbon absorbs solar radiation and has a warming effect.
- Cooling aerosols include primarily sulfates, nitrates and organic carbon, according to other studies.

Source: Article

Q.4) With reference to the Antimatter, consider the following statements:

- 1. It was created in equal amounts along with matter after the Big Bang
- 2. Anti-matter particles can be created in a lab

Which of the above statements is/are correct?

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

Answer: C

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^{*} Turquoise hydrogen is an emerging decarbonisation option.

- **Statement 1 is correct**: Antimatter is the opposite of normal matter. More specifically, the sub-atomic particles of antimatter have properties opposite those of normal matter. For example, the electrical charge of antimatter particles is reversed. The creation of antimatter happened along with matter after the Big Bang
- **Statement 2 is correct:** In 2018, physicists at CERN, the massive underground particle research lab in Europe, revealed that they created an antimatter particle in the lab as a part of the ALPHA experiment. Scientists created an atom of 'antihydrogen'.

Q.5) With reference to compulsory licensing (CL), consider the following statements:

- 1. The TRIPS Agreement of WTO does not have any provision related to compulsory licensing.
- 2. Despite having a provision, India so far never issued a compulsory license for drugs.

Which of the above statements is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) None of the above

Answer: D

Both statements are incorrect.

- Articles 31(f) of the TRIPS Agreement provides for a compulsory license. Under this, the
 government can issue a license to make use of a patent without the patent holder's
 consent.
- But, this drug can be used only for the supply of the domestic market. So the government cannot export the patented product.
 - For example, In 2012, India permitted generic production of Bayer Corporation's Nexavar. This drug was used for the treatment of Liver and Kidney cancer.
 - Similarly, South Africa permitted the generic production of Anti-Retroviral Drugs used in HIV treatment.





Q.6) With reference to the International Labour Organization, consider the following statements:

- 1. ILO received the Nobel Peace Prize for its contribution to setting labour standards, developing policies and devising programmes.
- 2. It was established by the Treaty of London as an affiliated agency.

Which of the statements given above is/are correct?

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

Answer: A

- **Statement 1 is correct**: ILO received the Nobel Peace Prize for its contribution to set labour standards, develop policies and devising programmes.
- Statement 2 is incorrect: It was established in 1919 by the Treaty of Versailles as an affiliated agency of the League of Nations.

Source: The Hindu

Q.7) With reference to Army Aviation Corps, consider the following statements;

- 1. Army Aviation Corps is the component of the Indian Army which was established after Kargil War.
- 2. The Army Aviation Corps of the Indian Army primarily carries out the evacuation of the injured troops during operations or health emergencies in the high-altitude areas.

Which of the statements given above is/are correct?

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

Answer: B

- **Statement 1 is incorrect**: Army Aviation Corps is the component of the Indian Army which was established on 1st November, 1986. It was inducted into 'Operation Pawan' which was a crucial test for the newly formed corps.
- **Statement 2 is correct**: The Army Aviation Corps of the Indian Army primarily carries out the evacuation of the injured troops during operations or health emergencies in the high-altitude areas.

Source: Indian Express



Q.8) With reference to CO2 and non-CO2 pollutants, consider the following statements;

- 1. The contribution of CO2 gases to global heating is less compares to non-CO2 pollutants.
- 2. Non-CO2 pollutants include methane, black carbon, hydrofluorocarbons (HFC), tropospheric ozone and nitrous oxide.

Which of the statements given above is/are correct?

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

Answer: B

- **Statement 1 is incorrect**: The contribution of CO2 gases to global heating is more compares to non-CO2 pollutants. IPCC Working Group reports have shown that the contribution of CO2 and non-CO2 greenhouse gases to global heating was 52-57% and 43-48%, respectively.
- **Statement 2 is correct**: Non-CO2 pollutants include methane, black carbon, hydrofluorocarbons (HFC), tropospheric ozone and nitrous oxide.

Source: DTE

Q.9) Which of the following is/are the benefits of Digital India BHASHINI platform?

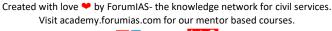
- 1. Promote Internet contents in Indian Languages
- 2. It is a step to realize the goal of Digital Government.
- 3. Opportunity to startups for developing innovative solutions and products.

