

10 PM Current Affairs Quiz Weekly Compilation

For UPSC CSE Prelims

[3rd Week] Aug 2024

10 PM Compilation August [Third Week] 2024

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Art & Culture

Q.1) Consider the following statements regarding the Eri Silk:

1. It is considered the world's only vegan silk.
2. Its production is mainly concentrated in the North-Eastern states of India.
3. It cannot be dyed.

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

Geography

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

1. It is known as a natural green wall in northwestern India.
2. The range acts as a transition zone between the Thar Desert and the Gangetic plain.
3. Taragarh is the highest peak of the Aravalli Range.
4. Sabarmati River originates from the Aravalli Range.

How many of the statements given above are correct?

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

Q.3) Consider the following statements:

1. Poland is located to the east of Ukraine.
2. Poland is a member of North Atlantic Treaty Organization (NATO).
3. Poland is India's largest trade partner in Central Europe.

How many of the statements given above are correct?

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

Q.4) Which one of these geographical features is NOT found near Demchok?

- a) Charding Nullah stream
- b) Indus River
- c) Pangong Tso lake
- d) Hot springs

Q.5) Which one of the following statements is correct regarding the Super Blue Moon?

- a) It is a rare celestial event where a full moon is both a supermoon and the second full moon in a calendar month.
- b) It is a rare event when two full moons occur in a single month and the second moon is slightly farther from Earth, making it appear smaller.
- c) It is a phenomenon where the moon is closer to Earth and appears blue in colour due to scattering of light in the atmosphere.
- d) It is a full moon that coincides with a lunar eclipse causing it to appear blue.

Q.6) Consider the following statements:

1. Territorial disputes and construction activities in the South China Sea have led to significant damage to coral reefs and loss of marine life.
2. The Geneva Conventions provides the legal framework for maritime claims and disputes in the South China Sea.
3. Strait of Malacca connects the South China Sea to the Indian Ocean.

How many of the statements given above are correct?

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

Q.7) Consider the following statements:

1. The Teesta River originates from Brahmaputra Glacier.
2. The Teesta River is considered suitable for hydropower development due its large number of tributaries.
3. The Teesta River flow through Assam and Meghalaya before entering Bangladesh.

How many of the statements given above are correct?

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

Q.8) Which of the following statement(s) is/are correct?

1. A Glacial Lake Outburst Flood (GLOF) is a gradual release of water from a glacial lake.
2. The National Glacial Lake Outburst Floods Risk Mitigation Programme aims to perform hazard assessments, install automated monitoring stations, and set up early warning systems for glacial lakes and downstream regions.

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

Polity

Q.9) Consider the following statements:

1. Directive Principles of State Policy are only guidelines and do not create any justiciable rights in favour of any person.
2. Directive Principles of State Policy override Fundamental Rights in case of conflict.

Which of the statement(s) given above is/are correct?

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

Q.10) Consider the following statements:

1. The 103rd Constitutional Amendment Act, 2019 introduced 10% reservation for economically weaker sections (EWS) in civil posts and services.
2. There is no reservation for promotions in top-level (Class A) civil services.

Which of the statement(s) given above is/are correct?

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

Q.11) With reference to the Central Consumer Protection Authority (CCPA), consider the following statements:

1. It aims to regulate matters related to the violation of consumer rights.
2. It has the authority to seize the assets of the advertising company in connection with misleading advertisements.
3. It has the authority to order the recall of goods or withdrawal of services that are considered dangerous, hazardous, or unsafe.

How many of the statements given above are correct?

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

Q.12) Consider the following statements regarding the lateral entry into the civil services:

1. Ministry of Home Affairs is responsible for the selection of candidates through the lateral entry system.
2. The main purpose of lateral entry is to bring in domain expertise from the private sector to improve efficiency and introduce innovative approaches in governance and policy formulation.
3. Lateral entries can be made in all the ministries of the government.
4. Implementing lateral entry into the system could create an equitable framework for career advancement among all officers.

How many of the statements given above are correct?

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

Q.13) Consider the following statements:

1. Corruption is the abuse of entrusted power for private gain which can occur in both the public and private sectors.
2. Corruption has decreased with globalization.
3. High levels of corruption between government and businesses leads to significant rent-seeking activities.

Which of the statement(s) given above is/are correct?

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

Q.14) Consider the following statements:

1. Only the elected members of the State Legislative Assemblies are eligible to vote in Rajya Sabha elections.
2. None of the Above (NOTA) option is applicable in Rajya Sabha elections.
3. Rajya Sabha elections, including by polls, use the first-past-the-post system.

How many of the statements given above are correct?

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

Q.15) Which one of the following statements is correct regarding the Prorogation of the Indian Parliament?

- a) Prorogation can only occur after the House is adjourned sine die
- b) The Rajya Sabha is dissolved during prorogation
- c) The President can prorogue the House even while it is in session
- d) Prorogation requires the approval of the Supreme Court

Q.16) Which one of the following is a key difference between a Bar Association and a Bar Council in India?

- a) Bar Associations are responsible for disciplinary actions against advocates, while Bar Councils are not.
- b) Bar Councils are voluntary organizations, while Bar Associations are statutory bodies.
- c) Bar Councils regulate the legal profession and education, while Bar Associations primarily serve as professional bodies for lawyers.
- d) Bar Associations have the authority to grant recognition to law colleges while Bar Councils do not.

Q.17) With reference to the Competition Commission of India (CCI), consider the following statements:

1. It is tasked with ensuring fair competition in the market by eliminating anti-competitive practices and protecting consumer interests.
2. The Chairperson and members of the CCI are appointed by the President of India.
3. Under the Competition Act 2002, the CCI possess power to issue licenses for new businesses.

How many of the statements given above are correct?

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

Q.18) Consider the following statements:

1. The primary function of the Lokayukta is to investigate allegations of corruption against public officials in the state.
2. Karnataka was the first Indian state to establish the institution of Lokayukta.
3. Lokayukta is a constitutional body in India.
4. Governor appoints the Lokayukta in a state.

How many of the statements given above are correct?

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

Q.19) With reference to the new rules for seaplane operations, consider the following statements:

1. Only scheduled operators can provide seaplane services.
2. Pilots with a commercial pilot license (CPL) will be qualified as seaplane-rated pilots.
3. Seaplane operations fall under the under the UDAN (Ude Desh ka Aam Nagrik) scheme.

How many of the statements given above are correct?

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

Q.20) Consider the following statements:

1. A Waqf property cannot be sold or inherited.
2. Under the Income-Tax Act of 1961, family waqfs are generally exempt from paying income tax.
3. If there are no successors to family waqf, the revenues from the property are absorbed by the state.
4. The Waqf Bill 2024 states that a Muslim can only create a family waqf with up to one-third of their property if they intend to exclude their heirs from it.

