

10 PM Current Affairs Quiz Weekly Compilation

For UPSC CSE Prelims

November, 2023 5th Week

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Art & Culture

Q.1) Which one of the following features is associated with 'Mahima Dharma', a Hindu sect?

- a) Rigidity of the Caste System
- b) Rejection of Idol Worship
- c) Polytheism
- d) Mortality of the Soul

Geography

Q.2) Consider the following statements:

- 1. The ionosphere is the warmest layer of the atmosphere.
- 2. The ionosphere grows and shrinks depending on the energy it absorbs from the Sun.
- 3. The earthquakes have effects on the ionosphere.
- 4. The ionosphere is most dense during the night and less dense during the day.

Which of the statements given above are correct?

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

Q.3) Which one of the following statements best describes the term 'Gender Inclusive Communication'?

- a) It focuses on using language that affirms and respects individuals' gender identities, particularly for transgender and non-binary individuals.
- b) It involves being aware of the impact language can have on different genders and adjusting communication to be sensitive to these differences.
- c) It refers to the use of language and communication practices that aim to include and respect all gender identities, acknowledging and affirming diversity.
- d) It refers to language that avoids gender-specific terms, using neutral terms that do not reinforce traditional gender roles.

Q.4) With reference to the Urbanization in India, which of the following statements are correct?

- 1. India's urban infrastructure is struggling to keep up with the pace of urbanization.
- 2. India's urban population is expected to reach 68% by 2050.
- 3. Urbanization can lead to increased economic growth by creating new jobs and businesses.

Select the correct statements using the codes given below:

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



Polity

- Q.5) Social Audit aims to ensure the transparency and accountability of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) scheme. In this context, which one of the following is responsible for publicizing the dates and venues for the social audits in the village?
- a) Gram Panchayat
- b) Gram Sabha
- c) Panchayat Secretary
- d) Panchayat Samiti

Q.6) Consider the following statements:

- 1. The Governor, being a part of the State legislature, has the authority to utilize his/her constitutional powers to disrupt the regular course of lawmaking within the State.
- 2. Once the State legislature reconsiders the Bill and passes it again, whether with or without amendments, and presents it to the Governor for assent, the Governor is obligated to grant assent without withholding 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

Q.7) With reference to the Special Category Status (SCS), consider the following statements:

- 1. SCS guarantees rapid economic development and prosperity for a state.
- 2. The criteria for SCS are the same for all states.
- 3. All states with Special Category Status receive the same level of financial assistance from the Central Government.

How many of the statements given above are correct?

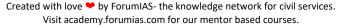
- a) Only one
- b) Only two
- c) All three
- d) None

Q.8) With reference to the Supreme Court of India, consider the following statements:

- 1. Disputes between two or more states can be heard at the Supreme Court in the form of appellate jurisdiction.
- 2. A Constitution of Bench in the Supreme Court should comprise a minimum of five judges for deciding a case involving a "substantial question of law as to the interpretation of the Constitution".
- 3. The Supreme Court can issue advisory opinions that override the decisions of lower courts.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None





Q.9) Consider the following statements:

Statement-I: Double Taxation Avoidance Agreements (DTAAs) cannot be automatically applied in India simply because it has been signed or ratified by India and the other contracting state.

Statement-II: Article 73 of the Constitution states that the executive can make international agreements, but they need legislative backing to become enforceable laws in India.

Which one of the following is correct in respect of the above statements?

- a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c) Statement-I is correct but Statement-II is incorrect
- d) Statement-I is incorrect but Statement-II is correct

Schemes & Policies

Q.10) With reference to Ayushman Bharat – Health and Wellness Centres (AB-HWCs), consider the following statements:

- 1. It aims to move away from selective health care to a more comprehensive range of services spanning preventive, promotive, curative, rehabilitative and palliative care for all ages.
- 2. Tele-consultation and health promotion including wellness activities like Yoga are the services provided by the centers.

Select the correct answer using the codes given below:

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

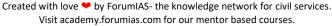
International Relation/Organization

Q.11) With reference to the Indo-Pacific Economic Framework (IPEF), which of the following statements is/are correct?

- 1. India is a founding member of the IPEF and has been actively participating in negotiations.
- 2. The IPEF is designed to counter China's economic influence in the Indo-Pacific region.
- 3. The IPEF is a free trade agreement that will help to ensure that all IPEF countries adhere to reduce tariffs or eliminate trade barriers.

Select the correct statements using the codes given below:

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





Q.12) Consider the following statements:

- 1. Houthis are in power in northern Yemen.
- 2. Yemen is located at the junction of the Red Sea and Gulf of Aden.
- 3. The Red Sea is connected to the Indian Ocean in the south through the Strait of Hormuz and the Gulf of Oman.

Which of the statements given above is/are correct?

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

Q.13) Which one of the following statements is correct regarding the 'Golden Gate Declaration', seen in the news recently?

