

10 PM Current Affairs Quiz Weekly Compilation

For UPSC CSE Prelims

[2nd Week] March, 2024

Index

Art & Culture	2
Modern Indian History	2
Geography	2
Polity.....	3
Acts & Policies	6
Index & Reports	7
International Relations/Organizations.....	8
Economy	10
Environment	13
Science & Technology	14
Answer Key	17
Answers & Explanation	17

Art & Culture

Q.1) The 'Gorsam Kora Festival' is mainly celebrated for:

- a) Celebrating a plentiful harvest period
- b) Commemorating a military victory
- c) Highlighting Buddhist cultural heritage
- d) Welcoming the spring season

Modern Indian History

Q.2) Consider the following statements with reference to Kochrab Ashram:

- 1. It is the first ashram established by Mahatma Gandhi upon his return to India from South Africa in 1915.
- 2. Mahatma Gandhi started the Quit India Movement from Kochrab Ashram.
- 3. The Ashram served as a communal living space promoting self-improvement and community service.

How many of the statements given above are correct?

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

Geography

Q.3) Consider the following statements with respect to 'Flue Cured Tobacco':

- 1. It is primarily used for cigarette production.
- 2. It contains a higher sugar content.
- 3. It is yellow to orange in colour.
- 4. It requires minimal processing after harvest.

How many of the statements' given above are correct?

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

Q.4) Which one of the following Indian states does the 'Sharda River' NOT flow through?

- a) Uttarakhand
- b) Uttar Pradesh
- c) Bihar
- d) Madhya Pradesh

Q.5) Consider the following statements:

1. Kolleru Lake lies between deltas of Mahanadi River and Cauvery River.
2. Kolleru Lake is the largest shallow freshwater lake in Asia.
3. Atapaka Bird Sanctuary serves as a habitat for various migratory bird species.

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.6) Jhum cultivation is a traditional practice prevalent in several northeastern Indian states. Which one of the following is the primary reason for the practice of burning vegetation before planting new crops?

- a) Clear land for cultivation efficiently.
- b) Release nutrients back into the soil.
- c) Control the spread of pests and diseases.
- d) Encourage the growth of specific plant varieties.

Q.7) Consider the following statements:

1. Iron ore refers to naturally occurring rocks and minerals that contain enough iron to be economically extracted and processed.
2. Limonite, an iron oxide, has the highest iron content.
3. Iron ore serves as a crucial raw material for steel-making.
4. In recent years, China has become a major importer of Indian iron ore.

Which of the statements given above are correct?

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

Polity

Q.8) Consider the following statements:

1. The term First Information Report (FIR) is not specified in the Indian Penal Code (IPC).
2. A copy of every General Diary (GD) of the police station is forwarded to the higher-ranking officers and the relevant Judicial Magistrate.
3. General Diary (GD) is an internal police record which is not required to be provided to the complainant.

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.9) With reference to the Comptroller and Auditor General (CAG) of India, which of the following statement(s) is/are correct?

1. The CAG is appointed by the President of India.
2. The primary function of the CAG of India is manage the national budget.
3. The CAG is accountable to the Cabinet.

Select the correct answer using the code given below:

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

Q.10) Which one of the following statements best defines the term 'Liberal Democracy'?

- a) It refers to a mixed economy with both public and private ownership, extensive welfare programs, and a commitment to reducing social and economic inequalities through democratic means.
- b) It refers to a political system where there are regular elections, but the electoral process is heavily manipulated or controlled by the ruling authorities to maintain their grip on power.
- c) It refers to a political system where the powers of the government are limited by constitutional principles and institutions, and there is a separation of powers among different branches of government.
- d) It refers to a political system where the executive branch is unified with the legislative branch.

Q.11) Consider the following statements:

1. The Bangalore Principles of Judicial Conduct (2002) discourage judges from making comments that could influence a case and require them to disqualify themselves if they cannot decide a matter impartially.
2. The Third Schedule in the Indian Constitution exempts judges from making oaths or affirmations as they are already appointed to uphold the Constitution and discharge their duties impartially.

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.12) Consider the following statements:

1. State governments are empowered to modify the President's list of Scheduled Castes (SCs) if they find it necessary based on local demographics, social dynamics, and specific community needs.
2. Under the ruling of Indra Sawhney vs Union of India, the Supreme Court declared that sub-classifications within socially and educationally backward classes for government services were permissible.

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

10 PM Compilation March [Second Week] 2024

Q.13) Consider the following statements:

1. Election Commission, Public Service Commission, and Comptroller and Auditor General (CAG) are required to perform their constitutional duties without any interference from the government.
2. The CAG and the chairman/members of the Union Public Service Commission can take up any other employment with Central or State governments after resigning from office.
3. A judge of a Supreme Court after ceasing to hold office cannot appear as a lawyer before any court or authority in India.
4. The Indian Constitution does not impose restrictions on individuals who have served in independent constitutional positions from joining political parties.

How many of the statements given above are correct?

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

Q.14) The primary function of the Telecom Regulatory Authority of India (TRAI) is to:

- a) Manage and allocate spectrum resources for telecom services.
- b) Operate and maintain government-owned telecom infrastructure.
- c) Directly provide telecom services to consumers.
- d) Regulate the telecommunications sector in India.

Q.15) With reference to the Model Code of Conduct (MCC), consider the following statements:

1. These are rules that only govern the conduct of civil servants during election periods.
2. The Election Commission of India is responsible for enforcing the Model Code of Conduct (MCC) during elections.

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.16) Consider the following statements with respect to the Competition Commission of India (CCI):

1. It has been established under Competition Act, 2002.
2. It can impose penalties on businesses found to be engaged in the violation of tax laws.
3. It regulates the prices set by businesses.

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

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

Acts & Policies

Q.17) With reference to the Unlawful Activities (Prevention) Act (UAPA), consider the following statements:

1. Under the Act, the Central Government is granted extensive authority to designate organizations as terrorist entities.
2. The law only applies to Indian citizens and only if the offenses take place within the territory of India.

