

10 PM Current Affairs Quiz Weekly Compilation

For UPSC CSE Prelims

January, 2024 3rd Week

Index

Art & Culture, Ancient India	2
Geography	2
Polity	4
Acts & Policies	5
Index & Reports	5
International Relations/Organizations	
Economy	
Environment	
Science & Technology	
Answer Key	
Answers & Explanations	

Art & Culture, Ancient India

Q.1) Consider the following statements:

- 1. The tableaux at the Republic Day Parade reflect the country's cultural splendour and diversity.
- 2. The selection process of tableaux for the Republic Day parade is carried out by the Ministry of Home Affairs.

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.2) The collapse of the Indus Valley Civilization marked the beginning of the Indian Dark Age due to:

- a) Invasion by foreign powers
- b) Sudden natural disasters
- c) Gradual environmental degradation and resource depletion
- d) Rise of new religious cults

Geography

Q.3) Which one of the geographical features characterizes the Maldives' coral islands?

- a) Volcanic origin
- b) Glacial formations
- c) Limestone composition
- d) Sandstone cliffs

Q.4) Which one of the following islands in Lakshadweep is known for its serene beaches and is a popular tourist destination?

- a) Kavaratti
- b) Minicoy
- c) Kalpeni
- d) Agatti

Q.5) Consider the following:

- 1. It requires a cold climate.
- 2. The ideal growth temperature falls within the range of 18-30°C.
- 3. It is grown in well-drained loam soils with a neutral pH.
- 4. It can withstand light frost but are sensitive to extreme heat.

Which one of the following crops requires the above climatic conditions?

- a) Barley
- b) Lentils
- c) Wheat
- d) Chickpea



Q.6) Consider the following statements:

- 1. Tea is the second most consumed drink in the world.
- 2. Tea plants grow well in temperatures above 30 degrees Celsius.
- 3. India is the largest producer of tea globally.
- 4. Tea Board of India functions as a statutory body of the Central Government under the Ministry of Commerce.

Which of the statements given above are correct?

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

Q.7) Which one of the following seas is located on the eastern side of Taiwan?

- a) East China Sea
- b) South China Sea
- c) Philippine Sea
- d) Sea of Japan

Q.8) Consider the following:

- 1. National Framework of Climate Services (NFCS)
- 2. Panchayat Mausam Sewa Portal
- 3. Agro-Meteorological Advisory Services

Which of the above services have been launched by the Indian Meteorological Department (IMD)?

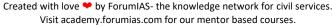
- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Q.9) Consider the following statements:

- 1. Kutch is the only place in the world where fresh dates without the need to ripen or soften, are economically grown, traded and consumed.
- 2. Currently, only one fruit from Gujarat has received the Geographical Indications (GI) tag.

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





Polity

Q.10) With reference to the Indian Polity, consider the following statements:

- 1. Remission refers to sending a case back to a lower court or authority for reconsideration or further action.
- 2. The President can grant pardon to the sentence of any person.

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) Consider the following statements:

- 1. There are no written grounds or procedures in the Constitution for removing governors.
- 2. In SR Bommai vs. Union of India, the Supreme Court has ruled that the determination of whether the State Government has the majority should be assessed on the floor of the House and not solely based on the subjective assessment of the Governor.
- 3. As per the Government of India Act 1858, the governor acted in accordance with the advice of Ministers of a province's legislature, but retained special responsibilities and discretionary power.

How many of the statements given above are correct?

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

Q.12) With reference to the Centre for Research and Planning (CRP) of the Supreme Court, consider the following statements:

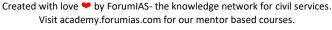
- 1. It is the Supreme Court's in-house think tank.
- 2. It aims to conduct cutting-edge research on fundamental jurisprudence, principles, doctrines of law, and judicial reforms, aiming to enhance justice delivery and uphold judicial Independence.

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.13) In the absence of a Speaker, who assumes the Speaker's powers in anti-defection cases?

- a) Deputy Speaker
- b) Prime Minister
- c) Vice-President
- d) President





Q.14) In addition to recommending grants, which one of the following roles does the Finance Commission play in promoting sustainable forest management?

- a) Implementing afforestation projects
- b) Conducting research on forest conservation
- c) Evaluating states' performance in forest conservation
- d) Managing national parks and wildlife sanctuaries

Q.15) The Anti-Defection Law applies to merger within political parties. Under which one of the following conditions can a merger occur without causing disqualification?

- a) If at least two-third of the party's legislators in the legislature join the new party.
- b) If the split is based on ideological differences within the party.
- c) If the party leadership approves of the split beforehand.
- d) If the merger occurs before elections.

Acts & Policies

Q.16) With reference to the Telecommunications Act of 2023, consider the following statements:

- 1. It introduces flexible spectrum allocation methods, crucial for effective deployment of communication technologies.
- 2. The Act promotes functional separation to lessen market concentration and support fair competition.
- 3. The Act withholds giving the government significant powers during public emergencies, thereby safeguarding citizen privacy.

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

Index & Reports

Q.17) Consider the following statements:

- 1. India has registered a significant decline in multidimensional poverty in recent years.
- 2. The National Multidimensional Poverty Index (NMPI) covers a greater number of indicators than the Global Multidimensional Poverty Index (GMPI).

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



International Relations/Organizations

Q.18) In the context of International Relations, what does a Letter of Arrangement (LoA) signify?

- a) A legally binding contract between two parties.
- b) A formal agreement outlining terms and conditions for a future contract.
- c) A non-binding document expressing intent to collaborate.
- d) A letter of credit used in international trade transactions.

Q.19) With reference to India-UAE relations, consider the following statements:

- 1. Reserve Bank of India (RBI) and the Central Bank of the UAE have agreed to establish a framework for enabling the use of their local currencies for cross-border transactions.
- 2. UAE supports India's bid for entry in the UNSC.
- 3. UAE is India's second-largest trading partner.

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.20) Consider the following pairs:

Initiatives-----Specifications

- 1. United Nations Convention on the Law of the Sea (UNCLOS)----It is a treaty to ensure that appropriate action is taken against people who commit unlawful acts against ships.
- 2. Combined Maritime Forces (CMF)-------It is a multinational naval partnership with primary focus areas aimed at defeating terrorism, preventing piracy, fostering regional cooperation, and promoting a secure maritime environment.

How many of the above pairs are correctly matched?

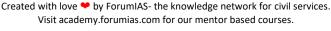
- a) Only one pair
- b) Only two pairs
- c) All three pairs
- d) None

Q.21) Consider the following components:

- 1. Non-Proliferation
- 2. Disarmament
- 3. Nuclear Material Security

How many of the above are the components of the Global Nuclear Order (GNO)?

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





Q.22) Which one of the following international organizations primarily focuses on addressing issues related to development in the Global South?