- a) It is a comprehensive plan of action to be taken globally, nationally, and locally by organizations of the United Nations, governments, and major groups in every area in which humans impact the environment.
- b) It outlines the rights that every child is entitled to, emphasizing the need for special protection and assistance.
- c) It outlines eight Millennium Development Goals aimed at addressing global challenges such as poverty, hunger, gender equality, and health.
- d) It is a significant step towards creating a more resilient, sustainable, interconnected, innovative, and inclusive Asia-Pacific region.

Q.14) With reference to Commission on Social Connection, consider the following statements:

- 1. The Commission's ultimate goal is to eliminate loneliness entirely by 2025.
- 2. The Commission is advocating for a mandatory "social connection" class in schools, where students are taught how to make friends and form positive social connections.
- 3. It aims to promote social connection as a priority.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.15) With reference to the International Sugar Organisation (ISO), consider the following statements:

- 1. The ISO collects and publishes statistics on sugar production, consumption, trade, and prices.
- 2. The ISO facilitates dialogue between producers and importers on issues of common interest, such as market stability, trade policy, and sustainable development.
- 3. The ISO provides technical cooperation to its members, including training courses, workshops, and seminars on sugar production, processing, and marketing.

Which of the statements given above are correct?

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



Q.16) With reference to the International Labour Organization (ILO), consider the following statements:

- 1. The International Labour Organization (ILO) is a specialized agency of the United Nations, founded with the primary purpose of promoting workers' rights, improving working conditions, and advancing social justice globally.
- 2. It is mainly concerned with protecting the rights of workers in the formal economy.
- 3. India has ratified 'Freedom of Association and Protection of Right to Organised Convention' of the ILO.

Which of the statements given above is/are correct?

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

Economy

Q.17) With reference to Investor Risk Reduction Access (IRRA) Platform, consider the following statements:

- 1. It is a platform that provides insurance coverage to investors in case of investment losses.
- 2. IRRA can be invoked by trading members when there's a technical glitch at their end across exchanges.

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

Q.18) Consider the following statements with reference to the International Container Transhipment Port (ICTP) Project:

- 1. It is a Transhipment port project being built at Galathea Bay in Great Nicobar Island.
- 2. It is expected to handle more containers than all the ports of India combined.
- 3. It aims to reduce India's dependency on foreign ports for transshipment cargo handling.
- 4. The project is being developed under the Public-Private-Partnership (PPP) model.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four



0.19) With reference to the Indian Sugar Industry, consider the following statements:

- 1. India is the largest consumer and second largest producer of sugar in the world.
- 2. India is the fourth largest country in the world in ethanol production.
- 3. The domestic sugar industry in India is characterized by a surplus production compared to consumption.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.20) Which of the following statements is/are correct with reference to the "Purple Sector in the Economy"?

- 1. It is the term used to describe the business of sustainable resource management and environmental protection.
- 2. Digital Public Infrastructure (DPI) can provide significant benefits to the Purple Sector.

Select the correct answer using the codes given below:

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

Q.21) Consider the following:

- 1. Reduced inflation
- 2. Lower interest rates
- 3. Financial Stability
- 4. Increased seigniorage revenue
- 5. Rise in monetary autonomy

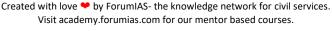
How many of the above mentioned are the benefits of 'Dollarization'?

- a) Only two
- b) Only three
- c) Only four
- d) All five

Environment

Q.22) In the context of Pollution, the term 'Airshed' refers to -

- a) It is the lowest part of the Earth's atmosphere, where turbulent mixing is strongly influenced by the Earth's surface.
- b) It refers to the geographic area where the movement of air is somewhat contained or confined.
- c) It is a localized area with elevated concentrations of pollutants, often due to specific sources such as industrial facilities, traffic congestion, etc.
- d) It refers to the specific origin or site where pollutants are released into the atmosphere, such as a factory, power plant, or vehicle.





Q.23) Consider the following methods:

- 1. Steam methane reforming (SMR)
- 2. Coal gasification
- 3. Green Hydrogen Electrolyzer
- 4. Solid oxide electrolysis (SOE)
- 5. Photoelectrochemical (PEC) water splitting

Which of the methods mentioned above are suitable for the production of green hydrogen?

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

Q.24) Nugu Wildlife Sanctuary is located at

- a) Karnataka
- b) Tamil Nadu
- c) Arunachal Pradesh
- d) Assam

Q.25) Consider the following statements:

- 1. Critical Tiger Habitats (CTHs) are legally protected under the Environment (Protection) Act, 1986.
- 2. All Protected Areas (PAs) have Critical Tiger Habitats (CTHs).
- 3. The notification of CTH is done by the state government in consultation with the expert committee constituted for the purpose.

Which of the statements given above is/are correct?

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

Q.26) Consider the following statements:

- 1. Compressed Biogas (CBG) has methane content of more than 90%.
- 2. CBG Blending Obligation (CBO) is a roadmap for mandatory blending of compressed biogas (CBG) in the transportation and domestic segments of the city gas distribution (CGD) sector in a phased manner.
- 3. When CBG is released into the atmosphere, it contributes to the oxygen content by releasing a portion of oxygen into the environment.