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.18) Which one of the following is the objective of the National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN) Bharat Mission?

- a) Increase school enrollment rates
- b) Improve overall academic performance in all subjects
- c) Equip children with essential reading, comprehension, and basic math skills
- d) Reduce dropout rates in primary education

Q.19) Consider the following statements with respect to the 'One Station, One Product' (OSOP) scheme:

1. The scheme aims to promote large-scale manufacturing units near railway stations.
2. Generic soft drinks are included in the OSOP scheme.
3. The scheme has been launched with a vision to promote "Buy Local, Support Local".

How many of the statements given above are correct?

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

Q.20) With reference to the Citizenship Amendment Act (CAA) 2019, how many of the following statements are correct?

1. The final decision on applications will be taken by the district committee headed by the Superintendent, Department of Post, in each State.
2. The implementation of the Act in the states is subject to approval by the state government.
3. The primary method for filing citizenship applications under CAA is by submitting applications through the designated local representatives.

Select the correct answer using the codes given below:

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

Q.21) With reference to the Khelo India Youth Games (KIYG), consider the following statements:

1. These are the annual national level multidisciplinary grassroots games in India.
2. The Khelo India Youth Games is open to all age groups.
3. The Khelo India Youth Games are organized by a consortium of private sports organizations.

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

Q.22) With reference to the Forest Rights Act (FRA) of 2006, which of the following statement(s) is/are correct?

1. Under Individual Forest Rights (IFR) of the FRA the right to protect and conserve the community forest has been granted to the individuals residing for generations within the forest.
2. The primary purpose of recognizing Community Forest Rights (CFR) under the FRA is to empower forest-dwelling communities to manage their traditional resources.

Select the correct answer using the codes given below:

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

Q.23) Consider the following statements:

1. Section 6A of the Citizenship Act, 1955 sets March 24, 1971 to determine eligibility for Indian citizenship in Assam.
2. The recent rules for the Citizenship Amendment Act, 2019 grants citizenship to specific communities by removing requirements for passports from their home countries or Indian visas.
3. The Assam Accord of 1985 aimed at addressing the issue of illegal immigration into Assam, protecting the cultural, social, and economic identity of the local people, and ensuring their political rights.

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.24) The objective of 'T V Somanathan Committee' is:

- a) To conserve and protect the biodiversity of the Western Ghats.
- b) To streamline and finalize uniform Know Your Customer (KYC) norms across different sectors.
- c) To improve the agricultural sector and the welfare of farmers in India.
- d) To make recommendations for providing legal aid to the poor and disadvantaged.

International Relations/Organizations

Q.25) Consider the following statements with respect to the Pancheshwar Multipurpose Project:

1. Pancheshwar Multipurpose Project is being developed as part of the Mahakali Treaty between India and Nepal.
2. The main goal of the project is to demarcate boundary between both the nations.

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) Which one of the following conducted the military exercise known as Steadfast Defender?

- a) European Union (EU)
- b) North Atlantic Treaty Organization (NATO)
- c) United Nations (UN)
- d) Organization for Security and Co-operation in Europe (OSCE)

Q.27) Consider the following statements:

1. Russian is one of the official languages of the African Union.
2. Peace and Security Council of the African Union is responsible for conflict prevention, management, and resolution.
3. The Africa Club aims to boost Africa's global financial influence by aligning with the Sustainable Development Goals (SDGs) and the African Union's Agenda 2063.

How many of the statements given above are correct?

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

Q.28) The International Astronomical Union (IAU) is primarily responsible for:

- a) Launching and operating astronomical observatories
- b) Funding research projects in astronomy
- c) Overseeing space exploration missions
- d) Establishing standards and classifications for astronomical objects

Q.29) Consider the following statements:

Statement-I: Sweden, a Nordic country, has recently become a member of North Atlantic Treaty Organization (NATO).

Statement-II: NATO membership is open to all Nordic countries.

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) Consider the following statements:

1. The United States has replaced Russia as the primary defense supplier to India.
2. The United States is the world's largest arms exporter.
3. India remains the top global arms importer between 2019-23.

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. Which of the following countries conducted naval drill named "Marine Security Belt 2024"?

- a) China, Iran, and Russia
- b) India, Russia and Israel
- c) Bangladesh, United States and Oman
- d) Australia, Japan and India

Q.32) Consider the following statements:

1. Five Eyes (FVEY) alliance is a multilateral agreement focused on nuclear non-proliferation.
2. New Zealand is a member country of the Five Eyes (FVEY) alliance.
3. India and New Zealand share common views on Indo-Pacific security.

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) India recently signed Trade and Economic Partnership Agreement (TEPA) with the European Free Trade Association (EFTA). In this context, consider the following statements:

1. Norway is the largest EFTA trading partner with India.
2. It is the first trade pact with a western nations' grouping that also includes provisions for non-trade issues.
3. One of the objectives of the TEPA is to attract foreign direct investment (FDI) into India and create job opportunities.

How many of the statements given above are correct?

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

Q.34) With reference to the United Nations, consider the following statements:

1. The primary purpose of a resolution passed by the UN General Assembly is to enforce international law.
2. The effectiveness of a UN resolution only depends on the number of countries that voted in favor of it.

Select the correct answer using the codes given below:

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

Q.35) Which one of the following is the significance of the "Treaty of Perpetual Peace and Friendship" signed in 1949 between India and Bhutan?

- a) It established full Bhutanese independence from British control.
- b) It formalized Bhutan's accession to the Indian Union.
- c) It guaranteed Bhutan's security and established close political ties with India.
- d) It delineated the entire India-Bhutan border.

Q.36) The Eurasian Economic Union (EAEU) is a regional economic organization established by former Soviet republics. Which one of the following countries is NOT a member of the EAEU?

- a) Kazakhstan
- b) Kyrgyzstan
- c) Belarus
- d) Tajikistan

Q.37) What does the term "Completely Built Unit" (CBU) refer to in the context of international trade?

