Forum AS

10 PM Current Affairs Quiz Compilation

7th to 12th March, 2022

ENVIRONMENT

Q.1) It is an ecological phenomenon triggered by the addition or removal of top Predators and involving reciprocal changes in the relative Populations of predator and Prey through a Food chain. Which of the following term describes this phenomenon most appropriately?

- a) Trophic Cascade
- b) Regeneration
- c) Ecological succession
- d) Biomagnification

Answer-a

Trophic cascade, an ecological phenomenon triggered by the addition or removal of top predators and involving reciprocal changes in the relative populations of predator and prey through a food chain, which often results in dramatic changes in ecosystem structure and nutrient cycling.

Source- Article

Q.2) Consider the following statements:

- 1. In India about 15 per cent of domestic surface transport takes place via Inland Waterways.
- 2. There are more than 10 operational inland waterways 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-d

There are 111 officially notified Inland National Waterways (NWs) in India identified for the purposes of inland water transport, as per The National Waterways Act, 2016. Out of the 111 NWs, 106 were created in 2016. The NW network covers around 20,275.5 km. NW-1, 2, & 3 are already operational.

"In several countries, IWT accounts for a substantial share as a percentage of the total: 32 per cent in Bangladesh, 20 in Germany, 14 in the U.S. and 9 in China. In China, much of the increase has occurred in recent decades, in tandem with its phenomenal industrial-agricultural growth. By contrast, in *India only 0.15 per cent of domestic surface transport is accounted for by IWT*, compared with 68 per cent for road and 30 per cent for rail."

Q.3) With reference to the Northern River terrapin, consider the following statements:

- 1. It is found in the Western Ghats area of peninsular India
- 2. They are listed as Endangered on the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species.

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

The River terrapin is found in India and Bangladesh (Sundarbans), Myanmar, Malaysia (peninsular), Indonesia (Sumatra), Thailand, and Cambodia (Stuart et al., 2001). It is regionally extinct in Myanmar, Singapore, Thailand and Vietnam.

IUCN Status: Critically Endangered.

Source- Article

Q.4) Consider the below given terms and Choose which of the following is a paper claim that entitles the buyer of that claim to future income from the seller?

- a) Money
- b) Physical asset
- c) Financial asset
- d) Liability

Answer-c

Money is an asset that can act as a medium of exchange, a store of value, or a unit of account. However, it does not provide future income as described in this definition.

A physical asset is a claim on a tangible asset, such as a house or a factory. It gives the owner the right to rent or sell that asset, but it does not guarantee future income.

A financial asset is a claim to future income that is not a claim to a tangible object. Stocks and bonds are examples of financial assets.

A liability is a requirement to *pay* money in the future, not to *receive* money in the future.

Source- Article

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

- 1. karewas are mainly devoted to the cultivation of saffron.
- 2. Absence of fossils is one of their major Characteristic.

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

Karewas are lacustrine deposits [deposits in lake] in the Valley of Kashmir and Jammu Division. They are characterized by the presence of fossils of mammals and at places by peat. They are used for the cultivation of saffron, almond, walnut, apple and orchards. Source- Article

Q.6) Which of the following recognizes the rights of forest-dwelling tribal communities and other traditional forest dwellers to forest resources?

- a) Fifth Schedule of the Indian constitution
- b) Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act of 2006.
- c) Protection of Civil Rights Act, 1955
- d) Forest Conservation Act, 1980

Answer-b

FRA enacted in 2006 recognises the rights of forest-dwelling tribal communities and other traditional forest dwellers to forest resources on which these communities were dependent for a variety of needs, including livelihood, habitation and other sociocultural needs. Source- Article

Q.7) Which of the following is/are possible benefit(s) of a forest fire?

- 1. Increase in soil fertility
- 2. Aid and move along life-cycle of several plants
- 3. Getting rid of invasive species

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

All are advantages of a forest fire.

- As dead or decaying plants begin to build up on the ground, they may prevent organisms within the soil from accessing nutrients or block animals on the land from accessing the soil. This coating of dead organic matter can also choke outgrowth of smaller or new plants. When humans perform a prescribed burn, the goal is to remove that layer of decay in a controlled manner, allowing the other, healthy parts of the ecosystem to thrive. Moreover, nutrients released from the burned material, which includes dead plants and animals, return more quickly into the soil than if they had slowly decayed over time. In this way, **fire increases soil fertility**—a benefit that has been exploited by farmers for centuries.
- Several plants actually **require fire to move along their life cycles.** For example, seeds from many pine tree species are enclosed in pine cones that are covered in pitch, which must be melted by fire for the seeds to be released.
- Fires can **help rid an ecosystem of invasive species** that have not adapted to regular wildland fires

Q.8) With reference to Waterways in India, consider the following statements:

- 1. As per constitutional provisions, only those waterways which are declared as National Waterways come under the purview of the Central Government.
- 2. Inland waterways have low transport speed thus not suitable where time is an important factor.