Which of the statements given above are correct?

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



Q.27) With reference to Sustainable Aviation Fuel (SAF), consider the following statements:

- 1. It is produced from renewable sources such as agricultural waste, municipal solid waste, and forestry residues.
- 2. Sustainable Aviation Fuel (SAF) is not a viable alternative to traditional jet fuel because it is less efficient.

Select the correct statements using the codes given below:

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

Science & Technology

Q.28) With reference to Kyasanur Forest Disease (KFD), consider the following statements:

- 1. It is a bacterial disease transmitted through contaminated water sources.
- 2. The disease is found only in India.
- 3. It is a rare disease that can cause severe illness and death.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.29) Which one of the following is the objective of Atmospheric Waves Experiment (AWE), recently launched by NASA?

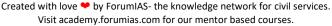
- a) to investigate solar radiation absorption to gain insights into how it permeates Earth's atmosphere and shapes the dynamics of regional weather conditions.
- b) to study the global properties and effects of atmospheric gravity waves.
- c) to study seismic waves to understand their propagation through Earth's interior and their role in shaping geological processes and seismic events.
- d) to examine biodiversity patterns to elucidate how different species contribute to ecosystem stability and influence environmental conditions on Earth.

Q.30) Consider the following statements:

- 1. Gene editing can be used to eliminate genetic differences.
- 2. Casgevy is a revolutionary gene-editing therapy designed to treat sickle cell anaemia.

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





Q.31) Consider the following statements:

- 1. Currently, most space communication is carried out using infrared waves.
- 2. NASA's Deep Space Optical Communications (DSOC) experiment seeks to use near-infrared laser signals for communication with spacecraft.

Select the correct statements using the codes given below:

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

Q.32) The Union Health ministry has made available generic drugs for rare diseases for the first time. For which of the following rare diseases, generic drugs have been made available?

- 1. Tyrosinemia-Type 1
- 2. Gauchers Disease
- 3. Fibrodysplasia Ossificans Progressiva (FOP)
- 4. Moyamoya Disease

Select the correct code given below:

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

Q.33) With reference to Computer Emergency Response Team (CERT-In), consider the following statements:

- 1. CERT-In is responsible for investigating cybercrimes and prosecuting cybercriminals.
- 2. Ministry of Electronics and Information Technology (MeitY) is the nodal ministry for CERT-In.

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

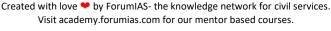
Q.34) Consider the following statements:

Statement-I: Spectrum is a limited resource and it needs to be allocated judiciously in order to ensure that users do not interfere with each other.

Statement II: In India, 'Spectrum Common' is a method adopted to allocate spectrum in which users of the spectrum are allowed to use it on a first-come, first-served basis.

Which one of the following is correct in respect of the above statements?

- a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c) Statement-I is correct but Statement-II is incorrect
- d) Statement-I is incorrect but Statement-II is correct





Q.35) If there is an oil spill in the water of Indian Exclusive Economic Zone (EEZ), then which one of the following organizations will likely be responsible for tackling it?

- a) Indian Ports Association (IPA)
- b) Indian Navy
- c) Indian Coast Guard
- d) Coastal Aquaculture Authority (CAA)

Q.36) Consider the following statements with reference to the 'Dark Sky Reserve':

- 1. It is a type of astronomical observatory.
- 2. They are designated to protect light pollution from the night sky.
- 3. The land must only be publicly owned to be designated for Dark Sky Reserve.
- 4. Dark Sky Reserve in Ladakh will be South East Asia's first Night Sky sanctuary.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.37) Decentralised Autonomous Organisations (DAOs) was seen in the news recently, is related to -

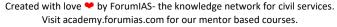
- a) Blockchain Technology
- b) Environmental Impact Assessment
- c) Primary Healthcare Facilities
- d) Establishment of Protected Areas

Q.38) Consider the following statements:

- 1. An optical fiber is a flexible glass or plastic fiber that can transmit light from one end to the other.
- 2. Optical fibers exhibit low attenuation, meaning that they suffer minimal signal loss over long distances.
- 3. Total internal reflection occurs when light travels from a rarer medium to a denser medium and the angle of incidence is greater than the critical angle.

Which of the statements given above is/are correct?

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





Answer Key

1 - (b)	2 - (c)	3 - (c)	4 - (d)	5 - (b)	6 - (b)	7 - (d)	8 - (a)	9 - (a)	10 - (c)
11 - (a)	12 - (b)	13 - (d)	14 - (a)	15 - (d)	16 - (b)	17 - (b)	18 - (b)	19 - (b)	20 - (b)
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21 - (b)	22 - (b)	23 - (d)	24 - (a)	25 - (d)	26 - (a)	27 - (a)	28 - (a)	29 - (b)	30 - (b)
31 - (b)	32 - (a)	33 - (b)	34 - (c)	35 - (c)	36 - (b)	37 - (a)	38 - (b)	- Sparie	
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Answers & Explanation

Art & Culture

1. Correct option is (B)

• Mahima Dharma is a monotheistic Hindu sect that rejects idol worship. Mahima Dharma followers believe that God is formless and cannot be contained in an idol. They also believe that idol worship is a distraction from true devotion to God. They oppose the caste system. The sect believes that all people are equal in the eyes of God, and that caste is a man-made construct. Mahima Dharma teaches the concept of immortality of the soul. The sect believes that the soul is eternal and never dies. Bhima Bhoi was the founder of Mahima Dharma.