Select the correct answer from the codes given below:

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

Answer: D

- A Bhashini Platform will make Artificial Intelligence (AI) and Natural Language Processing (NLP) resources available to MSMEs, Startups and Individual Innovators in the public domain.
- The platform aims to empower Indian citizens by connecting them to the Digital Initiatives of the country in their own language thereby leading to digital inclusion.





- It further aims to increase the content in Indian languages on the Internet substantially in the domains of public interest, particularly, governance-and-policy, science & technology, etc.
- Hence the platform will provide benefits such as,
- **Content in Indian Languages**: The platform will encourage citizens to use the Internet in their own language.
- **Revolutionise the startup ecosystem**: The Multi-linguality of the platform presents a major opportunity to startups for developing innovative solutions and products that can cater to all Indian citizens irrespective of the language.
- **Increase the reach of governance**: As public websites become multilingual and interactive, and the reach of public welfare schemes will also increase.

Source: PIB

Q.10) Project NIGAH, which was seen in news recently, is related to which of the following?

- a) It is a project that aims to create adequate infrastructure in border regions to facilitate movement of Indian Troops.
- b) It is an initiative to facilitate mathematical knowledge among school students in tribal areas.
- c) It is an initiative to track containers by using ICTM (ICD Container Tracking Module).
- d) It is a project to create a national database on health workers.

Answer: C

- Project NIGAH is an initiative to track containers by using ICTM (ICD Container Tracking Module) which will help in better visibility of the container movement inside the Inland Container Depots (ICDs).
- Significance: It will help Customs to expedite long standing containers and monitor timely clearances, thereby enhancing Ease of Doing Business along with ensuring lead preventive checks.

Source: PIB



GEOGRAPHY

Q.1) Bagmati river is the tributary of which of the following rivers?

- a) Narmada
- b) Kosi
- c) Ganga
- d) Brahmaputra

Answer: B

- The river Kosi is formed by the confluence of three streams namely the Sun Kosi, the Arun Kosi and Tamur Kosi all taking their origin in the Himalayan region of Nepal and Tibet.
- Apart from these three streams which form the Kosi, a number of tributaries join the river in course of its flows through the plains from the right bank. These are Trijunga, Bhutahi Balan, Kamla Balan and Bagmati.

Source: Article

Q.2) Which of the following statements correctly describes avulsion?

- a) The rapid abandonment of a river channel and the formation of a new river channel.
- b) A shift in the weather pattern of a place due to anthropogenic factors.
- c) Weathering of rocks over a period of time caused by the wind.
- d) A fairly rapid mass movement that usually occurs after heavy rainfall.

Answer: D

• Avulsion is the natural process by which river flow diverts out of an established river channel into a new permanent course on the adjacent floodplain.

Source: Article

Q.3) Prosoponoides biflectogynus sometimes seen in news is a species of?

- a) Frog
- b) Bat
- c) Spider
- d) Lizard

Answer: C

 Money spiders, commonly found in European meadows, have been reported for the first time in the country from the Muthanga range of the Wayanad Wildlife Sanctuary.



Researchers of Christ College, Irinjalakuda, Thrissur, have discovered the spider that belongs to the family of dwarf spiders (Linyphiidae) under the genus Prosoponoides. It has been given the name Prosoponoides biflectogynus.

Source: Article

Q.4) With reference to Natural Gas, consider the following statements:

- 1. The largest component of natural gas is methane.
- 2. The volume of natural gas in its liquid state is smaller than its volume in its gaseous state.

Which of the statements given above is/are correct?

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

Answer: C

Both statements are correct.

- Statement 1 is correct: Natural gas is a fossil energy source that formed deep beneath the earth's surface. Natural gas contains different compounds. The largest component of natural gas is methane, a compound with one carbon atom and four hydrogen atoms (CH4)
- Statement 2 is correct: The volume of natural gas in its liquid state is about 600 times smaller than its volume in its gaseous state. This process makes it possible to transport natural gas to places where pipelines do not reach.

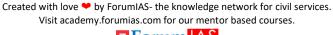
Q.5) Which of the following are the Green House Gases?