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**: As per constitutional provisions, only those waterways which are declared as National Waterways come under the purview of Central Government while rest of waterways remain in the purview of respective State Government.
- **Statement 2 is correct:** Inland waterways have low transport speed thus not suitable where time is an important factor. It has a limited area of operation, depending on the infrastructural premises and depth of the waterways. There are only very few cases in which Inland water transport (IWT) can offer door-to-door transport of cargo.

Source: Article

Q.9) HANSA-NG was recently seen in the news. It is related to which of the following?

- a) New Generation Anti Tank Missile tested by DRDO.
- b) New parasite species identified in Eastern Ghats.
- c) India's first indigenous Flying Trainer aircraft.
- d) Newly inaugurated Nuclear power plant in Sri Lanka donated by India.

Answer: C

HANSA-NG is India's first indigenous Flying Trainer aircraft.

Developed by: CSIR-National Aerospace Laboratories, Bangalore under the aegis of Council of Scientific and Industrial Research

Features: The aircraft is powered by Rotax Digital Control Engine with unique features like Just-In-Time Prepreg (JIPREG) Composite lightweight Airframe, Glass Cockpit, Bubble Canopy with wide panoramic view, electrically operated flap among others.

Significance: The aircraft is designed to meet the Indian flying club needs, and it is an ideal aircraft for Commercial Pilot Licensing(CPL) due to its low cost and low fuel consumption.

Source: PIB

Q.10) With reference to Pumped storage hydro (PSH) plants, consider the following statements:

- 1. These are storage systems based on hydropower operations between two or more reservoirs with an elevation difference.
- 2. So far, no PSH Plants has been installed in India.
- 3. PSH projects have high investment costs and long gestation periods.

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 only

Answer: C

Statement 1 is correct: Pumped storage hydro (PSH) plants are storage systems based on hydropower operations between two or more reservoirs (upper and lower) with an elevation difference. At the time of demand, downward water flow generates electricity with a hydraulic turbine, and water is pumped back to the upper reservoir using power from grid or RE sources, with an overall efficiency of 75-80%.

Statement 2 is incorrect: In India, the PSH potential of about 120GW has been identified at about 120 sites. Only nine plants with an installed capacity of 4,785MW have been commissioned so far, and three with a capacity of 2.7GW are under construction.

Statement 3 is correct: With High investment costs and long gestation for a PSH project, private participation has been low in India.

Source: Livemint



POLITY AND GOVERNANCE

Q.1) Consider the following statements:

- 1. A formal education or minimum educational is not necessary to be considered literate according to definition of literacy as used in census operations in India.
- 2. According to the census 2011 figures, female literacy rate in India is less than 60 percent.

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

Literacy, as defined in Census operations, is **the ability to read and write with understanding in any language**. A person who can merely read but cannot write is not classified as literate. Any formal education or minimum educational standard is not necessary to be considered literate.

The results of 2011 census reveal that there has been an increase in literacy in the country. The literacy rate in the country is 74.04 per cent, 82.14 for males and **65.46 for females**. Source-Article

Q.2) With reference to Plasma, consider the following statements:

- 1. It is also Fourth State of Matter, other than solid, liquid and gas.
- 2. when liquid boils, it changes into a gas, similarly heating a gas will lead to the formation of plasma.

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

Plasma is often called "the fourth state of matter," along with solid, liquid and gas. Just as a liquid will boil, changing into a gas when energy is added, heating a gas will form a plasma – a soup of positively charged particles (ions) and negatively charged particles (electrons). Because so much of the universe is made of plasma, its behavior and properties are of intense interest to scientists in many disciplines.

The fourth state of matter, Plasma, is the most natural and widely observed state of matter in the entire universe.

Q.3) Theyyam is a popular ritual form of dance worship, it belongs to which of the following state?

- a) Kerala
- b) Tamil Nadu
- c) Andhra Pradesh
- d) Odisha

Answer-a

Theyyam is a popular ritual form of dance worship in Kerala and Karnataka. Theyyam consists of thousand-year-old traditions, rituals and customs.

Source- Article

Q.4) Which one of the following is not a key Dimension of the World Economic Forum's Global Gender Gap Report?

- a) Educational Attainment
- b) Economic Participation and Opportunity
- c) Political Empowerment
- d) Reproductive health

Answer-d

Economic Participation and Opportunity, Educational Attainment, Health and Survival and, Political Empowerment are the four dimensions of Gender Gap report.

Source- Article

Q.5) Consider the following statements:

- 1. Out of the total energy capacity installed in India , more than 30 percent comes from renewable sources.
- 2. Out of the total solar power production taking place in India more than 90 percent is concentrated in the northern and central states.