- a) International Monetary Fund (IMF)
- b) United Nations Educational, Scientific and Cultural Organization (UNESCO)
- c) World Health Organization (WHO)
- d) The United Nations Development Programme (UNDP)

Q.23) Which one of the following advantages does Israel bring to the I2U2 grouping?

- a) Its vast reserves of natural resources, particularly oil and gas.
- b) Its expertise in water management and agricultural technology.
- c) Its experience in cybersecurity and counter-terrorism operations.
- d) Its strong cultural and historical ties with India and the UAE.

Q.24) In which one of the following ways are the judges appointed to the International Court of Justice (ICI)?

- a) Elected by the United Nations General Assembly and Security Council.
- b) Appointed by the Secretary-General of the United Nations
- c) Selected by the International Bar Association
- d) Nominated by national governments and subsequent approval by the United Nations General Assembly.

Q.25) With reference to the India and Oman relations, consider the following statements:

- 1. India exports gasoline, iron and steel, electronics, and machinery to Oman.
- 2. Oman is India's third largest export destination among the six Gulf Cooperation Council (GCC) countries.
- 3. Bilateral trade between India and Oman has been declining in recent years.

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

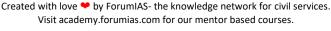
- a) 1 only
- b) 1 and 2 only
- c) 2 only
- d) 2 and 3 only

Q.26) In context of the Green Fuels Alliance India (GFAI), which of the following statements are correct?

- 1. The alliance aims to establish India as a global leader in green hydrogen production and export.
- 2. It is an alliance between the Denmark and India.
- 3. Facilitating joint research and development projects on green fuel technologies are some of the key areas of collaboration included in the GFAI.

Select the correct answer 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





0.27) With reference to the India-Iran relations, consider the following statements:

- 1. Bilateral ties deteriorated after India stopped Iranian oil imports following US exiting the Iran nuclear deal and imposing sanctions against Iran.
- 2. India's relationship with Iran is strategically important for securing its interest of accessing the Leviathan Gas Field in Israel.
- 3. Shanghai Cooperation Organization (SCO) has both India and Iran as members, contributing to their diplomatic ties.

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

Economy

Q.28) Consider the following statements with reference to India's aviation sector:

- 1. India has become the third-largest domestic aviation market in the world.
- 2. UDAN Scheme aims to improve the international footprint of India-based airline services.

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

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

Q.29) Consider the following:

- 1. Reduced Fiscal Flexibility
- 2. Increased Risk of Default
- 3. Crowding In Investment
- 4. Credit Rating Downgrades

Which of the above will likely be the consequences when a state carries a substantial burden of debt?

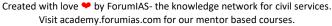
- a) 2, 3 and 4 only
- b) 1 and 4 only
- c) 1, 2 and 4 only
- d) 2 and 3 only

Q.30) With reference to India's Agricultural Export Sector, consider the following statements:

- 1. India's agricultural exports are experiencing consistent growth.
- 2. Majority of India's exports are low-value and semi-processed.
- 3. India's agricultural export sector faces challenges related to inadequate infrastructure, high logistics costs, and cold chain facilities.

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.31) A country's Gini coefficient has increased over time. Which one of the following scenarios can be inferred from this?

- a) The income gap between the rich and the poor has narrowed.
- b) The overall standard of living has improved for everyone.
- c) The distribution of income has become more unequal.
- d) The economy is experiencing a recession.

Q.32) With reference to the Cooperative Banks, consider the following statements:

- 1. Cooperative Banks are owned by the government, while Commercial Banks are privately owned.
- 2. Cooperative Banks follow the principle of profit maximization.
- 3. Cooperative Banks in India are regulated by Indian Banking Association (IBA).

How many of the statements given above are correct?

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

Q.33) Which one of the following is correct with reference to the term "twin-balance sheet problem" in the context of an economy?

- a) It refers to a high budget deficit and trade deficit simultaneously.
- b) It highlights the interconnectedness of the financial health of banks and corporations.
- c) It describes a situation where economic growth is stagnant despite high inflation.
- d) It signifies the widening gap between rich and poor in a society.

Q.34) Consider the following:

- 1. Linguistic and cultural differences
- 2. Centralized policymaking
- 3. Lack of industrial diversification
- 4. Uneven agricultural land

How many of the above are the primary reasons behind economic divide amongst Indian states?

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

Q.35) Which one of the following is the primary cause behind the Reserve Bank of India's (RBI) recent shift towards self-regulation and Self-Regulatory Organizations (SROs) in the financial sector?

- a) Reducing overall regulatory burden on the RBI
- b) Promoting innovation and adaptability within financial institutions
- c) Enhancing risk management and stability within the sector
- d) Lowering entry barriers for new players in the market

Q.36) Which one of the following statements is correct with reference to the impact of the Insolvency and Bankruptcy Code (IBC), 2016 on the resolution of non-performing assets (NPAs)?

- a) IBC has significantly reduced the time taken to resolve NPAs.
- b) IBC has led to a decrease in the recovery rate of NPAs.
- c) IBC has had no impact on the resolution of NPAs.
- d) IBC has increased the number of NPAs in the banking system.

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

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



Q.37) Consider the following statements:

- 1. Panama is a part of the "Lithium Triangle" along with Chile and Bolivia.
- 2. Currently, India's lithium demand is met through 100% import.
- 3. India's first major lithium reserve has been found in the Jammu and Kashmir.

How many of the statements given above are correct?

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

Environment

Q.38) With reference to the National Clean Air Programme (NCAP), consider the following statements:

- 1. It aims to reduce air pollution levels across India by 20-30% by 2025-26.
- 2. Carbon monoxide and ozone are the focus pollutant under the National Clean Air Programme (NCAP).
- 3. Ministry of Environment, Forest and Climate Change is the nodal agency for the implementation of the National Clean Air Programme (NCAP).

Which of the statements give above are correct?

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

Q.39) Consider the following statements:

- 1. Darjeeling zoo holds the largest captive population of snow leopards in the world.
- 2. Snow leopards are listed as Endangered on the IUCN Red List of Threatened Species.

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.40) With reference to Swachh Survekshan Awards, consider the following statements:

- 1. Swachh Survekshan is an annual survey of cleanliness, hygiene and sanitation in cities and towns across India.
- 2. Community involvement and behavioral change in waste management are one of the few focus areas for the evaluation of cities under the Swachh Survekshan.
- 3. Swachh Survekshan is conducted by the Ministry of Housing and Urban Affairs (MoHUA) with Quality Council of India (QCI) as its implementation partner.

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

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



Q.41) The Indian government has implemented various policies and initiatives to promote renewable energy. Which one of the following is NOT included in these efforts?

- a) Setting ambitious targets for renewable energy capacity addition.
- b) Providing financial incentives and subsidies for renewable energy projects.
- c) Developing smart grid technologies for efficient integration of renewable energy.
- d) Imposing carbon taxes on fossil fuel consumption.