Source: ForumIAS

Geography

2. Correct option is (C)

- Statements 1 and 4 are incorrect. The ionosphere is quite cold, typically ranging from -100°C to 0°C. The warmest layer of the atmosphere is the troposphere, the lowest layer of the atmosphere. The ionosphere is most dense during the day due to solar ionization. At night, with the absence of solar radiation, it becomes less dense.
- Statements 2 and 3 are correct. The ionosphere's density varies with solar activity. During the day, the Sun's energy ionizes the upper atmosphere, causing the ionosphere to expand. At night, it contracts as ionization decreases. Scientists have found that the earthquakes, even smaller ones, affect the ionosphere, causing disruptions known as coseismic ionospheric perturbations (CIP).

Source: ForumIAS



3. Correct option is (C)

Gender-inclusive communication refers to the use of language and communication practices that aim
to include and respect all gender identities, acknowledging and affirming diversity. It seeks to avoid
language that reinforces traditional gender norms and stereotypes, and instead, promotes an
inclusive and respectful environment for people of all gender identities.

Source: ForumIAS

4. Correct option is (D)

• Statements 1, 2 and 3 are correct. Urbanization is a major trend in India, with millions of people moving from rural areas to cities every year. This rapid urbanization is putting a lot of strain on the country's infrastructure, including housing, transportation, and sanitation. India's urban population is projected to continue growing rapidly over the coming decades, and is expected to reach 68% of the total population by 2050. Urbanization can lead to increased economic growth by creating new jobs and businesses, and by increasing productivity and innovation. However, there are also potential downsides to urbanization, such as increased pollution and traffic congestion.

Source: Forum IAS

Polity

5. Correct option is (B)

• The Gram Sabha is the general body of the village and is made up of all adult members of the village. It is the primary forum for public engagement and participation in village affairs. The Gram Sabha has the right to participate in the social audit process, and it is responsible for publicizing the dates and venues for the audits.

Source: ForumIAS

6. Correct option is (B)

- Statemen 1 is incorrect. While the Governor does have certain powers that can affect the legislative process, the Governor does not have the authority to disrupt the regular course of lawmaking. The Governor's role in the legislative process is primarily to review and approve bills passed by the State legislature.
- Statement 2 is correct. Once the State legislature reconsiders the Bill and passes it again, whether with or without amendments, and presents it to the Governor for assent, the Governor is obligated to grant assent without withholding it.

Source: ForumIAS

7. Correct option is (D)

- Statements 1, 2 and 3 are incorrect. SCS is a support mechanism that can provide additional resources and assistance to states facing unique challenges, but it does not guarantee economic growth. Economic development depends on a variety of factors, including state policies, investments, infrastructure, and overall economic conditions. SCS can help create a more favorable environment for development, but it cannot guarantee success.
- The Central Government considers a range of factors when determining whether or not to grant SCS to a particular state, including the state's geographical features, socio-economic conditions, infrastructure development, and overall development needs. The specific criteria that are considered may vary depending on the individual state's circumstances.
- The amount of financial assistance that SCS-granted states receive varies depending on their individual needs and priorities. The Central Government may provide additional funds for specific projects, schemes, or programs in a particular state based on its unique circumstances.



Source: ForumIAS

8. Correct option is (A)

- Statements 1 and 3 are incorrect. The Supreme Court typically exercises its original jurisdiction in disputes between two or more states, meaning it has the authority to hear such cases directly, without them having to go through lower courts first. The Supreme Court of India does not have the power to issue advisory opinions that override the decisions of lower courts. The Supreme Court only has the power to issue binding judgments, which are rulings that are legally enforceable and must be followed by lower courts. Advisory opinions, on the other hand, are non-binding and do not have the force of law.
- Statement 2 is correct. The Supreme Court of India requires a minimum of five judges to form a Constitution Bench for deciding cases involving substantial questions of law as to the interpretation of the Constitution.

Source: ForumIAS

9. Correct option is (A)

- Statements 1 and 2 are correct. The Supreme Court of India's ruling in the case of Assessing Officer Circle (International Taxation) New Delhi Vs Nestle SA has significant implications for the way Double Taxation Avoidance Agreements (DTAAs) are implemented in India. The Court held that a formal notification under Section 90(1) of the Income Tax Act, 1961 is mandatory for giving effect to a DTAA or any protocol that alters its terms or conditions.
- This means that a DTAA or its modification cannot be automatically applied in India simply because it has been signed or ratified by India and the other contracting state. They need to be notified in the official gazette by the Indian government to become enforceable in India.
- Article 73 of the Constitution gives the executive the power to make international agreements, but
 the agreements must be approved by the Parliament to become enforceable laws in India. The
 ratification of international agreements is the prerogative of the Parliament, and the agreements
 have to be in conformity with the Constitution of India. In other words, the executive cannot bypass
 the Parliament to implement international agreements.