Which of the statements given above are correct?

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

Acts & Polices

Q.21) Consider the following pairs:

Schemes-----Ministries

1. PM Awas Yojana----- Ministry of Housing and Urban Affairs
2. PM Surya Ghar----- Ministry of Micro, Small and Medium Enterprises
3. PM Vishwakarma schemes----- Ministry of New and Renewable Energy

Which of the above pair(s) is/are correctly matched?

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

Q.22) Consider the following statements:

1. The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is a government program that provides rural employment.
2. In agriculture, the MGNREGA is implemented only during the cultivation season.

Which of the statement(s) given above is/are correct?

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

Q.23) With reference to the National Handloom Development Programme (NHDP), consider the following statements:

1. It aims to facilitate the sustainable development of handloom weavers into cohesive, self-managing, and competitive socio-economic units.
2. It includes export subsidies for handloom products to support the weavers' ability to compete in international markets and enhance their economic stability.

Which of the statement(s) given above is/are correct?

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

Q.24) Consider the following statements:

Statement-I: The demand of work under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has increased in recent years.

Statement-II: A large number of populations live in rural areas 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

Q.25) Consider the following statements:

1. Over-the-top (OTT) communication platforms are considered as 'access services' under the Telecommunications Act of 2023.
2. Net neutrality is the principle through which Internet Service Providers (ISPs) can charge different rates for different types of content.

Which of the statement(s) given above is/are correct?

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

Q.26) Consider the following statements regarding the Prime Minister Employment Generation Programme (PMEGP):

1. The objective of the PMEGP is to promote large-scale industrialization and attract foreign direct investment in urban areas.
2. Khadi and Village Industries Commission (KVIC) is responsible for implementing the PMEGP at the national level.
3. Any individual above 18 years of age is eligible to apply for assistance under the PMEGP scheme.

How many of the statements given above are correct?

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

Q.27) 'SMILE program' is an initiative by the Indian Government for:

- a) Promoting digital literacy and internet access in rural areas across India.
- b) Offering financial incentives to startups in the technology sector to boost innovation.
- c) Providing comprehensive support and rehabilitation for marginalized groups such as transgenders.
- d) Enhancing agricultural productivity through advanced irrigation techniques and subsidies for farmers.

International Relations/Organizations

Q.28) With reference to the International Court of Justice (ICJ), which of the following statements are correct?

1. It can hear cases of environmental disputes between the countries.
2. The ICJ's advisory opinions are not legally binding.
3. The ICJ has appellate jurisdiction.
4. Only UN member states can bring cases before the ICJ.

Select the correct answer using the codes given below:

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

Q.29) Consider the following statements:

Statement-I: A 'Public Health Emergency of International Concern (PHEIC)' is World Health Organization's (WHO's) highest form of alert.

Statement-II: A PHEIC signifies an extraordinary event that poses a public health risk to other countries through the international spread of disease.

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.30) Which one of the following areas is a focus of the 'Enhanced Strategic Partnership' between India and Malaysia?

- a) Space exploration
- b) Renewable energy and technology
- c) Textile manufacturing
- d) Traditional agriculture

Q. 31) With reference to India's Act East Policy, consider the following statements:

1. The '4 C's' emphasized in India's Act East Policy are Connectivity, Communication, Collaboration, and Culture.
2. India-Myanmar-Thailand Trilateral Highway Project is a key connectivity initiative under the Act East Policy.

Which of the statement(s) given above is/are correct?

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

Q.32) Consider the following statements:

1. A Bilateral Investment Treaty (BIT) is an agreement between two countries to protect investments made by investors from both countries.
2. One key feature of BITs is that they allow foreign investors to directly sue the host country in an international tribunal if they believe their rights under the treaty have been violated.
3. BITs require host states to prioritize foreign investor interests over domestic concerns.

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.33) Consider the following statements:

1. Malaysia hosts the third largest community of Persons of Indian Origin (PIO).
2. India is Malaysia's largest trading partner.
3. Malaysia is a member both Association of Southeast Asian Nations (ASEAN) and BRICS.

Which of the statement(s) given above is/are correct?

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

Q.34) Consider the following statements:

1. Poland is a global leader in food processing.
2. Poland and India are full time members of International Energy Agency (IEA).
3. Under the Jam Saheb Memorial Youth Exchange Programme, 20 young people from Poland will visit India every year.

Which of the statement(s) given above is/are correct?

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

Economy

Q.35) The primary objective of the Marginal Cost of Funds-based Lending Rate (MCLR) introduced by the Reserve Bank of India (RBI) is to:

- a) Increase the profitability of banks
- b) Ensure faster transmission of monetary policy rates to borrowers
- c) Stabilize the cash flow of banks
- d) Provide a fixed interest rate for borrowers

Q.36) Consider the following statements:

1. Under inflation targeting, if inflation is above the target, the central bank will lower interest rates to bring inflation back to the target level.
2. In India, a significant amount of the household spending goes towards food.
3. When the Reserve Bank of India (RBI) raises the repo rate, it sometimes increases the core inflation.

How many of the statements given above are correct?

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

Q.37) Consider the following statements:

1. Khadi represents both India's rich history and its progress in modern times.
2. In handlooms, the Goods and Services Tax (GST) only applies to the finished products.

Which of the statement(s) given above is/are correct?

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

Q.38) In the context of finance, 'Rights Issue' refers to:

- a) A public offering of shares to new investors at market price.
- b) Issuing bonds to raise capital for debt repayment.
- c) Allowing shareholders to purchase additional shares at a premium to the market price.
- d) Raising additional capital from existing shareholders

Q.39) The primary objective of India's Duty-Free Tariff Preference (DFTP) Scheme is to:

- a) Provide subsidies to Indian exporters to enhance their competitiveness in international markets.
- b) Encourage foreign direct investment in India's manufacturing sector by offering tax incentives to multinational companies.
- c) Increase tariffs on all imports to protect domestic industries from foreign competition.
- d) Facilitate market access for exports from Least Developed Countries (LDCs) to India by reducing or eliminating tariffs on eligible products.

Q.40) Consider the following statements:

1. India-KLEMS is a framework used to measure industry-level total factor productivity (TFP).
2. The KLEMS framework is used to collect data on employment.

Which of the statement(s) given above is/are correct?

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

Q.41) With reference to the Digital General Crop Estimation Survey (DGCES), consider the following statements:

1. It enables efficient allocation of water, fertilizers, and other resources by providing detailed insights into crop health and soil conditions.
2. The data from DGCES will be used to generate crop production statistics through FASAL program (Forecasting Agricultural output using Space, Agro-meteorology, and Land-based observations).