Q.42) Which one of the following periods in Earth's history is characterized by the rise of free oxygen in the atmosphere, leading to the diversification of complex life?

- a) Cambrian Explosion
- b) Great Oxygenation Event
- c) Proterozoic Era
- d) Permian Extinction

Q.43) With reference to the Air Pollution, consider the following statements:

- 1. Primary air pollutants are harmful gases, while secondary air pollutants are solid particles.
- 2. One of the roles of the Air Quality Index (AQI) in managing air pollution is that it provides information to the public about air quality and potential health risks.
- 3. International Panel on Climate Change (IPCC) monitors air quality and sets guidelines for pollution control.

How many of the statements given above are correct?

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

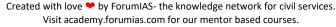
Science & Technology

Q.44) With reference to the Antimicrobial Resistance (AMR), consider the following statements:

- 1. It is the resistance of microorganisms to an antimicrobial agent.
- 2. E. coli has become resistant the latest generation of antibiotics.
- 3. Acquired antimicrobial resistance is caused by the structural characteristics of microbes.

How many of the statements given above are correct?

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





Q.45) With reference to Proba-3's mission, seen in the news recently, consider the following statements:

- 1. The mission is being led by Russian Federal Space Agency (Roscosmos).
- 2. It aims to form a 144-m long solar coronagraph, which will create an artificial eclipse, revealing new views of the Sun's faint corona.
- 3. It consists of two spacecraft flying in close formation, creating an artificial eclipse.

How many of the statements given above are correct?

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

Q.46) Consider the following statements:

Statement-I: Developing thorium-based nuclear energy technology is a strategic priority for India's energy independence and security.

Statement-II: Thorium is more efficient and cost-effective than uranium for producing nuclear energy.

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.47) With reference to the Cosmic rays, which of the following statement(s) is/are correct?

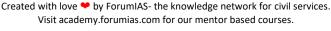
- 1. They are high-energy particles, moving at nearly the speed of light, originate from the Sun, our galaxy, and distant galaxies.
- 2. When cosmic rays interact with the Earth's atmosphere, it leads to the formation of ozone layer.
- 3. Gamma rays, X-rays, and ultraviolet light are the types of cosmic rays.

Select the correct answer using the codes given below:

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

Q.48) The Ministry of Health and Family Welfare has recently notified revised rules under "Schedule M of the Drugs and Cosmetics Rules, 1945". Which one of the following is the primary objective of 'Schedule M' in the Drugs and Cosmetics Rules, 1945?

- a) Define the permissible ingredients for different types of drugs.
- b) Specify quality control standards for drug manufacturing practices.
- c) Outline labeling and packaging requirements for medicinal products.
- d) Establish guidelines for advertising and promotion of drugs.





Q.49) Consider the following statements:

- 1. Discover transient black holes by detecting their rare X-ray flares.
- 2. Locate the electromagnetic sources of gravitational waves.
- 3. Study X-ray transients like gamma-ray bursts, supernovae, and flares from other stars.

How many of the above are the objectives of Einstein Probe (EP) satellite, recently launched by China?

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

Q.50) The 'Milky Way Galaxy' is a type of:

- a) Lenticular Galaxies
- b) Elliptical Galaxies
- c) Spiral Galaxies
- d) Irregular Galaxies

Q.51) With reference to Human Papillomavirus (HPV), consider the following statements:

- 1. It is a group of viruses that can cause abnormal cell growth in infected individuals.
- 2. HPV is transmitted through airborne droplets like coughing or sneezing.
- 3. More than 95% of all cervical cancer cases are linked to persistent infection with high-risk strains of HPV.

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.52) With reference to the New Generation Akash (Akash-NG) missile, consider the following statements:

- 1. It is a type of Ballistic missile.
- 2. One of the primary features that distinguishes the Akash-NG from the original Akash missile is its longer range.
- 3. It is considered a force multiplier because it enhances the Air Force's ability to defend against multiple threats simultaneously.

How many of the statements given above are correct?

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

0.53) With reference to Tuberculosis (TB), consider the following statements:

- 1. TB cases in India have been decreased since 2022.
- 2. The transmission of TB primarily occurs through contaminated water or food.
- 3. Tuberculosis is preventable and curable.

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

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

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



Q.54) Consider the following statements:

Statement-I: Dark matter is a form of matter that can't be detected through normal observational means.

Statement-II: Dark matter doesn't reflect or emit light.

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.55) Consider the following statements:

- 1. Thylakoids provide structural support for the chloroplast in the plant cell.
- 2. Cyanobacteria are photosynthetic bacteria that obtain energy through photosynthesis.

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 is the primary purpose of the "Drishti 10 Starliner UAV (Unmanned Aerial Vehicle)", recently received by the Indian Navy?

- a) Combat operations and strike missions
- b) Intelligence, surveillance, and reconnaissance (ISR) in maritime environments
- c) Electronic warfare and communication jamming
- d) Cargo transportation and logistics support

Q.57) Consider the following statements:

- 1. India has the world's largest internet user base.
- 2. Online gaming in India has been linked to national security concerns and money laundering.

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.58) Consider the following statements:

- 1. Cervical cancer is both preventable and curable if detected early.
- 2. Cervical cancer is usually caused by an inherited genetic mutation.
- 3. The best way to prevent cervical cancer is through surgery to remove the cervix.

How many of the statements given above are correct?

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



Q.59) Consider the following statements:

- 1. I-STEM (Indian Science, Technology, and Engineering facilities Map) is a National Web portal for sharing R&D (Research and Development) facilities.
- 2. Samavesha project launched by I-STEM is a wellness initiative, where communities engage in collective activities, promoting physical and mental well-being for all members.

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

Answer Key

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



Answers & Explanations

Art & Culture, Ancient India

- 1. Correct Answer is (A)
- **Statement 1** is correct. The tableaux at the Republic Day Parade reflects the country's cultural splendor and diversity, showcasing the unique traditions, costumes, and art forms of different states and union territories.
- Statement 2 is incorrect. The selection process of tableaux for the Republic Day parade is carried out by the Ministry of Defence (MoD). The MoD coordinates with states and other agencies to conduct the parade and begin preparations months in advance, including the selection and shortlisting of tableaux.

Source: ForumIAS

2. Correct Answer is (C)

• Many historians and archaeologists believe that a combination of factors, including changes in climate, environmental degradation, and resource depletion, contributed to the decline of the Indus Valley Civilization. There is evidence of shifts in river courses, reduced rainfall, and ecological stress that could have adversely affected the sustainability of the civilization. Dark Age is the time frame from the decline of the Indus Valley Civilization around 4,000 years ago (early 2nd millennium BCE) until the rise of the Iron Age and Mahajanapada cities like Gandhar, Koshal, and Avanti (6th-5th century BCE).