- a) A partially assembled product requiring further work before use.
- b) Raw materials used in the manufacturing process.
- c) A finished product that is ready to use upon import.
- d) A product that is manufactured in one country and then exported in parts to another country for final assembly.

Economy

Q.38) Consider the following statements:

Statement-I: India's research and development (R&D) expenditure is relatively low compared to other major economies.

Statement-II: India places a priority on allocating resources towards addressing socio-economic challenges such as poverty reduction, healthcare enhancement, and education.

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.39) The 13th Ministerial Conference (MCA 13) of the World Trade Organization has recently implemented fresh regulations aimed at streamlining international trade in services, applying them on a Most Favored Nation (MFN) basis. Which one of the following is the implication of the new regulations for member countries?

- a) Developing countries receive special treatment in terms of service trade.
- b) They can impose stricter regulations on service providers from certain countries.
- c) All member countries must offer the same level of market access to service providers from other member countries.
- d) They can offer preferential treatment to specific trading partners in the service sector.

Q.40) Consider the following statements:

1. One of the reasons for the decline in resources allocated to southern states is the income distance criterion used by the Fifteenth Finance Commission.
2. The Fifteenth Finance Commission utilized population data from 1971.
3. The Fifteenth Finance Commission proposed a new framework for fiscal management for both central and state governments.

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.41) The Reserve Bank of India (RBI) utilizes sell/buy swap agreements primarily to:

- a) Influence exchange rates between the Indian Rupee and other currencies
- b) Manage the short-term availability of cash (liquidity) in the Indian banking system
- c) Directly invest in foreign financial markets
- d) Provide emergency loans to individual banks facing financial difficulties

Q.42) In which one of the following ways does high food inflation affect the Reserve Bank of India's (RBI) interest rate decisions?

- a) It accelerates interest rate cuts to stimulate economic growth
- b) It delays interest rate cuts to mitigate inflationary pressures
- c) It leads to an increase in interest rates to attract foreign investment
- d) It encourages the RBI to maintain current interest rates

Q.43) Systemically Significant Digital Enterprises (SSDEs) was seen in the news recently, refers to -

- a) Small-scale digital startups
- b) Large digital enterprises with considerable market presence
- c) Digital startups focusing on niche markets
- d) Individual consumers in the digital space

Q.44) Which one of the following organizations in India is responsible for issuing a Third-Party Application Provider (TPAP) license?

- a) The Reserve Bank of India (RBI)
- b) The Securities and Exchange Board of India (SEBI)
- c) The National Payments Corporation of India (NPCI)
- d) The Ministry of Electronics and Information Technology (MeitY)

Q.45) Consider the following statements:

1. India ranks third globally in generating PhDs annually after the United States and China.
2. Higher Education Institutions (HEIs) in India play a major role in overall Research and Development (R&D) investment.

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.46) Consider the following statements:

Statement-I: India's exports through e-commerce platforms from Micro, Small, and Medium Enterprises (MSMEs) are significantly lower compared to China's.

Statement-II: MSMEs in India lacks the potential to compete in export markets in sectors like handicrafts, handloom textiles, and leather goods.

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) A decreasing Wholesale Price Index (WPI), accompanied by rising food prices, suggests:

- a) Overall inflation is under control.
- b) The cost of living is still high for consumers.
- c) There is a deflationary trend in the economy.
- d) Prices are falling due to a decrease in demand for goods.

Q.48) Consider the following statements:

- 1. Sela tunnel is world's longest twin tunnel.
- 2. Sela tunnel was constructed using the New Austrian Tunneling Method (NATM).
- 3. Sela tunnel aims to facilitate the movement of goods for international trade.

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

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

Q.49) With reference to the Directorate of Enforcement (ED), consider the following statements:

- 1. It is a specialized financial investigation agency functioning under the Ministry of Home Affairs.
- 2. It is responsible for enforcing Income Tax Act, 1961.
- 3. Investigation of financial frauds and money laundering falls under the purview of the Directorate of Enforcement.

How many of the statements given above are correct?

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

Q.50) Consider the following statements:

- 1. Tracking inflation and adjusting wages and pensions.
- 2. Comparing the cost of living in different regions.
- 3. Measuring the overall health of the economy.
- 4. Setting individual tax rates.

For how many of the above purposes is the Consumer Price Index (CPI) used?

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

Q.51) A country experiencing a large trade deficit due to rising imports might see:

- a) An appreciation of its domestic currency.
- b) A depreciation of its domestic currency
- c) No significant impact on its currency exchange rate.
- d) An increase in its foreign exchange reserves.

Environment

Q.52) Which one of the following is the primary mechanism through which stratospheric aerosol injection (SAI) aims to address climate change?

- a) Absorption of greenhouse gases
- b) Direct reduction of atmospheric carbon dioxide levels
- c) Reflection of incoming solar radiation
- d) Ocean acidification mitigation

Q.53) Consider the following statements with reference to the North Atlantic Right Whales:

- 1. They are categorized 'Critically Endangered' in the IUCN List of Threatened Species.
- 2. These whales are classified as toothed whales.
- 3. It lacks a dorsal fin and has a broad back.

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.54) With reference to Water Hyacinth, consider the following statements:

- 1. It is a freshwater aquatic plant known for its vibrant purple flowers.
- 2. The rapid growth of water hyacinth increases water clarity.
- 3. Water hyacinth grows well in cold climates.

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

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

Q.55) Consider the following statements:

- 1. Pobitora Wildlife Sanctuary is situated in Assam.
- 2. Pobitora Wildlife Sanctuary has the highest density of Barking deer in the world.
- 3. The proposal for denotification of any Sanctuary/National Park requires recommendation of the National Board for Wildlife as per the provisions of the Wild Life (Protection) Act, 1972.

How many of the statements given above are correct?

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

Science & Technology

Q.56) Consider the following:

1. Artificial Intelligence (AI)
2. Quantum Computing
3. E-commerce Platforms

How many of the above are Deep-tech innovation?