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

India is world's 3rd largest consumer of electricity and world's 3rd largest renewable energy producer with **38**% of energy capacity installed in the year 2020 (136 GW of 373 GW) coming from renewable sources.

Karnataka, Telangana, Rajasthan, Andhra Pradesh and Gujarat(in that order from highest capacity to lowest) are the leading states in terms of solar power production

Q.6) Consider the following statements:

- 1. It has advisory jurisdiction in the matter of post-election disqualification.
- 2. It sets limits of campaign expenditure per candidate.
- 3. It issues the Model Code of Conduct in election.

Which of the above are the functions performed by the Election Commission of India?

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

Answer-d

Election Commission has following functions-It grants recognition to political parties & allot election symbols to them along with settling disputes related to it.

The Commission also has advisory jurisdiction in the matter of post election disqualification of sitting members of Parliament and State Legislatures.

It issues the Model Code of Conduct in election for political parties and candidates so that the no one indulges in unfair practice or there is no arbitrary abuse of powers by those in power.

Source- Article

Q7 With reference to Savitribai Phule and Jyotirao Phule, consider the following statements:

- 1. They started a school for girls, Shudras and Ati-Shudras.
- 2. Ideas of Widow remarriage and inter-caste marriages were advocated by them.

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.

- Together, by 1848, the Phules started a school for girls, Shudras and Ati-Shudras in Poona. The historic work was started by Jyotirao when he was just 21 years old, ably supported by his 18-year-old wife.
- The Satyashodhak Samaj (The Truth-Seeker's Society) was established on September 24, 1873 by Jyotirao-Savitribai and other like-minded people. The Samaj advocated for social changes that went against prevalent traditions, including economical weddings, inter-caste marriages, eradication of child marriages, and widow remarriage.

Q.8) With which of the following countries India has a Comprehensive Economic Partnership Agreement (CEPA)?

- 1. Japan
- 2. UAE
- 3. Canada

Select the correct answer from the codes given below:

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

Answer: d

• India has a Comprehensive Economic Partnership Agreement (CEPA) with Japan and UAE. Negotiations are still ongoing with Canada.

Source: Article

Q.9) With reference to **Humanitarian Corridors**, consider the following statements:

- 1. These are specific demilitarised zones, in an area of conflict and both sides of an armed conflict agree to them.
- 2. All UN members can access the Humanitarian corridors.

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 are demilitarised zones, in a specific area and for a specific time and both sides of an armed conflict agree to them.

Statement 2 is incorrect: Access to humanitarian corridors is determined by the parties to the conflict. It's usually limited to neutral actors, the UN or aid organisations such as the Red Cross.

Source: Indian Express

Q.10) With reference to Side-Channel Attacks (SCAs), consider the following statements:

- 1. It is a security exploit that aims to gather information from a system by exploiting the indirect effects of the system or its hardware.
- 2. It can be used on smartwatch to extract ECG and heart rate signals.

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.

An SCA may also be referred to as a sidebar attack or an implementation attack. It is a security exploit that aims to gather information from a system by measuring or exploiting the indirect effects of the system or its hardware.

It can be applied to any data that one want to keep secret. For example, it can be used on smartwatch to extract ECG and heart rate signal."

Source: Indian Express



GEOGRAPHY

Q.1) Which of the following stated share border with both Nepal and Bhutan?

- Bihar
- 2. West Bengal
- 3. Sikkim

Select the correct answer using the code given below:

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

Answer-a

Nepal shares a border of about 1850 km with five Indian States - **Uttarakhand**, **Uttar Pradesh**, **Bihar**, **West Bengal and Sikkim**.

Bhutan shares borders with the Indian states of Arunachal Pradesh in its east, Sikkim in the west and Assam and West Bengal in the south.

Source- Article

Q.2) Suppose the Government increases taxes and this leads to a decline in the disposable income. What happens to household savings and the real interest rate in the short run, and potential output in the long run?

- 1. Household saving decreases
- 2. real interest rate increases
- 3. Potential output decreases

Select the correct answer using the code given below:

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

Answer-d

Less income after tax income decreases the ability to save, decreasing the supply of loanable funds and increasing the interest rate. Higher interest rates reduce the incentive for firms to create new capital, so as the existing stock of capital depreciates, the stock of capital decreases which decreases potential output.

Source- Article

Q.3) Which of the following is most likely to lead to higher levels of economic growth?

- a) An increase in inflows of foreign savings.
- b) A decrease in labor force participation rates.
- c) High government deficits
- d) Less retirement savings.

Answer-a

When foreign countries send their savings to a country, this increases the supply of loanable funds which makes it easier for firms to invest in plant and equipment and thus leads to economic growth.

Created with love ♥ by ForumIAS- the knowledge network for civil services.

Visit academy.forumias.com for our mentor based courses.