Source: Forum IAS

Geography

3. Correct Answer is (C)

• The Maldives is a tropical island nation located in the Indian Ocean, known for its white sandy beaches and crystal-clear waters. The islands that make up the Maldives are composed primarily of limestone, which is a type of rock formed from the accumulation of marine organisms such as corals and mollusks.

Source: Forum IAS

4. Correct Answer is (D)

• Agatti is a popular tourist destination in Lakshadweep, known for its serene beaches, coral reefs, and natural beauty. It is a popular destination for water sports like snorkeling, diving, and kayaking, as well as for relaxing on the beach and enjoying the scenic views.

Source: Forum IAS

5. Correct Answer is (B)

- Lentils generally require a cool to temperate climate, have an ideal growth temperature range of 18-30°C, are grown in well-drained loam soils with a neutral pH, and can withstand light frost but are sensitive to extreme heat. Lentils are small, lens-shaped seeds that come in various colors, with red and green being popular varieties in India. Lentil is also called Masur and Malka (bold seeded).
- India is anticipated to lead global lentil (masoor) production in 2023-24, due to increased cultivation. Although India ranks as the second-largest lentil producer, it has predominantly imported from Australia, Canada, Russia, Singapore, and Turkey until now.

Source: Forum IAS



6. Correct Answer is (C)

- **Statements 1 and 4** are correct. Water is the most consumed drink, and tea consistently ranks as the second most popular beverage globally. The Tea Board of India is a statutory body established under the Tea Act of 1953. The Tea Board of India operates under the Ministry of Commerce and Industry, promoting and regulating the Indian tea industry.
- **Statements 2 and 3** are incorrect. Tea plants grow best in temperatures between 20 and 30 degrees Celsius. Higher temperatures above 30 degrees Celsius can be stressful for tea plants and affect their growth and productivity. India is the second largest producer of tea after China globally. The majority of its annual production comes from Assam (55%) and West Bengal. India is among the world's top tea consuming countries, with 80 % of its production consumed domestically.

Source: ForumIAS

7. Correct Answer is (C)

• The Philippine Sea is located to the east of Taiwan, separating it from the Mariana Islands. The Philippine Sea is a vast expanse of the western Pacific Ocean that covers an area of over 5 million square kilometers.

Source: Forum IAS

8. Correct Answer is (D)

- Statements 1, 2 and 3 are correct.
- National Framework of Climate Services (NFCS): This framework was launched by IMD in 2018 to provide climate services to various sectors, including agriculture, health, and disaster management, to support climate-resilient development in India.
- Panchayat Mausam Sewa Portal: IMD launched this portal in 2020 to provide weather services to farmers in local languages, helping them plan their agricultural activities based on weather forecast.
- Agro-Meteorological Advisory Services: IMD has been providing agro-meteorological advisories to
 farmers for many years to help them make informed decisions about crop management and increase
 agricultural productivity. In 2019, IMD enhanced these services by introducing location-specific
 agricultural advisories based on remote sensing data.

Source: Forum IAS

9. Correct Answer is (A)

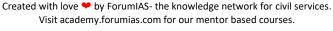
- Statement 1 is correct. The Kachchhi Kharek variety of dates, which is indigenous to the Kutch region of Gujarat, is known for its unique characteristic of being edible even in its fresh and unripened form. This is in contrast to other date varieties that require ripening or softening before they can be consumed. Kutch is the only place in the world where this variety of fresh dates is grown, traded, and consumed on a commercial scale.
- Statement 2 is incorrect. Recently, Kachchhi Kharek, the indigenous variety of dates of Kutch, has become the second fruit of Gujarat to get a geographical indication (GI) tag, after Gir kesar mango.

Source: Forum IAS

Polity

10. Correct Answer is (B)

• Statement 1 is incorrect. Remission, in the context of Indian Polity, does not involve sending a case back to a lower court. It refers to reducing the duration or severity of a sentence awarded by a court,





without altering the conviction itself. This can involve partial or complete reduction of the sentence, depending on various factors like good conduct, age, or illness of the convict.

- Statement 2 is correct. The President of India has the power to grant pardons, reprieves, respites, or remissions of punishment under Article 72 of the Constitution of India. The President's power to grant remission is an important aspect of India's constitutional framework, as it provides a mechanism for the executive to provide relief to individuals who have been convicted of crimes.
- However, the power to grant remission is subject to judicial review, and the Supreme Court has held that it must be exercised in accordance with constitutional principles and the rule of law.

Source: Forum IAS

11. Correct Answer is (B)

- Statements 1 and 2 are correct. The Constitution does not enumerate specific grounds or procedures for the removal of Governors. Unlike certain constitutional offices, such as judges of the higher judiciary, Governors do not have fixed tenures or specific grounds for removal mentioned in the Constitution. In the S. R. Bommai case, the Supreme Court ruled that the governor should give the chief minister an opportunity to prove their majority in the state legislative assembly before recommending the imposition of President's rule. This is known as the "floor test" and is considered a more objective way of assessing the stability of a government than relying solely on the governor's subjective assessment.
- **Statement 3** is incorrect. As per the Government of India Act 1935, the governor acted in accordance with the advice of Ministers of a province's legislature, but retained special responsibilities and discretionary power.
- Under the Government of India Act 1858, provincial Governors were agents of the crown, functioning under the supervision of the Governor-General.

Source: Forum IAS

12. Correct Answer is (C)

• Statements 1 and 2 are correct. Centre for Research and Planning of the Supreme Court is the Supreme Court's in-house think tank. It acts as an internal research body dedicated to supporting the Court's functions. It aims to conduct cutting-edge research on fundamental jurisprudence, principles, doctrines of law, and judicial reforms.

Source: Forum IAS

13. Correct Answer is (A)

• In the absence of the Speaker of the House, the Deputy Speaker assumes the Speaker's powers and responsibilities, including adjudicating anti-defection cases. This is in line with the constitutional provisions and parliamentary practices that provide for a succession in the event of the Speaker's absence.

Source: Forum IAS

14. Correct Answer is (C)

• Evaluating states' performance in forest conservation is a crucial aspect of the Finance Commission's role. They often link grant allocations to certain performance indicators, such as forest cover area, forest quality, and implementation of conservation plans. This incentivizes states to prioritize sustainable forest management practices and ensure efficient utilization of allocated funds.

Source: Forum IAS





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

15. Correct Answer is (A)

According to the Anti-Defection Law, legislators can change their party without disqualification if a
split occurs within the party, provided that at least two-thirds of the legislators in the legislature join
the new party. This exception is provided in the Tenth Schedule of the Indian Constitution to protect
instances of principled defections. The law also allows for mergers between political parties without
the risk of disqualification if not less than two-thirds of the members of the legislature party have
agreed to merge with another part.