Which of the statement(s) given above is/are correct?

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

Q.42) Consider the following statements:

1. Health is a state subjects in India.
2. India exceeds the World Health Organization's recommended spending on healthcare.

Which of the statement(s) given above is/are correct?

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

Environment

Q.43) Consider the following statements:

1. Microplastics are defined as natural plastic particles smaller than 1 mm.
2. Microplastics enter the food chain through environmental contamination and can also result from contamination during food processing and packaging.
3. Wheat contains higher concentrations of microplastics compared to other crops.

Which of the statement(s) given above is/are correct?

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

Q.44) Consider the following:

1. Ethanol
2. Biodiesel
3. Green hydrogen
4. Natural gas
5. Nuclear energy

How many of the above are considered as Green Fuel?

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

Q.45) Which one of the following is a harmful effect of golden algae blooms?

- a) Production of toxins that kill fish
- b) Reduction of water temperature
- c) Increase in water pH
- d) Decrease in water salinity

Q.46) With reference to Grasslands, which of the following statements are correct?

1. They are characterized by sandy soils with no vegetation.
2. They are distributed mainly in semiarid and arid area.
3. They play a crucial role in carbon storage and nutrient cycling.
4. They are crucial habitats for Bengal florican.

Select the correct answer using the codes given below:

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

Q.47) Consider the following statements:

1. India has lower costs for producing solar and wind energy compared to the global average.
2. Polysilicon is a major component in solar modules.
3. Green ammonia production emits no carbon dioxide.

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.48) Consider the following statements:

1. Ethanol blending can reduce greenhouse gas emissions and save India a significant amount in foreign exchange by cutting down on oil imports.
2. First-Generation Ethanol (1G) is derived from non-food biomass such as agricultural residues.
3. Rice is the primary crop used for ethanol production in India.

How many of the statements given above are correct?

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

Science & Technology

Q.49) Consider the following statements regarding the EOS-08 Mission, recently launched by the Indian Space Research Organisation (ISRO):

1. It is designed to improve Earth observation capabilities.
2. Synthetic Aperture Radar (SAR) payload is a part of the EOS-08 satellite.
3. The EOS-08 satellite operates in a Circular Low Earth Orbit.

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.50) With reference to the Krishi-Decision Support System (DSS), consider the following statements:

1. It aims to provide real-time data for crop management, productivity enhancement, and disaster warnings in agriculture.
2. It leverages blockchain technology to provide comprehensive agricultural management solutions.
3. It promotes sustainable agriculture by helping stakeholders understand cropping patterns and encouraging the cultivation of diverse crops through crop mapping and monitoring.

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.51) Consider the following statements:

1. The three foundational pillars of Digital Public Infrastructure (DPI) in India are e-governance, digital literacy, and internet connectivity.
2. Under India's presidency of the G-20, the first-ever multilateral agreement on Digital Public Infrastructure (DPI) was achieved with the establishment of a Global DPI Repository.

Which of the statement(s) given above is/are correct?

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

Q.52) The primary objective of the 'Bhavishya' software is to:

- a) Manage government employee's attendance
- b) Track pension sanction and payment processes
- c) Facilitate online tax filing
- d) Monitor government project deadlines

Q.53) Operation Parakram' was aimed at:

- a) Annexing Pakistan-occupied Kashmir
- b) Conducting joint military exercises with the United States
- c) Pressuring Pakistan to take action against cross-border terrorism
- d) Establishing an independent Khalistan state

Q.54) Consider the following statements:

- 1. The Gaganyaan mission is aimed at launching a satellite network for global internet coverage and enhancing connectivity worldwide.
- 2. The Samudrayaan mission is India's first manned ocean mission, focusing on exploring deep-sea resources such as metals, minerals, and biodiversity.
- 3. Indian Space Research Organisation (ISRO) is responsible for developing the technology for the Samudrayaan mission.

Which of the statement(s) given above is/are correct?

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

Q.55) Consider the following statements:

- 1. A vaccine-derived poliovirus (VDPV) is a strain of poliovirus that has been genetically engineered to be more effective.
- 2. India has been declared polio-free by the World Health Organization (WHO).

Which of the statement(s) given above is/are correct?

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

Q.56) Which one of the following statements correctly explains the 'Fourth Industrial Revolution'?

- a) It involves the convergence of digital, biological, and physical technologies, driving the creation of smart factories and AI-driven decision-making.
- b) It focuses on the automation of manufacturing processes using advanced machinery and minimal human intervention.
- c) It refers to the widespread adoption of renewable energy technologies, aiming to replace fossil fuels and reduce carbon emissions globally.
- d) It is driven by the proliferation of e-commerce and online platforms, leading to a transformation in global trade and consumer behaviour.

Q.57) Consider the following statements:

- 1. Sun's magnetic fields help move energy and matter from the Sun's inner layers to its outer layers.
- 2. The Sun's magnetic field maintains a consistent strength from its surface to its outermost layers.

Which of the statement(s) given above is/are correct?

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

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Q.58) Consider the following statements:

1. Polioviruses are mainly spread through the faecal-oral route.
2. The oral polio vaccine (OPV) contains a live but weakened virus that is used to immunize people against polio.
3. The Indian government does not consider vaccine-associated paralytic poliomyelitis (VAPP) to be polio.

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.59) Consider the following pairs:

Missions-----Objective

1. Aditya L1----- Focused on studying the solar atmosphere and solar magnetic storms
2. Gaganyaan TV-D1----- Enhances meteorological observations and weather forecasting
3. XPoSat----- Dedicated to measuring X-ray polarization from celestial sources
4. INSAT-3DS----- Aims to test the Crew Escape System for human spaceflight safety

Which of the above pairs are correctly matched?

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

Answer Key

1 - (a)	2 - (c)	3 - (b)	4 - (c)	5 - (a)	6 - (b)	7 - (d)	8 - (b)	9 - (a)	10 - (c)
11 - (b)	12 - (a)	13 - (c)	14 - (a)	15 - (c)	16 - (c)	17 - (a)	18 - (b)	19 - (b)	20 - (d)
21 - (a)	22 - (a)	23 - (a)	24 - (b)	25 - (d)	26 - (b)	27 - (c)	28 - (a)	29 - (a)	30 - (b)
31 - (b)	32 - (a)	33 - (a)	34 - (d)	35 - (b)	36 - (b)	37 - (a)	38 - (d)	39 - (d)	40 - (a)
41 - (b)	42 - (a)	43 - (c)	44 - (b)	45 - (a)	46 - (c)	47 - (d)	48 - (a)	49 - (c)	50 - (c)
51 - (b)	52 - (b)	53 - (c)	54 - (b)	55 - (b)	56 - (a)	57 - (a)	58 - (d)	59 - (a)	

Answers & Explanations

Art & Culture

1. Correct Answer is (A)

- Statements 1 and 2 are correct. Eri silk is often referred to as "peace silk" or "vegan silk" because the moth is not killed during the extraction process; it naturally exits the cocoon, making it a cruelty-free option compared to traditional silk production. Eri silk production is predominantly concentrated in the North-Eastern states of India, particularly Assam, as well as in Meghalaya, Nagaland, and Manipur.
- Statement 3 is incorrect. Eri silk can be dyed, and it is often dyed using natural dyes from plant extracts, which is a common practice in its production.