- a) Carbon dioxide, Ozone and Nitrogen
- b) Water Vapor, Methane and Nitrous oxide
- c) Ozone, carbon Monoxide and Sulphur Oxide
- d) Methane, Ozone and Nitrogen dioxide

Answer: B

The Primary GHGs are: Water Vapour, Carbon dioxide, Methane, Nitrous oxide and Ozone Other GHGs are carbon monoxide, fluorinated gases, chlorofluorocarbons (CFCs), black carbon (soot), and brown carbon.

Among the greenhouse gases, only water vapour can absorb both incoming (UV) and outgoing (infrared) radiation.





Q.6) With reference to Lavender cultivation, consider the following statements;

- 1. Lavender cultivation is promoted under the National Mission for Sustainable Agriculture.
- 2. Lavender water, which separates from lavender oil, is used to make incense sticks.

Which of the statements given above is/are correct?

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

Answer: B

- Statement 1 is incorrect: 'Lavender Cultivation' is getting promoted under CSIR-IIIM's Aroma Mission.
- **Statement 2 is correct**: Lavender water, which separates from lavender oil, is used to make incense sticks. Hydrosol is formed after distillation from the flowers. This is used to make soaps and room fresheners.

Source: PIB

Q.7) Which of the following is/are advantages of coal gasification?

- 1. Used to produce fertilisers.
- 2. Use as fuel in the transport sector.
- 3. Less water intensive than other forms of energy production.

Select the correct answer from the codes given below;

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

Answer: A

Statement 1 is correct: Used in a variety of applications such as in the production of electricity and making chemical products such as fertilisers.

Statement 2 is correct: Methane or natural gas extracted from coal gasification can be converted into LNG for direct use as fuel in the transport sector.

Statement 3 is incorrect: Coal gasification is one of the more water-intensive forms of energy production. There are concerns about water contamination, land subsidence and disposing of wastewater safely.

Source: PIB



Q.8) With reference to Sela macaque, consider the following statement;

- 1. It is a newly discovered macaque located in Western Ghats.
- 2. Sela macaque is a major cause of crop loss.

Which of the statements given above is/are correct?

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

Answer: B

- **Statement 1 is incorrect**: Sela macaque belongs to the sinica species group of Macaca. It is recorded from Arunachal Pradesh has been named after a strategic Sela mountain pass.
- Statement 2 is correct: Sela macaque is a major cause of crop loss in the West Kameng district of Arunachal Pradesh. Hence, it faces threats due to man-wildlife conflicts.

Source: The Hindu

Q.9) With reference to the Vande Bharat Trains, consider the following statements:

- 1. They are self-propelled trains that do not require an engine.
- 2. At present, no Vande Bharat trains are operating in the country.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is **correct**: Vande Bharat Trains are self-propelled trains that do not require an engine. This feature is called a distributed traction power system, which is increasingly becoming the norm the world over for passenger operations.

Note: Distributed power gives the train higher acceleration and deceleration compared to loco-hauled trains, which take a much longer time to reach top speed or to gradually come to a halt.

Statement 2 is incorrect: Currently, two Vande Bharat trains are currently in operation, Delhi-Varanasi and Delhi-Katra.

Source: The Hindu



Q.10) With reference to True Random Number Generator (TRNG), consider the following statements;

- 1. The random numbers are typically generated in computers using pseudorandom number generators, which rely on mathematical formulae.
- 2. Min-entropy is a parameter used to measure the performance of TRNGs

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is incorrect: Cryptographic keys are typically generated in computers using pseudorandom number generators, which rely on mathematical formulae or pre-programmed tables to produce numbers that appear random but are not.

In contrast, a TRNG device extracts random numbers from inherently random physical processes, making it more secure.

For instance, IISc's TRNG device, random numbers are generated using the random motion of electrons. The random motion of electrons consists of an artificial electron trap constructed by stacking atomically-thin layers of materials like black phosphorus and graphene.

Statement 2 is correct: Standard tests for cryptographic applications are designed by the US National Institute of Standards and Technology (NIST). Min-entropy is a parameter used to measure the performance of TRNGs. Its value ranges from 0 (completely predictable) to 1 (completely random).

Source: The Hindu