Source: ForumIAS

Schemes & Policies

10. Correct option is (C)

• Statements 1 and 2 are correct. AB-HWCs aims to move away from selective health care to a more comprehensive range of services spanning preventive, promotive, curative, rehabilitative and palliative care for all ages. AB-HWCs offer a wide range of services, including tele-consultation, which allows patients to connect with doctors remotely using video conferencing technology. Additionally, AB-HWCs promote wellness activities like Yoga to encourage healthy lifestyle habits and improve overall well-being.

Source: ForumIAS

International Relations/Organizations

11. Correct option is (A)

• Statement 1 is correct. India is one of the 14 founding members of the IPEF, along with the United States, Japan, Australia, and several other countries in the Indo-Pacific region. India has been actively engaged in negotiations and has emphasized the importance of the IPEF as a platform for promoting economic growth and integration in the region.



- Statements 2 and 3 are incorrect. The IPEF is not specifically designed to counter any one country's economic influence, but rather to promote economic cooperation and integration among a diverse group of countries in the Indo-Pacific region.
- The IPEF is not a free trade agreement, but rather a framework for economic cooperation and integration among its 14 member countries. While the IPEF seeks to promote free, fair, and open trade commitments that build upon the rules-based multilateral trading system, it does not mandate the reduction or elimination of tariffs or trade barriers among its member countries.

Source: ForumIAS

12. Correct option is (B)

- Statements 1 and 2 are correct. The Houthis have been largely in control of northern Yemen, including the capital Sanaa, and have been a significant force in the ongoing conflict in Yemen. They are named after the Houthi tribe who follow Zaydi Shia beliefs. They are supported by Iran.
- Yemen is located at the junction of the Red Sea and the Gulf of Aden, which is a strategic location for shipping and trade in the region. Yemen is located in the Arabian Peninsula (Western Asia). It is bordered by Saudi Arabia and Oman. It maritime borders are Djibouti, Eritrea and Somalia. Largest Island of Yemen is Socotra Island.
- Statement 3 is incorrect. The Red Sea is connected to the Indian Ocean in the south through the Bab el Mandeb strait and the Gulf of Aden. The Red Sea is a seawater inlet of the Indian Ocean lying between Africa and Asia. To the north of the Red Sea lies the Sinai Peninsula, the Gulf of Aqaba and the Gulf of Suez. Bordering Countries: Egypt, Saudi Arabia, Yemen, Sudan, Eritrea and Djibouti.

Source: ForumIAS

13. Correct option is (D)

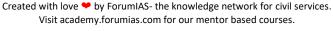
• The Golden Gate Declaration was adopted at the 30th APEC Economic Leaders' Meeting held in San Francisco, USA. This declaration builds upon previous APEC work and focuses on key areas such as resilience, sustainability, interconnection, innovation, and inclusion.

Source: Forum IAS

14. Correct option is (A)

- Statements 1 and 2 are incorrect. The Commission on Social Connection, launched by the World Health Organization (WHO), aims to address loneliness as a pressing health threat, promote social connection as a priority, and accelerate the scaling up of solutions in countries of all incomes. The commission aims to see the issue recognized and resourced as a global public health priority, but it does not set a specific target to eliminate loneliness entirely by 2025.
- While the Commission aims to promote social connection as a priority and analyze the central role social connection plays in improving health for people of all ages, it does not specifically advocate for mandatory "social connection" classes in schools as a solution.
- Statement 3 is correct. Promoting social connection as a priority is a central objective of the Commission on Social Connection. The Commission recognizes that strong social connections are essential for individual well-being, community resilience, and societal progress. It advocates for policies, programs, and initiatives that enhance social interaction, reduce isolation, and foster meaningful connections among individuals and communities.

Source: Forum IAS





15. Correct option is (D)

• Statements 1, 2 and 3 are correct. The International Sugar Organization (ISO) is an intergovernmental organization based in London, United Kingdom. It was established by the International Sugar Agreement of 1968 to promote orderly and efficient world sugar trade and to assist its members in developing their sugar industries. Its main functions are: the ISO collects and publishes statistics on sugar production, consumption, trade, and prices. The ISO facilitates dialogue between producers and importers on issues of common interest, such as market stability, trade policy, and sustainable development. The ISO provides technical cooperation to its members, including training courses, workshops, and seminars on sugar production, processing, and marketing.