Source: [Forum IAS](#)

Geography

2. Correct Answer is (C)

- Statements 1, 2 and 4 are correct. The Aravalli Range is referred to as a natural green wall in northwestern India, acting as a barrier against the expansion of the Thar Desert and providing ecological benefits. The Aravalli Range serves as a transition zone between the Thar Desert and the Gangetic plain. The Sabarmati River is one of the rivers that originates from the Aravalli Range.
- Statement 3 is incorrect. The highest peak of the Aravalli Range is Guru Shikhar, located on Mount Abu.

Source: [The Hindu](#)

3. Correct Answer is (B)

- Statement 1 is incorrect. Poland is located to the west of Ukraine. Lviv is the largest city in western Ukraine and is located near the Poland-Ukraine border. Poland is bordered to the north by the Baltic Sea and shares its eastern border with Ukraine.
- Statements 2 and 3 are correct. Poland has been a member of NATO since 1999, and its membership is highlighted as a significant aspect of its national defense strategy. Poland is India's largest trade partner and export destination in the Central European region. Food processing sector is a significant area of economic collaboration between India and Poland.

Source: [The Hindu](#)

4. Correct Answer is (C)

- Pangong Tso lake is the geographical feature that is NOT found near Demchok. Demchok is located at the confluence of the Charding Nullah and Indus River, in the Nyoma tehsil of Leh district, Ladakh, near the Line of Actual Control (LAC) between India and China. It is a significant area due to its strategic location along the disputed border between India and China. After the 1962 Sino-Indian War, the village of Demchok was divided in two parts, with Demchok, Ladakh administered by India and Dêmqog, Tibet Autonomous Region administered by China. The two parts are separated by the Charding Nullah stream which marks the Line of Actual Control (LAC).

Source: [The Hindu](#)

5. Correct Answer is (A)

- **Supermoon:** This occurs when the full moon is at its closest point to Earth in its elliptical orbit, known as perigee. This proximity makes the moon appear larger and brighter than usual in the night sky.
- **Blue Moon:** This term traditionally refers to the second full moon within a single calendar month. Since the lunar cycle is about 29.5 days, occasionally two full moons can fit into one month, making the second one a "blue moon." The term "blue moon" does not refer to the colour of the moon.
- **Super Blue Moon:** When these two phenomena coincide—meaning the second full moon of the month is also a supermoon—it results in what is called a Super Blue Moon. This is a rare event, occurring roughly once every 10 years, offering a spectacular view as the moon appears both larger and brighter.

Source: [The Times of India](#)

6. Correct Answer is (B)

- Statements 1 and 3 are correct. Territorial disputes and activities such as island-building have caused extensive damage to coral reefs and marine ecosystems in the South China Sea. The Strait of Malacca is a crucial maritime passage that connects the South China Sea to the Indian Ocean.
- Statement 2 is incorrect. The legal framework for maritime claims and disputes in the South China Sea is primarily provided by the United Nations Convention on the Law of the Sea (UNCLOS).

Source: [The Hindu](#)

7. Correct Answer is (D)

- Statements 1, 2 and 3 are incorrect. The Teesta River originates from the Tso Lhamo Lake in North Sikkim, India, and is fed by glaciers such as the Pauhunri Glacier. The Teesta River is considered suitable for hydropower development, due to its rapid descent from high elevations and its high velocity, rather than the number of tributaries. The Teesta River flows through the Indian states of Sikkim and West Bengal before entering Bangladesh.

Source: [The Hindu](#)

8. Correct Answer is (B)

- Statement 1 is incorrect. A GLOF is characterized by the sudden release of a significant amount of water from a glacial lake. This sudden discharge can cause catastrophic flooding downstream.
- Statement 2 is correct. The National Glacial Lake Outburst Floods Risk Mitigation Programme's goals include conducting detailed technical hazard assessments, installing automated weather and water level monitoring stations, and establishing early warning systems for glacial lakes and downstream areas.

Source: [The Hindu](#)

Polity

9. Correct Answer is (A)

- Statement 1 is correct. DPSPs are non-justiciable, meaning they are not legally enforceable by the courts. They serve as guidelines for the government to frame policies aimed at achieving social and economic welfare.
- Statement 2 is incorrect. Fundamental Rights typically take precedence over DPSPs. Fundamental Rights are supreme and enforceable. If there's a conflict between a law based on Directive Principles and a Fundamental Right, the law will be struck down as it violates the Fundamental Right. However, there have been instances where the Supreme Court has balanced both while interpreting the Constitution.

Source: [The Hindu](#)

10. Correct Answer is (C)

- Statements 1 and 2 are correct. The 103rd Amendment introduced a 10% reservation for the Economically Weaker Sections (EWS) in government jobs and educational institutions. Reservations in promotions are not applicable for certain top-level posts in Group A services, particularly those with a grade pay of Rs. 8700 or higher.

Source: [The Hindu](#)

11. Correct Answer is (B)

- Statements 1 and 3 are correct. The CCPA is established to regulate matters related to the violation of consumer rights, unfair trade practices, and misleading advertisements. It has the power to order the recall of goods or withdrawal of services that are deemed dangerous, hazardous, or unsafe.
- Statement 2 is incorrect. It can conduct search and seizure operations as part of its investigations, but it does not have the authority to seize assets of advertising companies.

Source: [The Hindu](#)

12. Correct Answer is (A)

- Statements 1, 3 and 4 are incorrect. The selection of candidates through the lateral entry system is overseen by the Union Public Service Commission (UPSC). Lateral entries are not made in all ministries. For instance, certain ministries like Home, Defence, Personnel, and Corporate Affairs are typically not included in lateral entry recruitment. While lateral entry can bring in new expertise and perspectives, it does not ensure a standardized or equitable framework for career advancement among all officers. The integration of lateral entrants may face challenges related to career progression and alignment with existing civil service structures.
- Statement 2 is correct. The lateral entry system aims to infuse fresh talent and specialized knowledge from the private sector into government roles, thereby enhancing efficiency and introducing innovative practices in governance and policy-making.