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

Q.57) Consider the following statements:

1. Genome India Project aims to develop genetically modified crops for increased yield.
2. Genome sequencing helps in producing genetically modified organisms for agricultural purposes.

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) Large Language Models (LLMs) can be used for a variety of applications. Which one of the following is NOT an application of LLMs?

- a) Generating creative text formats like poems or code.
- b) Translating languages with high accuracy.
- c) Answering open ended, challenging questions in a comprehensive way.
- d) Recognizing objects and scenes in images.

Q.59) With reference to the Miracle drugs, consider the following statements:

1. It is a medicine with no side effects.
2. It is more effective than the conventional medicine in treating some particular condition.
3. It can be used to cure all medical conditions.

How many of the statements given above are correct?

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

Q.60) Consider the following statements:

1. According to the World Health Organisation (WHO), obesity is defined as an abnormal or excessive accumulation of fat that poses health risks.
2. Lack of healthy lifestyle is a major reason for increasing obesity rates in India.

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.61) With reference to the Multiple Independently Targetable Re-entry Vehicle (MIRV) technology, consider the following statements:

1. It is an exoatmospheric ballistic missile payload containing several warheads, each capable of being aimed to hit a different target.
2. This technology is also used to launch vehicles into space for satellite deployment.
3. The technology has potential applications in nuclear deterrence.

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.62) Which one of the following color changes is commonly observed in galaxies when star formation activity declines?

- a) From red to blue
- b) From yellow to green
- c) From blue to red
- d) From green to yellow

Q.63) In the context of malnutrition, the term "Zero-food children" refers to:

- a) Children who consume little to no food on a daily basis
- b) Children who did not consume any animal milk, formula or solid or semisolid food during the last 24 hours.
- c) Children who do not have access to any form of food assistance programs.
- d) Children who consume food with zero nutritional value.

Q.64) Consider the following statements:

1. An artificial neural network (ANN) consists of computing units called nodes, which are connected to mimic the way the brain works.
2. A power processing unit (PPU) is the physical processor that powers artificial neural networks (ANNs).

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.65) Consider the following:

1. Demonstration of the capability of indigenously manufactured defence equipment
2. Integrated tri-service firepower and manoeuvre exercise
3. Demonstration of disaster relief capabilities of the Indian Armed Forces.

How many of the above are the features of the recently conducted "Exercise Bharat Shakti"?

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

Q.66) 'AlphaGeometry AI' demonstrates a significant capability in solving geometry problems. This capability is primarily because of:

- a) Relying on a vast database of pre-programmed geometric solutions
- b) Applying advanced machine learning techniques to analyze and solve problems
- c) Mimicking the problem-solving strategies of human mathematicians
- d) Utilizing a combination of symbolic reasoning and numerical methods

Q.67) Consider the following statements:

- 1. Photovoltaic cells are primarily made of copper and aluminum.
- 2. Currently, conventional solar cells can only convert about one-third of incident solar energy into electricity.
- 3. Shockley-Queisser limit defines the maximum achievable efficiency of a solar cell.

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

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

Q.68) Consider the following statements:

- 1. Rhodamine-B is used in agricultural pesticides due to its effectiveness against pests.
- 2. Rhodamine-B is also utilized in the textile industry as a dye for coloring fabrics.
- 3. Rhodamine-B can cause cell death.

How many of the statements given above are correct?

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

Q.69) With reference to the Lyme disease, consider the following statements:

- 1. It is a vector-borne infectious disease.
- 2. It is primarily transmitted to humans through the bite of infected black-legged ticks, often referred to as deer ticks.
- 3. The standard treatment for Lyme disease is an antibiotic taken as a pill.

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

Answer Key

1 - (c)	2 - (b)	3 - (c)	4 - (d)	5 - (b)	6 - (b)	7 - (c)	8 - (c)	9 - (a)	10 - (c)
11 - (a)	12 - (b)	13 - (c)	14 - (d)	15 - (b)	16 - (b)	17 - (a)	18 - (c)	19 - (d)	20 - (d)
21 - (a)	22 - (b)	23 - (d)	24 - (b)	25 - (a)	26 - (b)	27 - (b)	28 - (d)	29 - (b)	30 - (b)
31 - (a)	32 - (b)	33 - (b)	34 - (d)	35 - (c)	36 - (d)	37 - (c)	38 - (a)	39 - (c)	40 - (c)
41 - (b)	42 - (b)	43 - (b)	44 - (c)	45 - (a)	46 - (c)	47 - (b)	48 - (a)	49 - (a)	50 - (c)
51 - (b)	52 - (c)	53 - (c)	54 - (b)	55 - (b)	56 - (b)	57 - (d)	58 - (d)	59 - (a)	60 - (c)
61 - (c)	62 - (c)	63 - (b)	64 - (a)	65 - (b)	66 - (b)	67 - (c)	68 - (b)	69 - (d)	

Answers & Explanation

Art & Culture

1. Correct Answer is (C)

- The Gorsam Kora Festival is primarily celebrated to highlight the Buddhist cultural heritage of the region. It is held in Arunachal Pradesh's Zemithang Valley along the Nyanmjang Chu River. It is organized by Zemithang community in collaboration with civil authorities and supported by local Indian Army Units. It honours the shared Buddhist cultural heritage and celebrates the longstanding friendship between India and Bhutan. The festival featured various events, including cultural performances by local troupes and Indian army bands, as well as martial performances like Mallakhamb and Zanjh Pathaka.

Source: [Forum IAS](#)

Modern Indian History

2. Correct Answer is (B)

- Statements 1 and 3 are correct. Kochrab ashram is located in Kochrab village, Ahmedabad, Gujarat. It is the first ashram established by Mahatma Gandhi upon his return to India from South Africa in 1915. It is also called as Satyagraha Ashram based on his ideas of achieving India's independence from British rule through peaceful methods. It is a colonial-style building with a white-washed façade. The ashram also served as the starting point for Gandhi's advocacy of khadi, equality for the

10 PM Compilation March [Second Week] 2024

poor, Hindi as the national language, self-reliance, and independence. It also served as a communal living space promoting self-improvement and community service.