If the stock of labor increases, potential output increases. So a decrease will not lead to Growth.

High government borrowing raises the interest rate which discourages investment in capital. High savings rates and not low savings encourages economic growth.

Source- Article

Q.4) Consider the following statements:

- 1. Electronic nicotine delivery systems (ENDS) commonly known as e-cigarettes do not contain tobacco.
- 2. They are not harmful to health and are completely safe.

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

According to WHO, Electronic nicotine delivery systems (ENDS) and electronic non-nicotine delivery systems (ENNDS), commonly known as e-cigarettes, do not contain tobacco and may or may not contain nicotine, but are harmful to health and undoubtedly unsafe.

Source- Article

Q.5) Pochampalli Saree is a craft heritage of which one of the following states?

- a) Andhra Pradesh
- b) Tamil Nadu
- c) Kerala
- d) Karnataka

Answer-a

These are Silk and cotton sarees with intricate motifs from state of Andhra Pradesh Source- Article

Q.6) Which of the following suggests and identifies the public sector enterprises for strategic disinvestment to the Cabinet?

- a) Niti Aayog
- b) Department of Public Enterprises (DPE)
- c) Ministry of Finance
- d) Cabinet Committee on economic affairs

Answer-a

NITI Aayog to identifes CPSEs for strategic disinvestment and advice on the mode of sale, percentage of shares to be sold of the CPSE and method for valuation of the CPSE to the cabinet.

Q.7) With reference to Supercomputers, consider the following statements:

- 1. Param Shivay is India's first indigenously assembled Supercomputer.
- 2. Computational chemistry and Molecular Dynamics are two important application areas of supercomputing technology.

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.

- India's first supercomputer was PARAM 8000.
- PARAM Shivay, the first supercomputer assembled indigenously, was installed in IIT (BHU), followed by PARAM Shakti, PARAM Brahma, PARAM Yukti, PARAM Sanganak at IIT-Kharagpur, IISER, Pune, JNCASR, Bengaluru and IIT Kanpur respectively.
- Application areas: Climate Modelling, Weather Prediction, Aerospace Engineering including CFD, CSM, CEM, Computational Biology, Molecular Dynamics, Atomic Energy Simulations, National Security/ Defence Applications, Seismic Analysis, Disaster Simulations and Management, Computational Chemistry, Computational Material Science and Nanomaterials, Discoveries beyond Earth (Astrophysics), Large Complex Systems Simulations and Cyber Physical Systems, Big Data Analytics, Finance, Information repositories/ Government Information Systems.

Source: Article

Q.8) Which of the following is/are correctly matched?

Term Explanation

- 1. Creeping inflation Rate of inflation is high
- 2. Stagflation Recession
- 3. Disinflation Reduction in the rate of inflation

Select the correct answer from the codes given below:

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

Answer: c

- Creeping inflation: If the rate of inflation is low (up to 3%).
- Stagflation: Inflation + recession (Unemployment)
- Disinflation: Reduction in the rate of inflation

Q.9) With reference to **Boltzman medal**, consider the following statements:

- 1. This medal is awarded every three years by the Commission on Statistical Physics of the International Union of Pure and Applied Physics (IUPAP).
- 2. It is given only once to a person and on the condition that that person has not won the Nobel prize so far.

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.

This medal is awarded every three years by the Commission on Statistical Physics of the International Union of Pure and Applied Physics (IUPAP) at the Statphys Conference. The IUPAP was established in 1922 in Brussels with 13 Member countries and the first General Assembly was held in 1923 in Paris. It currently has 60 country members. India joined it in

1948. It is the only international physics organisation that is organised and run by the physics community itself.

It is given only once to a person and on the condition that that person has not won the Nobel prize so far.

Source: Indian Express

Q.10) Which of the following benefit is/are directly associated with Smart grids?

- 1. Reduction of T&D losses.
- 2. Improved quality of Service.
- 3. Improved power production.

Select the correct answer from the codes given below:

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

Answer: A

Statement 1 and 2 are correct: Smart grid can contribute to a reduction of T&D losses, Peakload management, improved quality of Service, increased reliability, better asset management, renewable integration, better accessibility to electricity and also lead to self-healing grids.

Statement 3 is incorrect: Smart grid does not increase power production.

Source: PIB

ECONOMY

Q.1) With reference to the Balance of Payment (BOP), consider the following statements:

- 1. Only imports and exports are included in the balance of payments
- 2. It means the sum of all credit entries is greater than the sum of all debit entries

Which of the statements given above is/are incorrect with respect to BOP?

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

Answer-c

Any transaction that causes money to flow into or out of a country is counted in the balance of payments not just export and imports.

The balance of payments is always balanced. That means the sum of all credit entries should match the sum of all debit entries.