Source: Forum IAS

Acts & Policies

16. Correct Answer is (A)

- Statements 1 and 2 are correct. The Act aims to streamline spectrum allocation by introducing mechanisms like spectrum trading, leasing, and sharing. This flexibility can facilitate faster deployment of technologies like 5G and internet of things (IoT). The Act promotes functional separation to lessen market concentration and support fair competition. It ensures that new service providers have equal access to crucial telecom infrastructure.
- Statement 3 is incorrect. The Act grants the government significant powers during public emergencies, potentially infringing on citizen privacy with minimal accountability.

Source: Forum IAS
Index & Reports

17. Correct Answer is (C)

- Statement 1 is correct. India has registered a significant decline in multidimensional poverty in recent years. According to the National Multidimensional Poverty Index (MPI) report by NITI Aayog, India's multidimensional poverty rate declined from 29.17% in 2013-14 to 11.28% in 2022-23.
- Statement 2 is correct. The National MPI for India uses 12 indicators across three equally weighted dimensions: health, education, and standard of living. On the other hand, the Global MPI, employs 10 indicators under 3 dimensions.

Source: Forum IAS

International Relations/Organizations

18. Correct Answer is (B)

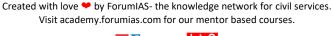
- A Letter of Arrangement (LoA) is a formal agreement outlining the terms and conditions for a future contract between two parties, in the context of international relations or defense procurement.
- Letters of Arrangement serve as a precursor to a final contract, allowing the parties to negotiate and establish the framework for their future collaboration. A Letter of Arrangement typically includes provisions on pricing, delivery schedules, and other contractual terms that will be included in the final contract.

Source: Forum IAS

19. Correct Answer is (A)

- Statements 1 and 2 are correct. The Reserve Bank of India (RBI) and the Central Bank of the UAE signed an agreement in 2023 to enable the use of their local currencies for cross-border transactions. The UAE has expressed its support for India's bid for a permanent seat in the United Nations Security Council (UNSC).
- Statement 3 is incorrect. In 2022-23, the UAE was India's third-largest trading partner, with bilateral trade totaling around \$85 billion.

Source: Forum IAS





20. Correct Answer is (A)

- Only 2 is correctly matched.
- The United Nations Convention on the Law of the Sea (UNCLOS), is a comprehensive treaty that sets out the legal framework for the use of the world's oceans, including rules for shipping, fishing, and the exploitation of marine resources. Its primary focus is on establishing a legal framework for the use of the oceans.
- Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation primarily addresses unlawful acts against the safety of maritime navigation, including acts of terrorism.

Source: Forum IAS

21. Correct Answer is (C)

- The Global Nuclear Order refers to the international framework of agreements, institutions, and norms that aim to promote nuclear non-proliferation, disarmament, and the safe and peaceful use of nuclear energy. Some key components of the GNO include:
- Non-Proliferation: Agreements and mechanisms to prevent the spread of nuclear weapons and technology, such as the Treaty on the Non-Proliferation of nuclear weapons (NPT).
- Disarmament: Efforts to reduce the number of nuclear weapons in existence and ultimately achieve a world free of nuclear weapons.
- Nuclear Material Security: Measures to prevent nuclear materials from falling into the wrong hands, including physical protection and cybersecurity.

Source: Forum IAS

22. Correct Answer is (D)

 The UNDP is the primary United Nations agency focused on development issues in the Global South, which refers to low- and middle-income countries in Africa, Asia, and Latin America. The organization's mandate is to eradicate poverty, reduce inequalities, and build resilience to crises and shocks.

Source: Forum IAS

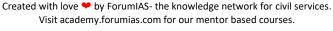
23. Correct Answer is (C)

• Israel's extensive experience and proven track record in cybersecurity and counter-terrorism operations, particularly in a region facing complex security challenges, make it a valuable asset to the I2U2 grouping. This expertise can be instrumental in joint initiatives related to intelligence sharing, cyber defense infrastructure development, and counter-terrorism strategies.

Source: Forum IAS

24. Correct Answer is (A)

- The election process for judges of the International Court of Justice (ICJ) involves both the United Nations General Assembly and Security Council. The voting power of both bodies is equal in this process, meaning that candidates must receive an absolute majority in both the General Assembly and Security Council to be elected.
- The General Assembly and Security Council each nominate candidates for the ICJ judgeship. Voting is conducted simultaneously in the General Assembly and Security Council. Candidates must receive an absolute majority in both the General Assembly and Security Council to be elected.
- The International Court of Justice (ICJ) is the principal judicial organ of the United Nations, composed of 15 judges elected for nine-year terms.





Source: Forum IAS

25. Correct Answer is (B)

- Statements 1 and 2 are correct. India exports gasoline, iron and steel, electronics, and machinery to Oman, and imports petroleum products, urea, propylene, and ethylene polymers. Oman is one of the major trading partners for India in the Gulf region, and it is the third largest export destination among the six Gulf Cooperation Council (GCC) countries.
- Statement 3 is incorrect. Bilateral trade between India and Oman has been increasing in recent years. In 2021-22, the bilateral trade between the two countries stood at USD 5.02 billion, a significant increase from USD 3.97 billion in 2020-21.

Source: Forum IAS

26. Correct Answer is (D)

• Statements 1, 2 and 3 are correct. Establishing India as a global leader in green hydrogen production and export is one of the objectives of the Green Fuels Alliance India (GFAI). This goal aligns with India's larger efforts to promote renewable energy and achieve carbon neutrality. The GFAI is an alliance between Denmark and India, but it is not limited to just these two countries. Facilitating joint research and development projects on green fuel technologies is an important area of collaboration envisaged by the GFAI.

Source: Forum IAS

27. Correct Answer is (C)

- Statements 1 and 3 are correct. In 2018, the United States withdrew from the Iran nuclear deal and re-imposed sanctions on Iran, including on its oil exports. India, which was a major importer of Iranian oil, had to reduce its imports significantly to avoid US sanctions. This led to a deterioration in bilateral ties between India and Iran. Both India and Iran are members of the Shanghai Cooperation Organization (SCO). The shared membership in SCO provides a platform for India and Iran to engage in diplomatic and economic cooperation, as well as discussing regional security issues.
- Statement 2 is incorrect. India's relationship with Iran is not directly related to accessing the Leviathan Gas Field in Israel. While India has shown interest in importing natural gas from Israel, including from the Leviathan field, this is a separate bilateral engagement and does not involve Iran.

Source: Forum IAS

Economy

28. Correct Answer is (A)

- Statement 1 is correct. As of January 2024, India has achieved the position of the world's third-largest domestic aviation market, surpassing Japan. This reflects the significant growth in passenger traffic within the country in recent years.
- Statement 2 is incorrect. The UDAN (Ude Desh ka Aam Naagrik) Scheme aims to make air travel more affordable and accessible, particularly for people living in remote and underserved areas. The scheme was launched in 2016 with the aim of connecting underserved and unserved airports and making air travel more affordable for the common people.
- Under the scheme, airlines are provided with viability gap funding to operate flights on regional routes, and passengers are offered subsidies to make air travel more affordable.