- Statement 2 is incorrect. Mahatma Gandhi started the Quit India Movement in 1942 from Gowalia Tank Maidan in Bombay.

Source: [Forum IAS](#)

Geography

3. Correct Answer is (C)

- Statements 1, 2 and 3 are correct. Flue-cured tobacco is a type of tobacco that is mainly used in the production of cigarettes. It is one of the most commonly grown tobacco varieties worldwide. It has a higher sugar content compared to other types of tobacco. This is because the curing process involves heating the leaves, which allows for the sugars in the leaves to caramelize and lock in a sweet flavor. The curing process of flue-cured tobacco turns the leaves a distinctive yellow to orange color. This color change is due to the heat applied during the curing process, which causes chemical reactions in the leaves and results in the characteristic color. In India, FCV tobacco is mainly produced in two states: a) Andhra Pradesh and b) Karnataka.
- Statement 4 is incorrect. Flue-cured tobacco requires a significant amount of processing after harvest. The curing process, which involves heating the leaves in a controlled environment, is a critical step in preparing flue-cured tobacco for use in cigarettes. After curing, the leaves undergo further processing, such as aging and blending, before they are ready for use in the production of cigarettes.

Source: [Forum IAS](#)

4. Correct Answer is (D)

- The Sharda River, also called Kali River and Mahakali River, originates from Kalapani in the Himalayas, situated in the Pithoragarh district of Uttarakhand. It flows through the states of Uttar Pradesh and Bihar before entering Nepal. It forms part of the border between India and Nepal, and eventually joins the Ghaghara River, a tributary of the Ganges River. Its tributaries are: Left-Chameliya, Ramgun in Nepal and Right-Kuthi, Dhauli, Gori, Sarju, Ladhiya rivers in Uttarakhand (India)

Source: [Forum IAS](#)

5. Correct Answer is (B)

- Statement 1 is incorrect. Kolleru Lake lies between the deltas of the Godavari River and Krishna River.
- Statements 2 and 3 are correct. Kolleru Lake is one of the largest freshwater lakes in India located in state of Andhra Pradesh and forms the largest shallow freshwater lake in Asia. Atapaka Bird Sanctuary, located at Kolleru Lake, serves as a habitat for various migratory bird species, including Grey Pelicans and Painted Storks.

Source: [The Hindu](#)

6. Correct Answer is (B)

- Jhum cultivation, also known as slash-and-burn agriculture or shifting cultivation, is a traditional practice in northeastern India, as well as other parts of the world. The primary reason for burning existing vegetation before planting crops in the practice of Jhum cultivation is to release nutrients back into the soil. Weed and pest control and clearing the ground are also the benefit associated with burning. However, the primary reason behind burning is to release nutrients back into the soil.

Source: [The Hindu](#)

7. Correct Answer is (C)

- Statements 1, 3 and 4 are correct. Iron ore refers to naturally occurring rocks and minerals that contain enough iron to be economically extracted and processed. Around 98% of all mined iron ore is used in the steel production process. In recent years, China has been the largest importer of iron ore, with a significant portion of global iron ore exports going to the country due to its extensive steel production and infrastructure development. Over the past seven years, approximately 83% of Indian exports have been directed to China.
- Statement 2 is incorrect. Magnetite and hematite are two common iron ores with higher iron content than limonite.

Source: [The Hindu](#)

Polity

8. Correct Answer is (C)

- Statements 1 and 3 are correct. The term FIR is not specified in the Indian Penal Code (IPC), the Code of Criminal Procedure (CrPC) of 1973, or any other legislation. However, within police regulations or rules, information documented under Section 154 of the CrPC is referred to as the First Information Report (FIR). General Diary (GD) is an internal police record, and there is no legal requirement to provide a copy of the GD to the complainant. However, the complainant or the victim has the right to receive a copy of the First Information Report (FIR) as per Section 154(2) of the Code of Criminal Procedure (CrPC).
- Statement 2 is incorrect. General Diary (GD) is an internal record maintained by the police, and it is not mandatory to forward a copy of every GD entry to higher-ranking officers or the Judicial Magistrate. The GD is primarily used for internal communication, recording daily events, and tracking the progress of investigations.

Source: [Forum IAS](#)

9. Correct Answer is (A)

- Statement 1 is correct. According to Article 148 of the Indian Constitution, the CAG is appointed by the President of India for a term of 6 years or up to the age of 65 years, whichever is earlier.
- Statements 2 and 3 are incorrect. The primary function of the CAG is to audit the accounts of the Union and State governments, government-owned companies, and other entities that receive financial assistance from the government. The CAG's responsibility is to ensure that public funds are used efficiently and for the intended purposes. The CAG of India is accountable to the Parliament.

Source: [Forum IAS](#)

10. Correct Answer is (C)

- Liberal democracy is a form of government that emphasizes individual rights, liberties, and the rule of law. It is characterized by a system of checks and balances among different branches of government, such as the legislative, executive, and judicial branches, to prevent any single branch from becoming too powerful. This separation of powers ensures that no individual or group can wield absolute authority, thus protecting citizens' rights and promoting democratic values. Regular, free, and fair elections are another key feature of liberal democracies, allowing citizens to vote for their representatives in government and ensuring accountability. Additionally, liberal democracies uphold fundamental rights and freedoms, such as freedom of speech, religion, and assembly, which are often enshrined in a constitution.