Source: Forum IAS

16. Correct option is (B)

- Statement 1 is correct. ILO is a specialized agency of the United Nations, founded with the primary purpose of promoting workers' rights, improving working conditions, and advancing social justice globally. India is a founding member of ILO.
- Statements 2 and 3 are incorrect. The ILO's objective of decent work marks an explicit concern for all
 workers, including those outside the formal labor market. The ILO has also developed a number of
 initiatives to promote decent work in the informal economy, including the Employment Transitions
 Programme and the Social Protection Floor Recommendation.
- Freedom of Association and Protection of Right to Organised Convention,
 Right to Organize and Collective Bargaining Convention, Occupational Safety and Health Convention,
 Promotional Framework for Occupational Safety and Health Convention, 2006 are the ILO
 conventions not ratified by India.

Source: ForumIAS

Economy

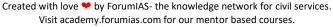
17. Correct option is (B)

- Statement 1 is incorrect. The IRRA Platform is not an insurance platform that provides coverage to investors in case of investment losses. It is a platform developed to reduce risks faced by investors in case of technical glitches at the end of trading members or stock brokers registered with SEBI. It will provide investors an opportunity to close their open positions and cancel pending orders in case of technical glitches or outages which render the trading member's site inaccessible.
- Statement 2 is correct. IRRA can be invoked by trading members when there's a technical glitch at their end across exchanges from both the primary site and disaster recovery site. Even stock exchanges can suo moto initiate the service, if needed, irrespective of any such request by the trading members.

Source: ForumIAS

18. Correct option is (B)

- Statements 1 and 3 are correct. International Container Transhipment Port (ICTP) Project is being built at Galathea Bay in Great Nicobar Island. It is being developed by the Syama Prasad Mookerjee Port Trust (SMPK). One of the primary objectives of the ICTP project is to reduce India's dependence on foreign ports for transhipment cargo handling. Currently, a significant portion of India's transhipment cargo is handled at ports in Singapore, Colombo, and Klang. The ICTP aims to capture this cargo and keep it within India. The project is Envisaged under Maritime India vision 2030.
- Statements 2 and 4 are incorrect. While the ICTP is expected to be a major transhipment hub, it is unlikely to handle more containers than all the ports of India combined. The ICTP project is expected





to handle around 16 million containers per year in its ultimate phase, which is still less than the total container handling capacity of all Indian ports combined. The ICTP project is being developed under the Landlord-Port Model, which means that the government will develop and maintain the port infrastructure, while private companies will operate the port facilities. Private companies will be allowed to bid for concessions to develop and operate specific terminals within the port.

Source: ForumIAS

19. Correct option is (B)

- Statements 1 and 3 are correct. India consumed 27.1 million tonnes of sugar in 2022, making it the world's largest consumer. It also produced 36 million tonnes of sugar in 2022, making it the world's second-largest producer after Brazil.
- The domestic sugar industry in India tends to produce a surplus compared to consumption. This surplus is often exported, which helps to support the global sugar market.
- Statement 2 is incorrect. India is the 3rd largest country in the world in ethanol production after the USA and Brazil. The ethanol blending percentage in India has increased from 5% in 2019-20 to 12% in 2022-23.

Source: ForumIAS

20. Correct option is (B)

- Statement 1 is incorrect. The Purple Sector, also known as the Care Economy, refers to the economic activities and services that contribute to the well-being of individuals and communities, particularly those related to caregiving, education, and social services. It does not specifically focus on environmental protection or sustainable resource management.
- Statement 2 is correct. Digital Public Infrastructure (DPI) can significantly benefit the Purple Sector by providing access to technology, improving communication, and enhancing efficiency.

Source: ForumIAS

21. Correct option is (B)

- Dollarization can help to reduce inflation by pegging the local currency to a stable foreign currency, such as the US dollar. This can help to anchor inflation expectations and make it more difficult for inflation to take hold.
- Dollarization can also help to lower interest rates by making the local economy more attractive to foreign investment. This is because foreign investors are more likely to invest in a country with a stable currency and a low risk of inflation.
- Dollarization can help to promote financial stability by reducing the risk of financial crises. This is because a dollarized economy is less vulnerable to shocks, such as currency depreciation or sudden changes in capital flows.
- Seigniorage revenue is the profit a government makes from issuing its own currency. When a country adopts a foreign currency, it loses control over its own currency and the associated seigniorage revenue.
- Adopting a foreign currency reduces monetary autonomy as the country gives up control over its own currency and monetary policy.

Source: Forum IAS

Environment

22. Correct option is (B)

• An airshed is a region of the atmosphere that is defined by the topography and meteorology of the area. The movement of air within an airshed is somewhat restricted, and pollutants can become



trapped within the airshed. This can lead to high levels of air pollution, especially in urban areas. An airshed can be as small as a few kilometers or as large as a whole country. For example, the Delhi-National Capital Region (NCR) airshed encompasses the city of Delhi and several surrounding districts, and it's considered one of the most polluted airsheds in the world.