Source: Forum IAS

29. Correct Answer is (C)

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

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



- Reduced Fiscal Flexibility: As the state accumulates a large debt burden, it may face constraints on its fiscal flexibility. A significant portion of the budget may be allocated to debt servicing, limiting the resources available for other essential public expenditures.
- Increased Risk of Default: A large debt burden raises the risk of default, especially if the state struggles to meet its debt obligations.
- Credit Rating Downgrades: Accumulating a large debt burden may result in credit rating downgrades by credit rating agencies. A lower credit rating indicates a higher risk of default, leading to increased borrowing costs for the state.
- However, crowding in investment is not a typical consequence of a large state debt burden. In most
 cases, high debt leads to higher interest rates, discouraging private investment and hindering
 economic growth. High debt levels can often lead to crowding out investment instead, as higher
 interest rates make it more expensive for private businesses to borrow and invest.

Source: Forum IAS

30. Correct Answer is (D)

• Statements 1, 2 and 3 are correct. According to recent reports, India's agricultural exports have been growing steadily in recent years, with exports reaching a record high of \$50 billion in the financial year 2022-23. Although India's agricultural exports are growing, a large portion of them are low-value, semi-processed commodities such as rice, wheat, and spices. Despite the growth in agricultural exports, India's agricultural export sector faces several challenges, including inadequate infrastructure, high logistics costs, lack of access to finance, and insufficient cold chain facilities, which can impact the quality and shelf life of agricultural products.

Source: Forum IAS

31. Correct Answer is (C)

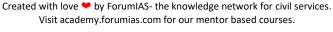
• The Gini coefficient is a commonly used measure of income inequality, with higher values indicating greater inequality. If a country's Gini coefficient has increased over time, it implies that the gap between the rich and poor has widened, meaning that the distribution of income has become more unequal. The coefficient ranges from 0 (0%) to 1 (100%), 0 representing perfect equality and 1 representing perfect inequality. Higher the value of Gini coefficient, higher the inequality.

Source: Forum IAS

32. Correct Answer is (D)

- Statements 1, 2 and 3 are incorrect. Cooperative Banks are not owned by the government, but by their members who are also customers. They operate on a cooperative basis, meaning they are owned and controlled by their members, who are often individuals or small businesses in a local community. On the other hand, Commercial Banks can be either privately owned or publicly traded companies, and their shareholders own them.
- Cooperative Banks follow the principle of service to their members, rather than profit maximization. They prioritize providing affordable financial services to their members, especially those with limited access to traditional banking services. Cooperative banks operate on the principle of 'no profit, no loss' and 'one person, one vote'.
- Cooperative Banks in India are regulated by the Reserve Bank of India (RBI). The Indian Banking Association (IBA) is an industry body representing the interests of banks in India, but it does not have regulatory powers over Cooperative Banks.

Source: Forum IAS





33. Correct Answer is (B)

• The term "twin-balance sheet problem" is often used to describe the interlinked financial health of banks and corporations in an economy. When corporations struggle with high debt levels and low profits, they may default on loan repayments to banks, leading to an increase in non-performing assets (NPAs) for the banking sector. This, in turn, affects the banks' lending capacity, limiting credit availability for businesses and impacting economic growth.

Source: Forum IAS

34. Correct Answer is (C)

- Linguistic and cultural differences can lead to disparities in economic opportunities and development across regions, especially when policies and investments are not tailored to local contexts. Centralized policymaking can also contribute to uneven development, as policies designed at the national level may not adequately address the specific challenges and needs of different states. A lack of industrial diversification can limit economic opportunities in some states, leading to dependence on a few industries and vulnerability to economic shocks.
- However, uneven agricultural land may not directly contribute to the economic divide across states.
 In fact, agricultural productivity can vary significantly based on various factors such as climate, access to resources, and technological advancements.

Source: Forum IAS

35. Correct Answer is (B)

• The primary driver for the Reserve Bank of India's shift towards self-regulation and Self-Regulatory Organizations (SROs) in the financial sector is to promote innovation and adaptability within financial institutions. The RBI's move towards SROs is aimed at empowering the fintech sector to operate and innovate responsibly while providing a framework for self-regulation. This approach seeks to balance the need for regulatory oversight with the need for flexibility and adaptability in the rapidly evolving fintech landscape. SRO is a non-governmental organization that sets and enforces rules and standards relating to the conduct of entities in the industry (members) to protect the customer and promote ethics, equality and professionalism.

Source: Forum IAS

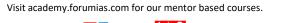
36. Correct Answer is (A)

- The Insolvency and Bankruptcy Code (IBC), 2016 was introduced to provide a time-bound process for resolving insolvency and bankruptcy cases in India. With respect to non-performing assets (NPAs), IBC has been effective in reducing the time taken to resolve these assets.
- Before the implementation of IBC, the process of resolving NPAs was lengthy and often dragged on for several years, leading to increased costs and reduced recovery for lenders. However, under IBC, the resolution process is mandated to be completed within a maximum of 330 days, which has helped in expediting the resolution of NPAs.

Source: Forum IAS

37. Correct Answer is (B)

- Statement 1 is incorrect. The "Lithium Triangle" refers to a region in South America that encompasses parts of Chile, Argentina, and Bolivia, where the world's largest lithium reserves are located. Panama is not part of the Lithium Triangle.
- Statements 2 and 3 are correct. India currently has no indigenous sources of lithium and relies entirely on imports to meet its demand. Over 95 per cent of India's lithium imports originate





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

from China and Hong Kong. India's first major lithium reserve has been found in the Salal-Haimana area of Reasi District in Jammu and Kashmir. Some small reserves are also present in Karnataka.

Source: Forum IAS

Environment

38. Correct Answer is (C)

- Statements 1 and 3 are correct. NCAP aims to reduce air pollution levels across India by 20-30% by 2025-26. The Ministry of Environment, Forest and Climate Change (MoEFCC) is the nodal agency responsible for overseeing and coordinating the implementation of NCAP across various government departments and states.
- Statement 2 is incorrect. The primary focus of NCAP is on particulate matter (PM), specifically PM10 and PM2.5. These microscopic particles pose the most significant health risks from air pollution in India.

Source: Forum IAS

39. Correct Answer is (A)

- Statement 1 is correct. Darjeeling zoo, also known as the Padmaja Naidu Himalayan Zoological Park, holds the largest captive population of snow leopards in the world. It is the largest high-altitude zoo in India. It specializes in breeding animals adapted to alpine conditions. It has successful captive breeding programs for the snow leopard, the endangered Himalayan wolf and the red panda. The zoo serves as the central hub for Central Zoo Authority of India's red panda program. It is a member of the World Association of Zoos and Aquariums (WAZA).
- Statement 2 is incorrect. Snow leopards are classified as "Vulnerable" on the IUCN Red List of Threatened Species. This means that they are facing a high risk of extinction in the wild in the medium-term future unless the threats to their survival are reduced.