Source- Article

Q.2) It is a traditional system of medicine practised in the Himalayan belt of India. Although originated in Tibet but is also widely practised in North and North east India. Majority of its theory and practice is similar to Ayurveda. Which of the following traditional medicine system best fits the description.

- a) Unani
- b) Siddha
- c) Homoeopathy
- d) Sowa Rigpa

Answer-d

Sowa-Rigpa (the science of healing) is a traditional system of medicine practised in the Himalayan belt of India.It originated in Tibet. It is widely practised in Sikkim, Arunachal Pradesh, West Bengal's Darjeeling, Himachal Pradesh and the Union Territory of Ladakh. It is similar to "Ayurveda".

Source- Article

Q.3) Consider the following statements, Which of the following best describes a depreciated currency?

- a) It takes more of another currency to buy that currency
- b) The depreciated currency can buy fewer domestic goods and services
- c) The depreciated currency can buy more domestic goods and services
- d) It takes less of another currency to buy that currency

Answer-d

Lets call our currency that is depreciating as X, Depreciation means that a currency has become less valuable relative to another currency. Less valuable means that its price, in terms of another currency, has gone down.

If it takes more of another currency to buy currency X that means X has appreciated and not depreciated.

Statement b and c are related to inflation and deflation, not depreciation.

Inflation decreases the domestic purchasing power of an individual unit of a currency.

Depreciation is when a currency becomes less valuable relative to another currency.

Deflation increases the domestic purchasing power of an individual unit of a currency.

Source- Article

Q.4) With reference to Hydrocarbon Exploration and Licensing Policy(HELP), consider the following statements:

- 1. It unifies the authority to grant licenses for exploration and production (E&P) of conventional and unconventional oil and gas resources
- 2. It will allow companies to approach the government at any time and seek permission to explore any block.

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

A new exploration and licensing policy was passed in March 2016 known as the Hydrocarbon Exploration and Licensing Policy (HELP).HELP unifies the authority to grant licenses for exploration and production (E&P) of conventional and unconventional oil and gas resources, including oil, gas, coal bed methane, shale gas/oil, tight gas, and gas hydrates. HELP introduces an Open Acreage Licensing Policy (OALP) that will allow companies to approach the government at any time and seek permission to explore any block.

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

- 1. It is a moist broadleaf tropical rainforest in the Amazon biome.
- 2. It is located entirely in Brazil

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2

Source- Article

d) Neither 1 nor 2

Answer-a

The **Amazon rainforest**, alternatively, the **Amazon jungle** or **Amazonia**, is a <u>moist broadleaf</u> tropical rainforest in the Amazon biome that covers most of the Amazon basin of South America.

The majority of the forest is contained within Brazil, with 60% of the rainforest, followed by Peru with 13%, Colombia with 10%, and with minor amounts in Bolivia, Ecuador, French Guiana, Guyana, Suriname and Venezuela

Q.6) Consider the following statements:

- 1. Indian Depository receipts enable foreign companies to raise funds from the Indian securities Markets.
- 2. American Depository receipts lists shares of a foreign country in the U.S. markets.

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

A foreign company can access Indian securities market for raising funds through issue of Indian Depository Receipts (IDRs). An IDR is an instrument denominated in Indian Rupees in the form of a depository receipt created by a Domestic Depository (custodian of securities registered with the Securities and Exchange Board of India) against the underlying equity of issuing company to enable foreign companies to raise funds from the Indian securities Markets.

American Depository Receipt (ADR) is a depository receipt which is issued by a US depository bank against a certain number of shares owned by a non-US based company. Source- Article

Q.7) With reference to Urea production and Urea Electrolysis, consider the following statements:

- 1. In terms of energy requirement for production of Hydrogen, Urea Electrolysis is more energy intensive than Water Electrolysis.
- 2. Nano Urea Liquid is a nutrient to provide nitrogen to plants as an alternative to conventional urea.

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 energy requirement for production of hydrogen through water electrolysis can be reduced by 70 % through urea electrolysis
- Statement 2 is correct: Nano Urea Liquid is a nutrient to provide nitrogen to plants as an alternative to conventional urea. It has been developed indigenously through proprietary technology at IFFCO"s Nano Biotechnology Research Centre (NBRC) in Gujarat.

Q.8) With reference to Lunar North and South Pole, consider the following statements:

- 1. Lunar surface area that remains in shadow at the Lunar South Pole is much larger than that at the North Pole.
- 2. The South Pole region contain a fossil record of the early Solar System.

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.

- The Lunar South pole is especially interesting because of the lunar surface area that remains in shadow is much larger than that at the North Pole. There could be a possibility of presence of water in permanently shadowed areas around it.
- In addition, South Pole region has craters that are cold traps and contain a fossil record of the early Solar System.