Source: [The Hindu](#)

13. Correct Answer is (C)

- Statements 1 and 3 are correct. Corruption involves the misuse of power for personal benefit, and it is not limited to the public sector. It can manifest in various forms across both public and private sectors, such as bribery, embezzlement, and other unethical practices. When there is significant corruption in the relationship between governments and businesses, it often leads to rent-seeking activities. Rent-seeking involves efforts to gain economic benefits through manipulation or exploitation of the political environment, rather than through productive economic activity, which can distort markets and hinder economic development.
- Statement 2 is incorrect. Globalization has in some cases exacerbated corruption by increasing opportunities for cross-border bribery, money laundering, and other corrupt practices. The increased interconnectedness of global markets can sometimes create environments where corruption is more challenging to control.

Source: [The Hindu](#)

14. Correct Answer is (A)

- Statement 1 is correct. The representatives of states in the Rajya Sabha are elected by the elected members of the state legislative assemblies using a system of proportional representation by means of a single transferable vote.
- Statements 2 and 3 are incorrect. The Supreme Court of India ruled that the NOTA option is not applicable in Rajya Sabha elections. It is only available in direct elections like those for the Lok Sabha and state assemblies. Rajya Sabha elections use the system of proportional representation by means of a single transferable vote, not the first-past-the-post system.

Source: [AIR](#)

15. Correct Answer is (C)

- Prorogation is the termination of a session of Parliament by the President. It doesn't require the House to be adjourned sine die. The President has the power to prorogue the House at any time, even while it is in session. Prorogation typically occurs after the House is adjourned sine die, but there is no constitutional restriction preventing the President from proroguing the House while it is still in session.

Source: [AIR](#)

16. Correct Answer is (C)

- Bar Councils, such as the Bar Council of India, are statutory bodies established under the Advocates Act, 1961, responsible for regulating legal education and the legal profession. They set standards for professional conduct, oversee disciplinary actions, and recognize law colleges. On the other hand, Bar Associations are professional organizations that represent the interests of lawyers and provide support and services to their members.

Source: [The Hindu](#)

17. Correct Answer is (A)

10 PM Compilation August [Third Week] 2024

- Statement 1 is correct. The CCI is responsible for promoting fair competition, eliminating anti-competitive practices, and protecting consumer interests.
- Statements 2 and 3 are incorrect. The Chairperson and members of the CCI are appointed by the Central Government. The CCI does not have the power to issue licenses for new businesses. Its role is to regulate competition and prevent anti-competitive practices.

Source: [The Hindu](#)

18. Correct Answer is (B)

- Statements 1 and 4 are correct. The Lokayukta is an anti-corruption authority that investigates allegations of corruption against public officials in the state. The Governor appoints the Lokayukta in a state, often based on recommendations from a selection committee.
- Statements 2 and 3 are incorrect. Maharashtra was the first state to implement the Lokayukta system, with the Maharashtra Lokayukta and Upa-Lokayuktas Act passed in 1971. The Lokayukta is a statutory body established under the Lokpal and Lokayuktas Act, 2013.

Source: [The Hindu](#)

19. Correct Answer is (B)

- Statement 1 is incorrect. The new rules allow non-scheduled operators to provide seaplane services, expanding the scope of operations beyond just scheduled operators.
- Statements 2 and 3 are correct. The new rules allow pilots with a commercial pilot license (CPL) to qualify as seaplane-rated pilots, making it easier for them to operate seaplanes. The simplified regulations for seaplane operations are aimed at encouraging their use under the regional air connectivity scheme UDAN (Ude Desh ka Aam Nagrik). The scheme includes initiatives to promote seaplane services to improve connectivity in regions where traditional airport infrastructure is not feasible.

Source: [The Hindu](#)

20. Correct Answer is (D)

- Statements 1 and 4 are correct. Once a property is designated as waqf, it is considered to be owned by God, and its corpus cannot be sold or inherited. Only the benefits or income generated by the waqf property can be used for the designated charitable or religious purposes. The Waqf Bill 2024 includes a provision that a family waqf should not result in the denial of inheritance rights to the heirs, including women heirs. A Muslim can create a family waqf with up to one-third of their property if they intend to exclude their heirs.
- Statements 2 and 3 are incorrect. While religious and charitable waqfs are exempt from paying income tax under the Income-Tax Act of 1961, family waqfs are not generally exempt and are required to pay income tax. Family waqfs are required to pay income tax, even when part of their income is intended for religious or charitable purposes. Additionally, estate duty (a tax on the transfer of property after someone's death) is applicable when property passes from one beneficiary to another, even though, according to waqf principles, the property is not supposed to be transferred or sold. When the line of succession fails in a family waqf, the income is typically redirected towards charitable purposes such as education, development, and welfare, rather than being absorbed by the state.

Source: [The Hindu](#)

Acts & Polices

21. Correct Answer is (A)

- **Pradhan Mantri Awas Yojana (PMAY) - Ministry of Housing and Urban Affairs** - Launched in 2015, PMAY aims to address the urban housing shortage among the Economically Weaker Section (EWS), Low Income Group (LIG), and Middle-Income Group (MIG) categories, including slum dwellers, by providing a pucca house to all eligible urban households. The scheme promotes affordable housing through a Credit Linked Subsidy Scheme (CLSS) and aims to ensure housing for all by 2022.

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- **PM Surya Ghar Muft Bijli Yojana - Ministry of New and Renewable Energy** - This scheme aims to install rooftop solar panels on one crore houses to generate electricity from solar energy, thereby reducing electricity costs for middle-class and poor households. It promotes sustainable energy practices and aims to decrease reliance on traditional energy sources by providing up to 300 units of free electricity each month.
- **PM Vishwakarma Scheme - Ministry of Micro, Small and Medium Enterprises** - The PM Vishwakarma Scheme is designed to provide holistic support to artisans and craftspeople, offering access to collateral-free credit, skill training, modern tools, incentives for digital transactions, and market linkage support. The scheme aims to enhance the skills and productivity of artisans, enabling them to access new growth opportunities.

Source: [AIR](#)

22. Correct Answer is (A)

- Statement 1 is correct. MGNREGA is an Indian government program aimed at enhancing livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work.
- Statement 2 is incorrect. MGNREGA is a demand-driven program that provides employment throughout the year and is not limited to the cultivation season. It aims to provide employment during periods when there is less agricultural work available to prevent rural-urban migration and to support rural livelihoods.