Source: Forum IAS

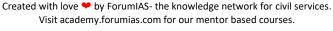
40. Correct Answer is (C)

- Statements 1 and 3 are correct. Swachh Survekshan is an annual survey conducted by the Ministry of Housing and Urban Affairs (MoHUA) to evaluate the cleanliness and sanitation levels in cities and towns across India.
- The Quality Council of India (QCI) is the implementation partner for Swachh Survekshan, responsible for conducting the survey and assessing the participating cities based on various parameters.
- Statement 2 is incorrect. Community involvement and behavioral change in waste management are not specific focus areas for evaluation under the Swachh Survekshan Awards. Door-to-door waste collection and processing, public toilet access and cleanliness, street sweeping and cleaning of public spaces are some of the focus areas for evaluation under the Swachh Survekshan Awards.
- Swachh Survekshan Awards 2023: In the state rankings, Maharashtra came first, followed by Madhya Pradesh and Chhattisgarh. Indore has been adjudged the cleanest city for the seventh time in a row.

Source: Forum IAS

41. Correct Answer is (D)

- Carbon taxes on fossil fuel consumption are not typically considered a part of initiatives to promote renewable energy.
- The government has set ambitious targets for renewable energy capacity addition, such as achieving 175 GW of renewable energy capacity by 2022 and 500 GW by 2030.





- B) Financial incentives and subsidies have been provided for renewable energy projects through various programs and schemes, such as the Solar Park Scheme, the Wind Energy Scheme, and the National Biofuel Policy.
- C) Developing smart grid technologies has been a focus area for efficient integration of renewable energy, and the government has launched initiatives like the Smart Grid Mission and the Green Energy Corridors Program.

Source: Forum IAS

42. Correct Answer is (B)

• The Great Oxygenation Event, also known as the "Oxygen Catastrophe" or "Oxidation Catastrophe," occurred approximately 2.4 billion years ago during the Paleoproterozoic era. It marks a period when the Earth's atmosphere experienced a significant increase in oxygen levels due to the evolution of oxygen-producing organisms like cyanobacteria. This event had a profound impact on the Earth's atmosphere, allowing for the proliferation of oxygen-dependent life forms and paving the way for the diversification of complex life.

Source: Forum IAS

43. Correct Answer is (A)

- Statements 1 and 3 are incorrect. The distinction between primary and secondary air pollutants is not based on their physical state. Rather, primary pollutants are emitted directly into the atmosphere from sources like vehicles, industries, and biomass burning, while secondary pollutants are formed in the atmosphere from reactions between primary pollutants. For example, ground-level ozone, a secondary pollutant, is formed from the reaction of primary pollutants like nitrogen oxides and volatile organic compounds in the presence of sunlight. The International Panel on Climate Change (IPCC) does not monitor air quality or set pollution control guidelines. IPCC's primary role is to provide scientific information on climate change to governments and other stakeholders, assisting them in developing climate policies and solutions.
- Statement 2 is correct. The Air Quality Index (AQI) is a tool used to communicate air quality and associated health risks to the public. It converts complex air quality data into a simple numerical scale, making it easy for people to understand and take necessary actions to protect their health.

Source: Forum IAS

Science & Technology

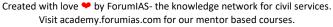
44. Correct Answer is (B)

- Statements 1 and 2 are correct. AMR refers to the ability of microorganisms, like bacteria, viruses, fungi, and parasites, to withstand the effects of antimicrobial agents, such as antibiotics, antifungals, and antiviral drugs. Bacteria like E.
 - coli, Klebsiella, Acinetobacter, Staphylococcus aureus, enterococcus have become resistant to even the latest generation of antibiotics.
- Statement 3 is incorrect. Acquired antimicrobial resistance is not caused by structural characteristics of microbes, but rather by genetic changes that occur within the microbe in response to exposure to antimicrobial agents.

Source: Forum IAS

45. Correct Answer is (B)

• Statement 1 is incorrect. Proba-3's mission is being led by European Space Agency (ESA).





• Statements 2 and 3 are correct. Proba-3's objective is to develop technology for precision formation flying and demonstrate the ability to create an artificial eclipse using two satellites. It aims to form a precise formation of two satellites flying in tandem, creating a "flying coronagraph" with a separation distance of 144 meters. The goal is to study the Sun's corona, the outermost part of its atmosphere. Proba-3 consists of two small satellites, each carrying a set of sensors and instruments, flying in close formation to create an artificial eclipse and study the Sun's corona.

Source: Forum IAS

46. Correct Answer is (C)

- Statement 1 is correct. Developing thorium-based nuclear energy technology is a strategic priority for India. India has significant thorium resources and sees thorium-based nuclear energy as a way to achieve long-term energy security and reduce its dependence on imported uranium. The country has a three-stage nuclear power program that aims to ultimately harness thorium-based nuclear energy.
- Statement 2 is incorrect. Thorium is not necessarily more efficient or cost-effective than uranium for producing nuclear energy. While thorium-based nuclear energy offers some potential advantages, such as reduced nuclear waste and a potentially more abundant fuel supply, it also presents significant technical and economic challenges. Currently, uranium-based nuclear energy is the most widely used and established nuclear energy technology, and thorium-based nuclear energy is still in the research and development stage.

Source: Forum IAS

47. Correct Answer is (A)

- Statement 1 is correct. Cosmic rays are high-energy particles, mostly protons and atomic nuclei, that travel through space at close to the speed of light. They originate from various sources, including the Sun, our galaxy (Milky Way), and even distant galaxies beyond.
- Statements 2 and 3 are incorrect. Cosmic rays do not contribute to the formation of the ozone layer. Some studies suggest that cosmic rays may indirectly affect the atmosphere by influencing cloud formation, but the ozone layer is primarily shaped by chemical reactions involving oxygen, ultraviolet radiation, and pollutants like CFCs. While gamma rays, X-rays, and ultraviolet light are forms of electromagnetic radiation, they are not classified as cosmic rays. Cosmic rays consist primarily of high-energy particles like protons, electrons, and atomic nuclei.

Source: Forum IAS

48. Correct Answer is (B)

- Schedule M is specifically devoted to "Good Manufacturing Practices (GMP) and requirements of premises, plant and equipment for pharmaceutical products." It outlines detailed regulations for various aspects of drug manufacturing, including personnel, facilities, equipment, materials, documentation, and quality control procedures.
- It is a set of guidelines that specifies good manufacturing practices for pharmaceutical products. It outlines the minimum standards that pharmaceutical companies must follow to ensure the quality and safety of their products.