Source: Article

Q.9) With reference to **Noble gas**, consider the following statements:

- 1. Noble gases are colourless, odourless, tasteless, nonflammable gases.
- 2. The abundances of the noble gases increase as their atomic numbers increase.

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

Noble gases are a group of the seven chemical elements that make up Group 18 (VIIIa) of the periodic table.

The elements are helium (He), neon (Ne), argon (Ar), krypton (Kr), xenon (Xe), radon (Rn), and oganesson (Og).

Statement 1 is correct: The noble gases are colourless, odourless, tasteless, nonflammable gases.

Statement 2 is incorrect: The abundances of the noble gases decrease as their atomic numbers increase. Helium is the most plentiful element in the universe after hydrogen.

Source: The Hindu

Q.10) mCessation Programme was recently seen in the news. The programme is related to which of the following?

- a) A programme to end photography in sensitive locations.
- b) A Programme to Control Tobacco Consumption.
- c) To protect wildlife by not geotagging the locations.
- d) Programme to achieve the swachh bharat by not putting litters in public places.

Answer: B

mCessation Programme is an initiative which uses mobile technology for tobacco cessation. It was launched in 2016 as part of the government's Digital India initiative.

It uses two-way messaging between the individual seeking to quit tobacco use and programme specialists providing them dynamic support.

The programme can deliver content through SMS or interactive voice response in 12 languages. Source: Times Now



SCHEME

Q.1) With reference to Open Government Data (OGD) Platform in India, consider the following statements:

- 1. Open Government Data (OGD) Platform India has been setup by the NITI Aayog in compliance with the Open Data Policy (NDSAP) of India.
- 2. Providing proactive access to Government owned shareable data is one of the core policy objectives.

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

The Open Government Data (OGD) Platform India has been setup by the National Informatics Centre (NIC) in compliance with the Open Data Policy (NDSAP) of India. The objective of the policy is to provide proactive access to Government owned shareable data along with its usage information in open/machine readable format.

Source- Article

Q.2) Freshwater lakes have distinct zones of biological communities. These zones are based on the availability of resources linked to the structure of the lake. Which of the following best characterizes the benthic zone of a lake?

- a) It is below the thermohaline and has cold, dense water.
- b) It receives enough sunlight and nutrients to support large communities of rooted plants.
- c) It contains organisms that are able to survive in low-oxygen concentrations.
- d) It is composed of open water and dominated by plankton.

Answer-c

The thermohaline is a zone of water in which temperature changes quickly. The benthic zone can be located above or below the thermohaline.

The benthic zone can be near shore or in open water. However, it is dominated by decomposers and detritus feeders, not plankton.

The benthic zone can support some rooted plants but is dominated by decomposers and detritus feeders.

The benthic zone contains invertebrates such as worms, insects, larva, and clams, which can survive in low-oxygen environments.

Q.3) Which of the following actions by a large-scale farming operation are most likely to result in severe soil erosion?

- 1. The farmer sprays an ultra fine mist of powdered herbicides on crop fields.
- 2. The farmer irrigates their cropland by flooding the ground, and allowing gravity to distribute the water.
- 3. The farmer removes native vegetation and ploughs bare acres of topsoil months before the planting season.

Which of the statements given above is/are correct?

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

Answer-c

Erosion removes soil particles, and spraying a powdered mist herbicide is not likely to cause erosion.

As gravity carries irrigation water it also carries large amounts of topsoil away from the land. This is erosion.

Removing plants and turning over soils (i.e., ploughing) leave soils loose and vulnerable to erosion

Source- Article

Q.4) What fiscal and monetary measures can be taken in response to the depreciation of a currency?

- 1. The quantity of currency supplied would decrease
- 2. The Nation whose currency is depreciating would buy more foreign financial assets

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

If currency depreciates, its purchasing power in other countries would depreciate. That means other countries goods are now more expensive relative to goods in that particular country, so residents of the country would buy more domestic goods and fewer foreign goods. Buying fewer foreign goods means less of other countries' currencies are needed, so country won't need to supply as much of its own currency in the foreign exchange market for its domestic currency. If a currency depreciates, foreign financial assets would be relatively more expensive than financial assets in the domestic market. A higher price of a financial asset means a lower return, so the country(whose currency is depreciating)would buy fewer foreign financial assets. Source- Article

Q.5) Which of the following appropriately describes the structural make-up of a gene?

- a) A gene is a sequence of amino acids found within a larger protein molecule.
- b) A gene is a sequence of proteins found within a larger DNA molecule.
- c) A gene is a sequence of nucleotides found within a larger DNA molecule.
- d) None

Answer-c

A gene is a stretch of nucleotides within a larger DNA molecule.

A gene is **the basic physical and functional unit of heredity**. Genes are made up of DNA. Some genes act as instructions to make molecules called proteins. However, many genes do not code for proteins. In humans, genes vary in size from a few hundred DNA bases to more than 2 million bases.