Source: [The Hindu](#)

23. Correct Answer is (A)

- Statement 1 is correct. The NHDP is designed to support the sustainable development of handloom weavers, helping them organize into cohesive, self-managing, and competitive socio-economic units.
- Statement 2 is incorrect. The NHDP includes marketing assistance to promote handloom products in both domestic and international markets. However, there is no export subsidies for handloom products in the programme guidelines. The focus is more on developing marketing infrastructure and providing market access initiatives rather than direct export subsidies.

Source: [The Hindu](#)

24. Correct Answer is (B)

- **Statement-I:** The demand for work under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has increased in recent years. There has been a sharp increase in demand by 48.8% in April 2024.
- **Statement-II:** A large number of the population lives in rural areas in India. According to the data, 63.4% of India's population lived in rural areas as of 2024.
- However, the increase in demand for MGNREGA work is more directly attributed to factors such as unemployment and stagnant wages rather than just the large rural population. Therefore, while Statement-II is true, it is not the direct explanation for the increased demand described in Statement-I.

Source: [The Hindu](#)

25. Correct Answer is (D)

- Statements 1 and 2 are incorrect. There is a discussion about whether OTT platforms should be classified under access services. The Cellular Operators Association of India (COAI) argues that OTT communication services should be considered access services under the new Telecommunications Act, but this is a matter of debate and not a settled classification. Net neutrality is the principle that ISPs should treat all internet traffic equally, without charging different rates or discriminating based on content type.

Source: [The Hindu](#)

26. Correct Answer is (B)

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- Statement 1 is incorrect. The primary objective of PMEGP is to generate employment opportunities through the establishment of micro-enterprises in both rural and urban areas.
- Statements 2 and 3 are correct. The Khadi and Village Industries Commission (KVIC) is the nodal agency responsible for implementing the PMEGP at the national level. Any individual above 18 years of age is eligible to apply for assistance under the PMEGP scheme.

Source: [AIR](#)

27. Correct Answer is (C)

- The SMILE program, which stands for Support for Marginalized Individuals for Livelihood and Enterprise, is a government initiative launched by the Ministry of Social Justice and Empowerment in India. The program aims to provide comprehensive support and rehabilitation for marginalized groups, specifically targeting the transgender community and individuals engaged in begging. This includes welfare measures, medical facilities, counseling, education, skill development, and economic opportunities to help these individuals achieve sustainable livelihoods.

Source: [The Hindu](#)

International Relations/Organizations

28. Correct Answer is (A)

- Statements 1 and 2 are correct. The ICJ has jurisdiction over contentious cases between states, which can include environmental disputes, as long as the states involved consent to the court's jurisdiction. Advisory opinions issued by the ICJ are not legally binding, though they carry significant legal and moral weight.
- Statements 3 and 4 are incorrect. The ICJ does not have appellate jurisdiction; it functions as a court of first and only instance in the cases it hears. While the majority of cases are brought by UN member states, non-member states can also bring cases before the ICJ, provided they accept the court's jurisdiction.

Source: [DD News](#)

29. Correct Answer is (A)

- **Statement-I is correct:** PHEIC is the highest level of alert issued by WHO to signal a serious public health risk that requires international attention and response.
- **Statement-II is correct.** The International Health Regulations (IHR) of 2005 defines PHEIC as an extraordinary event that poses a risk to other states through the international spread of disease and may require a coordinated international response.
- Hence, Statement-II provides the reasoning behind why a PHEIC is considered the highest form of alert.

Source: [DD News](#)

30. Correct Answer is (B)

- The Enhanced Strategic Partnership between India and Malaysia is a multifaceted collaboration aimed at strengthening bilateral ties across various domains. The partnership includes initiatives to enhance trade and investment, with a target to achieve a trade volume of \$25 billion. Both nations have engaged in regular defense exercises and cooperation agreements, reinforcing trust and strategic ties. The partnership acknowledges India's technological prowess and includes collaborations like the India-Malaysia Startup Bridge and the Malaysia India Digital Council to foster innovation and digital growth. The partnership emphasizes cultural affinity and increased two-way tourist movement, reflecting the close ties between the peoples of both countries. It also includes renewable energy and technology, as both countries are working to strengthen their ties in these sectors.

Source: [AIR](#)

31. Correct Answer is (B)

- Statement 1 is incorrect. The 4 C's of India's Act East Policy are Culture, Connectivity, Commerce, and Capacity Building.

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- Statement 2 is correct. The India-Myanmar-Thailand Trilateral Highway Project is a significant connectivity initiative under India's Act East Policy. India's Act East Policy is a strategic initiative launched in 2014 to enhance economic, strategic, and cultural ties with countries in Southeast Asia and the wider Asia-Pacific region. This policy builds upon the earlier Look East Policy introduced in 1991, which primarily focused on economic integration with Southeast Asian countries.

Source: [AIR](#)

32. Correct Answer is (A)

- Statements 1 and 2 are correct. BITs are agreements between two countries designed to protect and promote investments made by investors from each country in the other's territory. BITs often include provisions for investor-state dispute settlement (ISDS), which allows investors to bring claims against the host country in international arbitration if they believe their rights under the BIT have been breached.
- Statement 3 is incorrect. While BITs provide protections for foreign investors, they do not explicitly require host states to prioritize foreign investor interests over domestic concerns. Instead, they establish standards for treatment to prevent unfair practices.

Source: [The Hindu](#)

33. Correct Answer is (A)

- Statement 1 is correct. Malaysia is reported to host the third largest PIO community in the world, following the United States and the United Arab Emirates.
- Statements 2 and 3 are incorrect. While India is a significant trading partner for Malaysia, it is not the largest. Malaysia's top trading partners include Singapore, China, the United States, Hong Kong, and Japan. However, India is the largest trading partner for Malaysia within the Southeast Asian region. Malaysia is a member of ASEAN but is not yet a member of BRICS. Malaysia has applied for BRICS membership, but it has not been finalized.

Source: [The Hindu](#)

34. Correct Answer is (D)

- Statements 1 and 3 are correct. Poland is recognized as a leading producer in the food processing industry, particularly in sectors like meat, dairy, and processed fruits and vegetables. It is one of the largest food processing industries in the EU. The Jam Saheb Memorial Youth Exchange programme will invite 20 Polish youths annually to visit India.
- Statement 2 is incorrect. While Poland is a full member of the IEA, India is not. India is currently an associate member and has begun talks to become a full member.

Source: [The Hindu](#)

Economy

35. Correct Answer is (B)

- The MCLR system was implemented to improve the transmission of policy rate changes into the lending rates of banks, ensuring that changes in the RBI's policy rates are quickly reflected in the interest rates offered to borrowers. This approach aims to enhance transparency and ensure that bank loans are available at fair rates to both lenders and borrowers.