Source: Forum IAS

49. Correct Answer is (C)

• The Einstein Probe, recently launched by China, aims to study transient cosmic phenomena and uncover mysteries of the universe. Its objectives include: detecting rare X-ray flares to discover transient black holes, locating the electromagnetic sources of gravitational waves, studying X-ray

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

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



transients like gamma-ray bursts, supernovae, and flares from other stars. The satellite is equipped with advanced instruments, including a lobster-eye X-ray telescope, which enables it to detect and study transient cosmic phenomena with high sensitivity.

Source: Forum IAS

50. Correct Answer is (C)

• The Milky Way Galaxy, which contains our Solar System, is a large spiral galaxy. It has a characteristic spiral structure, with spiral arms winding around a central bar, and a halo of stars and dark matter surrounding the whole system. A spiral galaxy is a type of galaxy characterized by its distinctive spiral arms that radiate from a central bulge. These arms are often lined with bright young stars, dust, and gas, creating a spiral pattern when viewed from afar.

Source: Forum IAS

51. Correct Answer is (C)

- Statements 1 and 3 are correct. HPV is a group of viruses that can cause abnormal cell growth in infected individuals. Some types of HPV can lead to cancer, including cervical cancer, anal cancer, and oral cancer. A persistent infection with high-risk strains of HPV is a major cause of cervical cancer. According to the World Health Organization, over 95% of all cervical cancer cases are linked to HPV infection.
- Statement 2 is incorrect. HPV is not typically transmitted through airborne droplets like coughing or sneezing. It is primarily transmitted through direct contact with infected skin or mucous membranes, often during sexual activity or other close physical contact.

Source: Forum IAS

52. Correct Answer is (B)

- Statement 1 is incorrect. The New Generation Akash (Akash-NG) missile is not a Ballistic missile but a Surface-to-Air Missile (SAM) system. Ballistic missiles follow a ballistic trajectory towards their target after launch, while SAM systems are designed to be launched from the ground to hit aerial targets.
- Statements 2 and 3 are correct. The Akash-NG is an advanced version of the original Akash missile, featuring several improvements, including a longer range, higher speed, etc. The Akash-NG has a range of 60 km compared to the original Akash's range of 30 km. The Akash-NG's capability to engage multiple targets simultaneously enhances the Air Force's ability to defend against various threats, making it a force multiplier. The missile system's advanced technology and network-centric operation enable it to engage multiple targets with high precision and efficiency, improving the defense system's effectiveness against potential aerial threats.

Source: Forum IAS

53. Correct Answer is (C)

- Statements 1 and 3 are correct. TB cases in India have decreased since 2022. According to the Global TB Report 2023, India has reported a decrease in TB cases from 2,135,830 in 2021 to 2,053,130 in 2022, a decrease of around 4%. TB is preventable and curable. Early diagnosis and prompt treatment can cure most cases of TB, and vaccinations are available to prevent infection.
- Statement 2 is incorrect. TB is not primarily transmitted through contaminated water or food. TB is caused by the bacteria Mycobacterium tuberculosis, which is usually transmitted through the air when an infected person coughs, speaks, etc.

Source: Forum IAS





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

54. Correct Answer is (A)

- Statement-I: Dark matter is invisible to our current telescopes and detectors. We can't directly observe it through electromagnetic radiation like light.
- Statement-II: Dark matter's invisibility stems from its lack of interaction with the electromagnetic force. It doesn't absorb, reflect, or emit light, making it invisible to our usual methods of observation.
- Hence, Statement-I correctly states that dark matter cannot be detected through normal observational means, and Statement-II correctly explains that this is because dark matter does not reflect or emit light.

Source: Forum IAS

55. Correct Answer is (B)

- Statement 1 is incorrect. Thylakoids are membrane-bound structures within chloroplasts that contain chlorophyll and other pigments involved in capturing light energy during photosynthesis. While they are essential for photosynthesis, their primary function is not to provide structural support for the chloroplast. They are found in ancient, light-sensitive bacteria called cyanobacteria. They store chlorophyll, the substance in plants that reacts to sunlight and triggers photosynthesis. The thylakoid's function is to perform light-dependent reactions in photosynthesis.
- Statement 2 is correct. Cyanobacteria, also known as blue-green algae, are photosynthetic bacteria that carry out oxygenic photosynthesis, similar to plants. They have the ability to convert light energy from the sun into chemical energy through photosynthesis, using water and carbon dioxide to produce oxygen and sugars.

Source: Forum IAS

56. Correct Answer is (B)

• The primary purpose of the Drishti 10 Starliner UAV is intelligence, surveillance, and reconnaissance (ISR) in maritime environments. The Drishti 10 Starliner is a state-of-the-art UAV designed to provide the Indian Navy with enhanced maritime surveillance capabilities. Its advanced sensors and long-endurance capabilities enable it to conduct extended surveillance missions over the ocean, gathering critical information for strategic decision-making and maritime security.

Source: Forum IAS

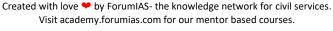
57. Correct Answer is (B)

- Statement 1 is incorrect. India has the second largest internet user base globally, with over 850 million users as of 2023. This vast user base makes it an attractive market for various online services, including gaming platforms.
- Statement 2 is correct. Online gaming in India has been linked to national security concerns and money laundering. India's growing online gaming industry has attracted the attention of malicious actors, including those involved in financial fraud, money laundering, and even cyber espionage.

Source: Forum IAS

58. Correct Answer is (A)

- Statement 1 is correct. Cervical cancer is both preventable and curable if detected early. Regular screening tests, such as the Pap test and HPV test, can detect changes in the cervix that may lead to cancer, allowing for early intervention and treatment.
- Statements 2 and 3 are incorrect. Cervical cancer is not usually caused by an inherited genetic mutation. Cervical cancer is mainly caused by infection with the human papillomavirus (HPV), which





is a sexually transmitted virus. Removing the cervix, a procedure called a hysterectomy, is not the best way to prevent cervical cancer. It is a major surgery with long-term implications for reproductive health. The primary methods of prevention are HPV vaccination and regular screening.

Source: Forum IAS

59. Correct Answer is (A)

- Statement 1 is correct. The I-STEM (Indian Science, Technology, and Engineering facilities Map) portal is a national portal that provides a platform for sharing scientific and engineering facilities among researchers, academia, and industry. The objective of the portal is to promote efficient use of research infrastructure, reduce duplication of investments, and foster collaboration among different institutions.
- Statement 2 is incorrect. The Samavesha project launched by I-STEM is not a wellness initiative, rather, it is a platform to enhance research collaboration in India by connecting researchers, industry, and start-ups with laboratory facilities and equipment. The Samavesha project is focused on fostering innovation and scientific progress by providing access to critical research infrastructure.

Source: Forum IAS