Source: ForumIAS

23. Correct option is (D)

- Some of the methods used to produce green hydrogen are: Green Hydrogen Electrolyzer, Solid oxide electrolysis (SOE), Photoelectrochemical (PEC) water splitting, Alkaline electrolysis, Proton exchange membrane (PEM) electrolysis, Thermochemical water splitting, Photobiological water splitting, electrolysis.
- Methods 1 and 2 (SMR and coal gasification) are not suitable for producing green hydrogen because they rely on fossil fuels and produce significant carbon emissions.
- Further, Finland and India recently discussed manufacturing green hydrogen electrolyzer in India.
- A normal Hydrogen Electrolyzer is an electrochemical device that use electricity to split water into hydrogen and oxygen. Whereas, green hydrogen electrolyzer uses electricity generate from renewable sources to power the electrolysis process, by means of which hydrogen is obtained from water. One of the world's largest electrolysers is located in Fukushima, Japan, at the site of the well-known nuclear disaster.

Source: ForumIAS

24. Correct option is (A)

 Nugu Wildlife Sanctuary is located in the Mysore district of Karnataka state, to the north of the Bandipur National Park. It's a small sanctuary with an area of just 30.32 square kilometers, and it's not yet open to tourists.

Source: Forum IAS

25. Correct option is (D)

- Statements 1 and 2 are incorrect. Critical Tiger Habitats (CTHs) are legally protected under the Wildlife (Protection) Act, 1972, not the Environment (Protection) Act, 1986. Not all Protected Areas (PAs) have Critical Tiger Habitats (CTHs). CTHs are only designated in PAs that meet specific criteria for tiger conservation, such as having high tiger density, abundant prey, and suitable habitat.
- Statement 3 is correct. The notification of a CTH is done by the state government in consultation with an expert committee, which includes scientists, wildlife experts, and representatives from relevant government agencies.

Source: ForumIAS

26. Correct option is (A)

• Statements 1 and 2 are correct. Bio-gas is produced naturally (through a process of anaerobic decomposition) from waste/biomass sources like agriculture residue, cattle dung, municipal solid waste, etc. After purification, it is compressed and called as Compressed Bio Gas (CBG). CBG has methane content of more than 90% which is similar to commercially available natural gas in composition and energy potential. It can help reduce carbon emissions and provide additional revenue source for farmers. It can also help reduce import of natural gas and crude oil, ensuring energy security.



- The CBG Blending Obligation (CBO) is an initiative by the Indian government to mandate the blending of CBG with natural gas in the city gas distribution (CGD) sector. This blending obligation is being implemented in a phased manner, with the target of achieving 5% blending by 2028-29.
- Statement 3 is incorrect. CBG is primarily composed of methane (CH4), and it does not contain oxygen. Upon combustion, CBG produces carbon dioxide (CO2) and water vapor (H2O), but no oxygen is released into the atmosphere.

Source: ForumIAS

27. Correct option is (A)

- Statement 1 is correct. Sustainable Aviation Fuel is produced from renewable sources such as agricultural waste, municipal solid waste, and forestry residues. It has the potential to reduce greenhouse gas emissions by up to 80 percent.
- Statement 2 is incorrect. In terms of efficiency, SAF has the same energy density as traditional jet fuel, meaning that it can power aircraft for the same amount of time. However, they are more expensive than traditional jet fuel.

Source: ForumIAS

Science & Technology

28. Correct option is (A)

- Statements 1 and 2 are incorrect. Kyasanur Forest Disease (KFD) is a tick-borne viral hemorrhagic fever endemic to the western and central districts of Karnataka State. It is caused by Kyasanur Forest Disease virus (KFDV), a member of the Flaviviridae family of viruses. The disease is characterized by fever, headache, muscle pain, vomiting, and bleeding. In severe cases, it can lead to neurological complications and death. KFD is not found only in India. The disease is also endemic to other parts of Southeast Asia, including Nepal, Myanmar, and Thailand.
- Statement 3 is correct. Kyasanur Forest Disease (KFD) can cause severe illness and death if left untreated. It is a zoonotic disease. It is also referred to as Monkey disease/ monkey fever because of its association with monkey deaths. It is transmitted through the bite of ticks and bonnet. Black-faced langur monkeys are highly susceptible to the infection. They play a significant role in the spread of the virus in the human population. There is no specific treatment for monkey fever. A vaccine (Formalin inactivated KFDV vaccine) does exist for KFD and is used in endemic areas of India.

Source: ForumIAS

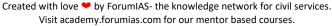
29. Correct option is (B)

- The Atmospheric Waves Experiment (AWE) is a NASA mission that is designed to study atmospheric gravity waves, which are large-scale ripples in Earth's atmosphere. These waves can travel for thousands of kilometers and can have a significant impact on weather patterns. AWE is the first mission to study atmospheric gravity waves on a global scale.
- Atmospheric gravity waves are generated by a variety of sources, including storms, mountains, and tropical cyclones, and they can propagate vertically and horizontally across the globe. These waves can have a wide range of effects, including influencing the distribution of temperature, moisture, and winds in the atmosphere, and affecting cloud formation and precipitation.

Source: ForumIAS

30. Correct option is (B)

• Statement 1 is incorrect. Gene editing is a tool that can be used to modify specific genes in an organism, but it cannot eliminate genetic differences. Every individual has a unique genetic makeup,





including variations in their DNA sequence that are responsible for many of the differences between individuals.