Source: [The Hindu](#)

36. Correct Answer is (B)

- Statement 1 is incorrect. Under inflation targeting, if inflation is above the target, the central bank typically raises interest rates to reduce inflation by decreasing spending and demand.
- Statements 2 and 3 are correct. A significant portion of household expenditure in India is allocated to food. In India, nearly 50% of household spending goes towards food, which is much higher compared to countries like the U.S., where it's less than 10%. Raising the repo rate can sometimes lead to an increase in core inflation because businesses may raise prices to maintain profit margins despite higher borrowing costs and reduced sales. However, generally, raising the repo rate is

intended to reduce inflation by making borrowing more expensive, thereby reducing spending and slowing down inflation.

Source: [The Hindu](#)

37. Correct Answer is (A)

- Statement 1 is correct. Khadi is deeply rooted in India's history, particularly as a symbol of the freedom struggle led by Mahatma Gandhi. It represents self-reliance and unity among Indians. In modern times, khadi has seen a resurgence in popularity, embraced by fashion designers and promoted as an eco-friendly and sustainable textile, reflecting both tradition and contemporary relevance.
- Statement 2 is incorrect. GST applies to both finished handloom products and raw materials. There have been calls to roll back the 5% GST on handloom clothes and raw materials due to the financial distress it causes to weavers.

Source: [The Hindu](#)

38. Correct Answer is (D)

- Rights Issue refers to a method by which a company raises additional capital by offering its existing shareholders the opportunity to purchase additional shares at a discounted price, in proportion to their current holdings.

Source: [The Hindu](#)

39. Correct Answer is (D)

- The DFTP Scheme is designed to provide duty-free and preferential market access to products originating from Least Developed Countries (LDCs). This scheme aims to enhance trade opportunities for LDCs by allowing their products to enter the Indian market with reduced or zero tariffs, thereby supporting economic development in these countries.

Source: [DD News](#)

40. Correct Answer is (A)

- Statement 1 is correct. KLEMS stands for Capital (K), Labour (L), Energy (E), Material (M) and Services (S). The India-KLEMS framework is designed to measure industry-level total factor productivity (TFP), which involves analyzing inputs like capital, labour, energy, materials, and services to assess how efficiently these resources are used to produce goods and services.
- Statement 2 is incorrect. The KLEMS framework itself does not directly collect data on employment. Instead, it utilizes employment data from other official sources such as the Census of India and labour surveys. The employment figures in the KLEMS framework are derived from these external sources rather than being collected directly by the framework itself.

Source: [The Hindu](#)

41. Correct Answer is (B)

- Statement 1 is incorrect. The Digital General Crop Estimation Survey (DGCES) primarily focuses on providing accurate crop area estimation and yield calculations through scientifically designed crop cutting experiments. It does not provide detailed insights into crop health and soil conditions for resource allocation. It will provide plot-level data with geotagged areas of crops, enabling accurate crop area estimation and improving the reliability of agricultural statistics. Remote sensing and geospatial analysis technologies are primarily used in the DGCES to enhance data accuracy. Geospatial referencing in the DGCES allows for precise location-based data collection of crop plots, enhancing data transparency and accuracy.
- Statement 2 is correct. The DGCES is part of initiatives that include the revamped FASAL program, which uses remote sensing and other technologies to generate accurate crop production statistics.

Source: [The Hindu](#)

42. Correct Answer is (A)

- Statement 1 is correct. Health is primarily a state subject in India, meaning that state governments are primarily responsible for healthcare services.
- Statement 2 is incorrect. India spends less than the World Health Organization's recommendation on healthcare. The WHO recommends that countries spend at least 6% of their GDP on health, whereas India's spending is significantly lower, at less than 2% of GDP.

Source: [The Hindu](#)

Environment

43. Correct Answer is (C)

- Statements 1 and 3 are incorrect. Microplastics are not defined as natural particles; they are synthetic. Microplastics are small plastic fragments that result from the breakdown of larger plastic debris or are manufactured at a small size. Microplastics are generally defined as plastic particles less than 5 mm in diameter. Studies have shown that crops like wheat and lettuce tend to have lower concentrations of microplastics compared to the surrounding soil. Root vegetables like carrots are more likely to contain higher concentrations of microplastics compared to other crops. This is because most plastic particles accumulate in plant roots.
- Statement 2 is correct. Microplastics can enter the food chain through contamination during food processing and packaging. However, a significant entry point for microplastics into the food chain is environmental contamination. Microplastics are prevalent in oceans, rivers, and soils, where they can be ingested by marine and terrestrial organisms. These organisms are then consumed by larger animals and eventually humans, integrating microplastics into the food chain.

Source: [The Hindu](#)

44. Correct Answer is (B)

- **Natural Gas:** Natural gas is a fossil fuel and is not considered a green fuel. Although it burns cleaner than coal or oil, it is non-renewable and the extraction process can result in significant methane emissions, a potent greenhouse gas.
- **Nuclear Energy:** While nuclear energy is a low-carbon energy source, it is not classified as a green fuel because the uranium used in nuclear reactors is non-renewable.

Source: [The Hindu](#)

45. Correct Answer is (A)

- Golden algae, specifically *Prymnesium parvum*, produce toxins that are harmful to gill-breathing organisms such as fish, leading to significant fish kills. These toxins disrupt the respiration process in fish, causing them to die from asphyxiation. The harmful effect of golden algae blooms is production of toxins that kill fish.

Source: [The Hindu](#)

46. Correct Answer is (C)

- Statement 1 is incorrect. Grasslands are characterized by vast open areas dominated by grasses and have very few trees. They are ecosystems with significant vegetation, primarily grasses, and are not barren or devoid of vegetation.
- Statements 2, 3 and 4 are correct. Grasslands are often found in regions with limited rainfall, which prevents the growth of forests and supports grass dominance. They are typically located in areas that are not dry enough to become deserts but not wet enough to support forests. Grasslands are important for carbon storage and nutrient cycling. They contribute to biogeochemical cycles and help regulate climate by storing carbon in their soils. The Bengal florican is a bird species that inhabits grassland habitats, making these ecosystems crucial for its survival. The Kachchh district in Gujarat, India, is home to one of the country's largest grassland areas, known as Banni.

Source: [The Hindu](#)

47. Correct Answer is (D)

- Statements 1, 2 and 3 are correct. India benefits from lower costs in solar photovoltaic (PV) and wind energy compared to global averages, making it a competitive player in renewable energy production. Polysilicon is a fundamental material used in the production of solar cells, which are essential components of solar panels. India is set to establish its first polysilicon manufacturing unit, which will help reduce the cost of solar modules. Green ammonia is produced using renewable energy sources and does not emit carbon dioxide during its production process. Green ammonia can be used as a zero-carbon fuel in the maritime industry. Green ammonia is produced using hydrogen obtained through water electrolysis and nitrogen separated from the air, utilizing renewable energy sources. Green ammonia can be used as an alternative fuel for internal combustion engines, offering a zero-carbon emission option for transportation and energy sectors.