Source- Article

Q.6) Which of the following are the members of Indian Ocean Rim Association (IORA)?

- 1. Myanmar
- 2. India
- 3. Pakistan

Which of the statements given above is/are correct?

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

Answer-b

IORA has 22 member states, including Australia, Bangladesh, Comoros, India, Indonesia, Iran, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Seychelles, Singapore, Somalia, South Africa, Sri Lanka, Tanzania, Thailand, UAE, and Yemen. Source- Article

Q.7) With reference to Unified Payments Interface (UPI), consider the following statements:

- 1. It supports both pay request and collect request financial transactions.
- 2. An end-user can directly raise a complaint regarding a UPI transaction with the Banking Ombudsman.

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: UPI supports the following financial transactions – a) Pay Request: A Pay Request is a transaction where the initiating customer is pushing funds to the intended beneficiary. b) Collect Request: A Collect Request is a transaction where the customer is pulling funds from the intended remitter by using Virtual ID.

• Statement 2 is incorrect: A complaint is first raised with the relevant TPAP (Third Party Application Providers) in respect to all UPI related grievances / complaints of the end-user customers on-boarded by the PSP (payment Service Provider) Bank / TPAP (if the UPI transaction is made through TPAP app). In case the complaint / grievance remains unresolved, the next level for escalation will be the PSP Bank, followed by the bank (where the end-user customer maintains its account) and NPCI, in the same order. After exercising these options, the end-user customer can approach the Banking Ombudsman and / or the Ombudsman for Digital Complaints, as the case may be.

Source: Article

Q.8) The Carbon Dioxide (CO₂) captured through the Carbon Capture Utilization and Storage (CCUS) technology can have which of the following potential application areas?

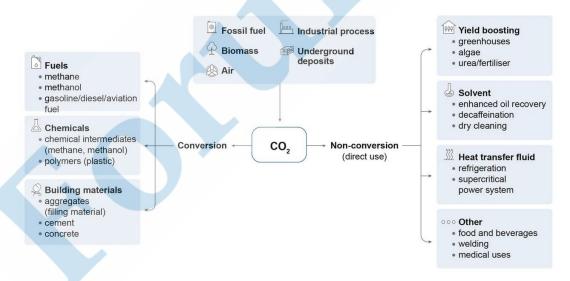
- 1. As a solvent for enhanced oil recovery
- 2. Heat Transfer fluid in refrigeration
- 3. Boosting yields in fertilizer industry

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

All given options are potential application areas for the Carbon Dioxide captured via CCUS technology.



Carbon capture, utilization and storage (CCUS) refers to a suite of technologies that can play an important and diverse role in meeting global energy and climate goals. CCUS involves the capture of CO2 from large point sources, including power generation or industrial facilities that use either fossil fuels or biomass for fuel. The CO2 can also be captured directly from the atmosphere.

Q.9) With reference to Ukrainian Foreign Legion, consider the following statements:

- 1. It is a volunteer foreign legion military unit created by the United Nations.
- 2. Indian domestic law clearly states joining foreign legion is punishable.

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: It is a volunteer foreign legion military unit created by the Government of Ukraine.

Statement 2 is correct: Indian domestic law clearly states such an act is punishable under Chapter VI, Section 121-130 of the Indian Penal Code (offences against the state). They are punished under the section "Committing depredation on territories of power at peace with the Government of India".

The law is invoked when the foreign Army in which India nationals joining is doing inimical things or is an adversary of India.

Source: The Hindu

Q.10) Which of the following countries is/are member of Colombo Security Conclave?

- 1. India
- 2. Bangladesh
- 3. Sri Lanka

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 only

Answer: B

India, Maldives, and Sri Lanka began a National Security Advisor (NSA)-level trilateral meeting on maritime security cooperation named Colombo Security Conclave in 2011.

Recently, Mauritius was included as a new member of the conclave.

Source: The Hindu

ECONOMY

Q.1) Consider the following statements:

- 1. Quinary sector activities are specialized activities in the Knowledge Sector.
- 2. Quaternary sector comprises the top decision-makers in industry, commerce, and other sectors.

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

Quinary sector is the one which involves those taking Highest levels of decision making in an economy. While, Quaternary activities involve specialized tertiary activities in the 'Knowledge Sector'.

Quinary sector is the part of the economy where the top-level decisions are made. This includes the government which passes legislation. It also comprises the top decision-makers in industry, commerce and also the education sector.

Source- Article

Q.2) Which of the following belong(s) to the group of UN (United nations) specialized agencies?

- 1. UNESCO (United Nations Educational, Scientific and Cultural Organization)
- 2. WHO (World Health Organization)
- 3. IMF (International Monetary Fund)

Select the correct answer using the code given below:

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

Answer-d

All the three a belong to the 17 Specialized agencies of the United nations.