Source: [The Hindu](#)

11. Correct Answer is (A)

- Statement 1 is correct. The Bangalore Principles of Judicial Conduct were adopted in 2002 as a set of ethical standards for judges, aiming to promote judicial integrity, impartiality, and independence. The principles emphasize that judges should avoid making statements or comments that could potentially influence the outcome of a case or prejudice the parties involved. Additionally, judges are expected to recuse themselves from cases where they cannot make an impartial decision due to potential conflicts of interest or personal biases.
- Statement 2 is incorrect. Like other officials enumerated in the Third Schedule of the Indian Constitution, judges are constitutionally mandated to take an oath or affirmation. This oath includes a pledge to uphold the Constitution and the rule of law, to work without fear or favor, and to discharge duties impartially. The Third Schedule of the Indian Constitution lists the oaths or affirmations that various constitutional functionaries, including judges, must take before assuming their respective offices.

Source: [The Hindu](#)

12. Correct Answer is (B)

- Statement 1 is incorrect. State governments do not have the authority to modify the President's list of Scheduled Castes. The classification of SCs is a central subject, and only the Parliament or the President has the power to make changes to the list of SCs, as per Article 341 of the Constitution. Under the Constitution of India, the President, in consultation with the Governor of the state concerned, has the power to specify the list of Scheduled Castes for each state.
- Statement 2 is correct. In the Indra Sawhney vs Union of India (1992) case, the Supreme Court upheld the concept of sub-classification within the Other Backward Classes (OBCs) for the purpose of providing reservations in government services. The Court recognized that there are varying degrees of backwardness within the OBC category and that sub-classification would help ensure that the benefits of reservations reach the most deserving individuals and groups.

Source: [The Hindu](#)

13. Correct Answer is (C)

- Statements 1, 3 and 4 are correct. The Election Commission, Public Service Commissions, and the CAG are constitutional bodies designed to function independently. This independence is crucial to ensure their impartiality and avoid undue influence from the government in power. According to the Constitution of India, a judge of the Supreme Court is not allowed to practice as a lawyer before any court or authority in India after ceasing to hold office. This restriction helps maintain the independence and impartiality of the judiciary. The Indian Constitution does not explicitly impose restrictions on individuals who have served in independent constitutional positions from joining political parties.
- Statement 2 is incorrect. The CAG and the chairman/members of the Union Public Service Commission cannot take up any other employment with Central or State governments after resigning from office.

Source: [The Hindu](#)

14. Correct Answer is (D)

- The primary function of the Telecom Regulatory Authority of India (TRAI) is to regulate the telecommunications sector in India. TRAI is responsible for ensuring compliance with the provisions of the Telecom Regulatory Authority of India Act, 1997, and other regulations in the sector. Its role

10 PM Compilation March [Second Week] 2024

includes protecting consumer interests, promoting fair competition, and facilitating the growth of the telecommunications industry in India.

Source: [The Hindu](#)

15. Correct Answer is (B)

- Statement 1 is incorrect. The MCC is not only focused on the conduct of civil servants during election periods. It is primarily a set of guidelines for political parties, candidates, and their supporters to ensure free and fair elections.
- Statement 2 is correct. The Election Commission of India (ECI) is responsible for enforcing the Model Code of Conduct during elections. The ECI monitors and implements the MCC, and it has the authority to issue warnings or take action against violators to maintain the integrity of the electoral process.

Source: [The Times of India](#)

16. Correct Answer is (B)

- Statement 1 is correct. The CCI was established under the Competition Act, 2002 to promote competition and prevent practices that have an adverse effect on competition in India.
- Statements 2 and 3 are incorrect. The CCI's primary responsibility is to enforce the Competition Act, 2002, which focuses on preventing anti-competitive practices and promoting fair competition in the market. It does not have the authority to impose penalties on businesses for violating tax laws. The CCI does not directly regulate the prices set by businesses. Its main role is to ensure that businesses do not engage in anti-competitive practices, such as price-fixing, bid-rigging, or abuse of a dominant position, which may harm consumers or other businesses.

Source: [The Times of India](#)

Acts & Policies

17. Correct Answer is (A)

- Statement 1 is correct. The UAPA allows the Central Government to designate an organization as a terrorist organization if it believes that the organization is involved in terrorism. The government can also add or remove organizations from the list of terrorist organizations as needed.
- Statement 2 is incorrect. The UAPA applies to both Indian citizens and foreign nationals, and its jurisdiction is not limited to offenses committed within the territory of India. The Act also applies to offenses committed outside India by Indian citizens, individuals residing in India, or companies incorporated in India, as well as offenses committed on Indian ships and aircraft registered in India.

Source: [Forum IAS](#)

18. Correct Answer is (C)

- The NIPUN Bharat Mission was launched by the Indian government to ensure that every child in the country attains foundational literacy and numeracy by the end of Grade 3, with a target to achieve this goal by 2026-27. The mission focuses on developing reading, writing, and basic math skills among children, as these competencies are considered essential for their overall academic success and future prospects.

Source: [Forum IAS](#)

19. Correct Answer is (D)

- Statements 1, 2 and 3 are incorrect. The OSOP scheme is designed to give visibility and a marketplace to locally produced, often small-scale, and indigenous products. It's about showcasing regional specialities. The concept of 'One Station One Product' was announced by the government in the Union

10 PM Compilation March [Second Week] 2024

Budget 2022-23. The scheme aims to build each railway station as a promotional hub and showcasing local and indigenous manufacturing products. The products under the OSOP scheme includes – Food items (Seasonal or Processed or semi processed foods), Handicrafts, Artefacts, Textiles, Handlooms, Traditional Garments, Local agricultural produce, Local toys, Leather products, Local Gems and Jewellery. The OSOP scheme was launched with a vision to promote 'Vocal for Local'. This would help the local manufacturers to sell their product and will create additional income opportunities for the marginalised sections of society.

Source: [The Hindu](#)

20. Correct Answer is (D)

- Statements 1, 2 and 3 are incorrect. The final decision on applications will be taken by the empowered committee headed by the Director (Census Operations) in each State, which will include officers from the Intelligence Bureau, the Post Master General, State or National Informatics Centre official, and a representative each from the Department of Home of the State government and the Divisional Railway Manager will be the invitees. The CAA 2019 is a central act, passed by the Indian Parliament, and does not require approval from individual state governments for its implementation. Citizenship is a subject under the Union List in the Indian Constitution, which means that the central government has exclusive power to legislate on this matter. Therefore, the implementation of the Act applies uniformly across all states in India. The primary method for filing CAA applications is through an online portal created for this purpose. There may be designated local representatives to assist with the process, but the main application is done online.