• Statement 2 is correct. Casgevy is a revolutionary gene-editing therapy designed to treat sickle cell anaemia. It utilizes the advanced CRISPR-Cas 9 tool for editing genes. It works by editing the patient's genes to revive fetal haemoglobin, which is normally switched off after birth. This compensates for the defective haemoglobin in sickle cells, reducing the disease's severe symptoms and complications.

Source: Forum IAS

31. Correct option is (B)

- Statement 1 is incorrect. Space communication is primarily carried out using radio waves, not infrared waves. Radio waves are a type of electromagnetic radiation with a longer wavelength than infrared waves. Radio waves can travel long distances through the vacuum of space and are not affected by Earth's atmosphere, making them ideal for space communication.
- Statement 2 is correct. NASA's Deep Space Optical Communications (DSOC) experiment is a cuttingedge technology that has the potential to revolutionize deep space communications. By using nearinfrared laser signals, DSOC can transmit data at rates that are up to 100 times faster than traditional radio frequency (RF) systems. This would allow NASA to send and receive high-resolution images and videos from spacecraft in deep space, as well as conduct real-time scientific experiments.

Source: Forum IAS

32. Correct option is (A)

• The Union Health ministry has made available generic drugs for rare diseases for the first time. Presently, they are made available for four rare diseases Tyrosinemia-Type 1, Gauchers Disease, Wilson's Disease, and the Dravet-Lennox Gastaut Syndrome. In the next few months, the Ministry also plans to include Phenylketonuria and Hyperammonemia to the list.

Source: Forum IAS

33. Correct option is (B)

- Statement 1 is incorrect. CERT-In is not responsible for investigating cybercrimes or prosecuting cybercriminals. These are the responsibilities of law enforcement agencies. CERT-In's primary function is to prevent cyberattacks and respond to cybersecurity incidents.
- Statement 2 is correct. The Ministry of Electronics and Information Technology (MeitY) is the nodal ministry for CERT-In. This means that MeitY is responsible for overseeing CERT-In's activities and ensuring that it is fulfilling its mandate.

Source: Forum IAS

34. Correct option is (C)

- Statement 1 is correct. Spectrum allocation is the process of dividing the radio frequency spectrum into different frequency bands and assigning them to different users and services. Spectrum is a limited resource; it needs to be allocated judiciously to ensure users do not interfere with each other.
- To prevent interference, spectrum is divided into different frequency bands, and each band is assigned to specific users, such as telecom operators, broadcasters, and government agencies. This allocation process ensures that users can operate within their assigned frequency ranges without interfering with each other.
- Statement 2 is incorrect. In India, spectrum is allocated either through the method of auctions, lotteries or administrative allocation. Under an auction model, companies bid for spectrum above the





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reserve price set by the state allocating such spectrum, whereas, in administrative allocation, the state allocates spectrum to qualified communications companies.

• While "spectrum commons" is a method used in some countries, it is not used in India.

Source: ForumIAS

35. Correct option is (C)

• The Indian Coast Guard (ICG) is the primary agency responsible for coordinating oil spill response operations in the Indian Exclusive Economic Zone (EEZ). The ICG has a dedicated Oil Spill Response Cell, which is responsible for developing and implementing oil spill response plans, conducting training exercises, and coordinating with other agencies in the event of an oil spill.

Source: ForumIAS

36. Correct option is (B)

- Statements 1 and 3 are incorrect. Dark Sky Reserves (DSRs) are not astronomical observatories, although they are valuable for astronomy and scientific research. Observatories are specifically designed facilities equipped with powerful telescopes for observing the night sky, while DSRs are broader areas designated to protect the night sky from light pollution. Dark Sky Reserves can be on public, private, or a combination of both types of land. However, the designation process typically requires cooperation between landowners and government agencies to ensure that the necessary light pollution controls are in place.
- Statements 2 and 4 are correct. DSRs are designated to protect the night sky from light pollution, preserving the natural darkness of the sky. Dark Sky Reserve in Ladakh will be South East Asia's first Night Sky sanctuary.

Source: ForumIAS

37. Correct option is (A)

Decentralized Autonomous Organizations (DAOs) are a type of organization that uses blockchain
technology to automate decision-making and operations. Blockchain is a distributed ledger
technology that allows for secure and transparent record-keeping. This makes it an ideal platform for
DAOs, which are designed to be decentralized and transparent. They are controlled by the respective
organization members and not influenced by the government.

Source: ForumIAS

38. Correct option is (B)

- Statements 1 and 2 are correct. An optical fiber is a flexible glass or plastic fiber that can transmit light from one end to the other. Optical fibers are used in a wide variety of applications, including telecommunications, fiber optic sensors, and medical imaging. It works on the process of total internal reflection (TIR).
- Statement 3 is incorrect. Total internal reflection occurs when light travels from a denser medium to a rarer medium and the angle of incidence is greater than the critical angle. This is because when light enters a rarer medium, the angle of refraction is always greater than the angle of incidence.

Source: Forum IAS