UN specialized agencies are international organizations working with the UN, in accordance with relationship agreements between each organization and the UN.

Q.3) It is the process by which new species form. It occurs when groups in a species become reproductively isolated and diverge.

Which of the following term describes the above given description most appropriately?

- a) Speciation
- b) Aneuploidy
- c) Phenotypic variation
- d) Regeneration

Answer-a

Speciation is the process by which new species form. It occurs when groups in a species become reproductively isolated and diverge.

Source-Article

Q.4) Which of the following are true regarding the environmental problems most directly associated with atmospheric warming?

- 1. Disease vectors can spread from the tropics towards the poles
- 2. Spreading diseases may lead to human population movements

Select the correct answer using the code given below:

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

Answer-c

Atmospheric warming leads to expanded ranges in which disease-carrying organisms can spread.

This may lead to human populations moving to avoid areas with higher disease-carrying organisms.

Source- Article

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

- 1. They inhabit and are mainly based in the states of Gujarat and Rajasthan
- 2. Sohrai Murals is an indigenous art form is practiced by the women of Santhal Community.

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

Santal or Santhal, are a Munda ethnic group native to India. Santals are the largest tribe in the Jharkhand state of India in terms of population and are also found in the states of Assam, Tripura, Bihar, Chhattisgarh, Odisha and West Bengal.

 $\textbf{Sohrai Mural} \ \text{is an indigenous art form is practised by the women of Santhal Community}.$

Source- Article

Q.6) With reference to International Energy Agency, consider the following statements:

- 1. It is an autonomous non-governmental organization.
- 2. It was established in the wake of Asian crisis of 1999

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

The International Energy Agency is a Paris-based autonomous intergovernmental organisation established in the framework of the Organisation for Economic Co-operation and Development in 1974 in the wake of the 1973 oil crisis.

Source- Article

Q.7) With reference to **Hague Convention**, consider the following:

- 1. It is the first and the most comprehensive multilateral treaty dedicated exclusively to the protection of cultural heritage in times of peace and armed conflict.
- 2. India is not a party to Hague Convention 1954.
- 3. Blue Shield Emblem is associated with it.

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is correct: 1954 Hague Convention is the first and the most comprehensive multilateral treaty dedicated exclusively to the protection of cultural heritage in times of peace as well as during an armed conflict.

Statement 2 is incorrect: India is party to Hague Convention 1954.

Statement 3 is correct: To avoid deliberate or accidental damages, UNESCO will mark cultural sites and monuments with the distinctive "Blue Shield" of the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict.

Source: Indian Express

Q.8) With reference to Indian Exports, consider the following statements:

- 1. Almost 40% of India's exports is limited to just seven countries.
- 2. Signing FTAs with foreign nation will help India to diversify exports.

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.

India is gearing up to finalize FTAs with the UK, Australia, EU, Canada and other major economies.

Created with love ♥ by ForumIAS- the knowledge network for civil services. Visit academy.forumias.com for our mentor based courses.



The Economic Survey highlighted India's need for FTAs as it will help it to diversify exports and explore new shores for the promotion of its products. According to survey, 40% of India's exports is limited to just seven countries. This indicates that India needs to do a lot more on widening its export basket and give a further push to promoting exports to new shores.

Source: PIB

Q.9) With reference to Biological and Toxin Weapons Convention (BTWC), consider the following statements:

- 1. It is the first multilateral disarmament treaty banning an entire category of weapons of mass destruction (WMD).
- 2. The BWC does not explicitly ban the use of biological and toxin weapons.

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**: The BWC does not ban the use of biological and toxin weapons but reaffirms the 1925 Geneva Protocol, which prohibits such use.
- Statement 2 is correct: Although the BWC (in its title and in Article I) does not explicitly prohibit "use" of biological weapons, the Final Declaration of the 1996 Treaty Review Conference reaffirmed that, although "use" is not explicitly prohibited under Article I of the BWC, it is still considered to be a violation of the Convention.

Source: Article

Q.10) Uranium is the most widely used fuel by nuclear power plants for nuclear fission. Consider the following statements:

- 1. After being used up in a nuclear power plant, the Uranium is still radioactive.
- 2. Nuclear power is a bigger source of low-carbon electricity as compared to hydropower.

Which of the statements given above is/are incorrect?

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

Answer: b

- **Statement 1 is correct:** To make natural uranium more likely to undergo fission, it is necessary to increase the amount of uranium-235 in a given sample through a process called uranium enrichment. Once the uranium is enriched, it can be used effectively as nuclear fuel in power plants for three to five years, after which it is still radioactive and has to be disposed of following stringent guidelines to protect people and the environment.
- **Statement 2 is incorrect:** Nuclear power is the second-largest source of low carbon energy used today to produce electricity, following hydropower.