Source: [The Hindu](#)

21. Correct Answer is (A)

- Statement 1 is correct. KIYG is an annual national-level multidisciplinary grassroots sports event held in India, aimed at providing a platform for young athletes to showcase their talent and promote sports culture in the country.
- Statements 2 and 3 are incorrect. KIYG is specifically designed for young athletes in two categories: the Under-17 and Under-21 age groups. It is not open to all age groups. KIYG is a government initiative, organized by the Sports Authority of India (SAI) under the Ministry of Youth Affairs and Sports, in collaboration with the state governments and various national sports federations. It is not organized by private sports organizations.

Source: [The Hindu](#)

22. Correct Answer is (B)

- Statement 1 is incorrect. Under Individual Forest Rights (IFR) of the FRA, individuals are granted rights over specific forest land or habitat they have been residing in or cultivating. However, the right to protect and conserve the community forest is typically associated with Community Forest Rights (CFR), not Individual Forest Rights (IFR).
- Statement 2 is correct. The primary purpose of recognizing Community Forest Rights (CFR) under the FRA is to empower forest-dwelling communities to manage their traditional resources. By granting these rights, the FRA aims to enable communities to conserve and govern their customary forest resources in a sustainable manner.

Source: [The Hindu](#)

23. Correct Answer is (D)

- Statements 1, 2 and 3 are correct. Section 6A of the Citizenship Act, 1955 was a special provision inserted due to the Assam Accord. It establishes March 24, 1971, as the crucial date for determining citizenship eligibility in Assam. Recent rules associated with the Citizenship Amendment Act (CAA), 2019 aim to streamline citizenship for specific religious minorities from Pakistan, Bangladesh, and Afghanistan. One key change is the removal of the need for a passport from their home country or an Indian visa. Instead, “any document” that shows one of the parents, grandparents or even great-grandparents of the applicant were from one of these countries is sufficient to prove their nationality. Additionally, a certificate issued by an elected member of a local body can be a replacement for a visa. The Assam Accord of 1985 aimed at addressing the issue of illegal immigration into Assam, protecting the cultural, social, and economic identity of the local people, and ensuring their political rights. Section 6A of the Citizenship Act was introduced to give effect to the Assam Accord. It provides the framework to recognise migrants in Assam as Indian citizens or to expel them based on the date of their migration.

Source: [The Hindu](#)

Index & Reports

24. Correct Answer is (B)

- T V Somanathan, who is the Finance Secretary of India, has chaired multiple committees to examine various aspects of the country's financial and economic systems. Some of the objectives of the committees include: Reviewing the National Pension System (NPS) for government employees and suggesting reforms to address the needs of the employees while maintaining fiscal prudence and Developing uniform Know Your Customer (KYC) norms across different sectors to streamline the process and make it more customer-friendly.

Source: [Forum IAS](#)

International Relations/Organizations

25. Correct Answer is (A)

- Statement 1 is correct. Pancheshwar Multipurpose Project is a joint venture between India and Nepal, and it is being developed in accordance with the Mahakali Treaty signed between the two countries in 1996. The treaty aims to promote cooperation and collaboration in the development of the water resources of the Mahakali River, which forms part of the border between the two countries. The treaty recognizes the Mahakali River as a boundary river between the two countries.
- Statement 2 is incorrect. The primary goal of the Pancheshwar Multipurpose Project is to harness the water resources of the Mahakali River for multiple purposes, including hydroelectric power generation, irrigation, and flood control. The project is expected to benefit both countries by providing clean energy, improving food security, and enhancing water management.

Source: [Forum IAS](#)

26. Correct Answer is (B)

- Steadfast Defender is a NATO-led military exercise designed to test and improve the alliance's ability to defend its member nations against various threats. The exercise involves participation from NATO member states, as well as partner nations, and focuses on enhancing interoperability, coordination, and military readiness among the participating forces.

Source: [Forum IAS](#)

27. Correct Answer is (B)

- Statement 1 is incorrect. The African Union (AU) is a continental union consisting of 55 member states across Africa. It was established to promote unity, peace, and socioeconomic development among African nations. The AU's objectives include fostering political stability, economic integration, and addressing social issues such as poverty and conflict. The official languages of the African Union are: Arabic, English, French, Portuguese, Spanish, Swahili, Any other African language.
- Statements 2 and 3 are correct. The Peace and Security Council (PSC) is a key organ of the African Union responsible for promoting peace, security, and stability across the continent. Its main functions include conflict prevention, management, and resolution, as well as post-conflict reconstruction and peacebuilding efforts. Africa Club is an alliance of African Multilateral Financial Institutions (which are African-owned and controlled). It was launched at the 37th African Union Summit. It aims to amplify Africa's influence in the global financial system by aligning its functions with the SDGs and the African Union's Agenda 2063. It seeks to introduce innovative financial instruments, provide a venue for debt management discussions and foster collaborative effort to address the specific needs of African countries.

Source: [Forum IAS](#)

28. Correct Answer is (D)

- The International Astronomical Union (IAU) is primarily responsible for establishing standards and classifications for astronomical objects. It is the global authority for naming celestial bodies, such as stars, planets, and asteroids, as well as their surface features. The IAU also sets standards for astronomical measurements and coordinates international collaboration in astronomy. It was founded in 1919. Its headquarters is in Paris, France. It also collaborates with scientific organizations globally.