Source: [DD News](#)

48. Correct Answer is (A)

- Statement 1 is correct. Ethanol blending reduces greenhouse gas emissions and helps India save on foreign exchange by reducing oil imports.
- Statements 2 and 3 are incorrect. First-Generation Ethanol (1G) is produced from sugar or starch-based feedstocks like corn, wheat, sugarcane, and beet, not from non-food biomass. Sugarcane is the primary crop used for ethanol production in India, with ethanol being a byproduct of the sugar-making process.

Source: [The Hindu](#)

Science & Technology

49. Correct Answer is (C)

- Statements 1 and 3 are correct. The EOS-08 satellite is an Earth Observation Satellite designed to enhance capabilities in monitoring and observing the Earth's environment, as indicated by its advanced payloads for satellite-based surveillance and environmental monitoring. The EOS-08 satellite is designed to operate in a Circular Low Earth Orbit at an altitude of 475 km.
- Statement 2 is incorrect. The EOS-08 satellite carries three primary payloads: the Electro Optical Infrared Payload (EOIR), the Global Navigation Satellite System-Reflectometry payload (GNSS-R), and the SiC UV Dosimeter.

Source: [The Hindu](#)

50. Correct Answer is (C)

- Statements 1 and 3 are correct. The Krishi-DSS provides real-time data-driven insights on weather patterns, soil conditions, crop health, and more, which are essential for crop management, enhancing productivity, and issuing disaster warnings like pest attacks and heavy rain. The Krishi-DSS uses crop mapping and monitoring to analyze cropping patterns, which helps in understanding crop rotation practices and promotes sustainable agriculture by encouraging the cultivation of diverse crops. It has been developed using technology similar to the flagship Gati Shakti initiative to deliver early warnings about potential disasters such as pest attacks and extreme weather events.
- Statement 2 is incorrect. Krishi-DSS system primarily uses geo-spatial and satellite technology to provide its services. The platform can be used to monitor drought conditions, providing valuable information for managing water resources and planning agricultural activities. It offers information on weather patterns, soil conditions, crop health, and crop acreage.

Source: [The Hindu](#)

51. Correct Answer is (B)

- Statement 1 is incorrect. The three foundational pillars of DPI in India are digital identity (Aadhaar), real-time fast payment systems (UPI), and data management (Data Empowerment Protection Architecture - DEPA).
- Statement 2 is correct. Under India's G-20 presidency, a Global DPI Repository was established, marking the first multilateral consensus on DPI.

Source: [DD News](#)

52. Correct Answer is (B)

- The primary objective of the Bhavishya software is to track pension sanction and payment processes. The Bhavishya system is designed to provide online tracking of the pension sanction and payment process for retiring employees and administrative authorities, ensuring transparency and timely disbursement of retirement benefits.

Source: [Forum IAS](#)

53. Correct Answer is (C)

- Operation Parakram was a large-scale military mobilization by India in response to the December 2001 terrorist attack on the Indian Parliament. The primary objective was to pressure Pakistan to take decisive action against terrorist groups operating from its soil, such as Lashkar-e-Taiba and Jaish-e-Muhammad, which were believed to be responsible for the attack and other cross-border terrorist activities in India. The operation aimed to demonstrate India's resolve and military preparedness to counter Pakistan's alleged support for terrorism, but stopped short of an outright declaration of war.

Source: [The Hindu](#)

54. Correct Answer is (B)

- Statements 1 and 3 are incorrect. The Gaganyaan mission is focused on demonstrating India's capability to conduct human spaceflight to Low Earth Orbit (LEO). The technology for the Samudrayaan mission is being developed by the National Institute of Ocean Technology (NIOT), which is under the Ministry of Earth Sciences.
- Statement 2 is correct. The Samudrayaan mission is India's first manned ocean mission, designed to explore deep-sea resources, including metals, minerals, and biodiversity, using a submersible vehicle.

Source: [AIR](#)

55. Correct Answer is (B)

- Statement 1 is incorrect. Vaccine-derived poliovirus (VDPV) is not genetically engineered to be more effective. Instead, it is a strain that has mutated from the weakened live virus used in the oral polio vaccine (OPV). This mutation can occur in communities with low immunization coverage, leading to a form of the virus that can cause paralysis similar to the wild poliovirus.
- Statement 2 is correct. India was declared polio-free by the WHO in 2014, after reporting no new cases of wild polio for three consecutive years.

Source: [The Hindu](#)

56. Correct Answer is (A)

- The Fourth Industrial Revolution represents a fusion of technologies blurring the lines between the physical, digital, and biological spheres. It is marked by advancements such as artificial intelligence (AI), the Internet of Things (IoT), robotics, and biotechnology. These innovations enable smart factories where machines communicate and make decisions autonomously, significantly transforming industries and societies.

Source: [AIR](#)

57. Correct Answer is (A)

- Statement 1 is correct. The magnetic fields in the Sun's atmosphere act as channels for transporting energy and mass from the Sun's inner layers to its outer layers, such as the corona.
- Statement 2 is incorrect. The magnetic field does not remain constant; it varies with height in the solar atmosphere. The strength and configuration of the magnetic field change as it extends from the photosphere to the chromosphere and into the corona.

Source: [The Hindu](#)

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58. Correct Answer is (D)

- Statements 1, 2 and 3 are correct. Polioviruses are primarily transmitted through the fecal-oral route. The OPV contains a live, attenuated (weakened) virus, which is used for immunization against polio. The weakened virus stays in the intestines for a short time and is then excreted in the stool. In very rare cases, the virus can change (or mutate) and regain its ability to cause the disease. When this happens, it's called vaccine-derived poliovirus (VDPV). The Indian government does not consider vaccine-associated paralytic poliomyelitis (VAPP) to be polio because these cases happen infrequently and do not pose much risk to other people.

Source: [The Hindu](#)

59. Correct Answer is (A)

- Aditya L1 – The Aditya L1 mission is designed to study the Sun's corona, chromosphere, and photosphere, as well as solar storms and the solar magnetic field.
- Gaganyaan TV-D1 – The Gaganyaan TV-D1 mission is part of India's human spaceflight program and focuses on testing the Crew Escape System for astronaut safety.
- XPoSat – XPoSat is India's mission dedicated to analyzing the polarization of X-rays from bright celestial sources.
- INSAT-3DS – INSAT-3DS is a meteorological satellite aimed at improving weather forecasting and monitoring land and ocean surfaces.

Source: [The Hindu](#)