Source: [Forum IAS](#)

29. Correct Answer is (B)

- Statement-I is correct. Sweden formally joined NATO on March 7, becoming the 32nd member of the alliance. This marks a significant shift in Sweden's foreign policy, as the country had maintained a stand of neutrality for decades after World War II.
- Statement-II is also correct. NATO membership is open to all European countries, including the Nordic countries, provided they meet the necessary criteria and follow the admission process outlined in the NATO treaty. NATO's open-door policy allows any European country to apply to join, but they must commit to defense spending of 2% of GDP. The policy is based on Article 10 of the Washington Treaty, which states that membership is open to any "European State in a position to further the principles of this Treaty and to contribute to the security of the North Atlantic area.
- However, Statement-II does not explain the Statement-I.

Source: [The Hindu](#)

30. Correct Answer is (B)

- Statement 1 is incorrect. As per the latest Stockholm International Peace Research Institute (SIPRI) data, Russia remains the primary defense supplier to India, accounting for 36% of its arms imports. However, its share in Indian imports has decreased to less than half for the first time since the 1960s.
- Statements 2 and 3 are correct. The United States has been the world's largest arms exporter for several years, accounting for a significant share of global arms exports. SIPRI data indicates that India has been the world's largest importer of major arms for several years, including the period between

10 PM Compilation March [Second Week] 2024

2019 and 2023. This is primarily due to India's efforts to modernize its armed forces and maintain its military capabilities in the context of regional security challenges.

Source: [The Hindu](#)

31. Correct Answer is (A)

- The "Marine Security Belt 2024" is a joint naval exercise conducted by China, Iran, and Russia. The exercise is aimed at strengthening maritime cooperation, enhancing interoperability, and promoting regional security among the participating nations. The drills typically involve various naval operations, including anti-piracy, search and rescue, and maritime security exercises.

Source: [The Hindu](#)

32. Correct Answer is (B)

- Statement 1 is incorrect. The Five Eyes (FVEY) Alliance is an intelligence-sharing alliance between Australia, Canada, New Zealand, the United Kingdom, and the United States.
- Statements 2 and 3 are correct. New Zealand is a member of the Five Eyes (FVEY) Alliance, along with Australia, Canada, the United Kingdom, and the United States. India and New Zealand share common views on Indo-Pacific security, including a commitment to a rules-based order, respect for international law, and a free and open Indo-Pacific region.

Source: [The Hindu](#)

33. Correct Answer is (B)

- Statement 1 is incorrect. Switzerland is the largest EFTA trading partner with India, followed by Norway.
- Statements 2 and 3 are correct. The India-EFTA Trade and Economic Partnership Agreement (TEPA) is the first trade pact India has signed with a western nations' grouping. The agreement not only focuses on trade-related issues like tariffs and market access but also includes provisions for non-trade issues, such as intellectual property rights, labor, and environmental standards. One of the objectives of the TEPA is to attract foreign direct investment (FDI) into India and create job opportunities. The other objectives are: Boosting bilateral trade, Promoting cooperation, etc.

Source: [The Hindu](#)

34. Correct Answer is (D)

- Statements 1 and 2 are incorrect. The primary purpose of a resolution passed by the UN General Assembly (UNGA) is to express the collective opinion or recommendations of the member states on international issues. UNGA resolutions are not legally binding in the same way that international treaties or rulings from the International Court of Justice are. The effectiveness of a UN resolution does not depend solely on the number of countries that voted in favor of it. Other factors, such as the political will of member states, the resolution's language and specificity, and the availability of resources for implementation, can also influence a resolution's impact. In some cases, a resolution may have limited effect even if it receives widespread support, particularly if powerful countries oppose it or fail to take action on it.

Source: [The Hindu](#)

35. Correct Answer is (C)

- The Treaty of Perpetual Peace and Friendship, signed in 1949 between India and Bhutan, holds great significance as it guaranteed Bhutan's security and established close political ties with India. The treaty marked the beginning of a strong bilateral relationship and allowed Bhutan to maintain its

10 PM Compilation March [Second Week] 2024

independence while benefitting from India's support and assistance. This treaty affirmed perpetual peace and friendship between the two nations, outlined non-interference in each other's internal affairs, established free trade and extradition protocols, and made Bhutan a protected state without becoming a protectorate of India.

Source: [The Hindu](#)

36. Correct Answer is (D)

- The EAEU is a free trade agreement that came into effect in 2015. Its main goals are to improve the competitiveness of its member states' economies, increase cooperation among them, and promote stable development to raise the standard of living in all member states. The EAEU's institutions include: Supreme Eurasian Economic Council, Eurasian Commission, and Court of the Eurasian Economic Union. The Eurasian Economic Union (EAEU) has five member states: Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia.

Source: [The Hindu](#)

37. Correct Answer is (C)

- In the context of international trade, the term "Completely Built Unit" (CBU) refers to a finished product that is ready to use upon import. A CBU is a fully assembled and operational product manufactured in one country and imported as a whole by another country. It doesn't require any additional assembly, testing, or finishing work, making it convenient for immediate use by consumers or businesses in the importing country.

Source: [The Hindu](#)

Economy

38. Correct Answer is (A)

- Statement-I: India's research and development (R&D) expenditure is around 0.64% of GDP, which is relatively low compared to other major economies. There has been a decline in science funding from 0.8% in 2008-2009 and 0.7% in 2017-2018 to 0.64 currently.
- Statement-II: India, like many developing countries, faces various socio-economic challenges, such as poverty, education, healthcare, and infrastructure development. The government often prioritizes addressing these immediate needs over investing in long-term R&D initiatives. As a result, public spending on R&D is limited. Along with this, there are other reasons behind low R&D investments like limited private sector investment, Regulatory Issues, Under-utilization of allotted funds, etc.

Source: [Forum IAS](#)

39. Correct Answer is (C)

- The Most Favored Nation (MFN) principle, which is a fundamental pillar of the World Trade Organization (WTO), requires that each member country treat all other member countries equally in terms of trade policy. In the context of the new regulations aimed at streamlining international trade in services, applying MFN means that member countries must offer the same level of market access to service providers from all other member countries. The regulations address the bureaucratic hurdles in cross-border service trade, aiming to simplify procedures and ensure equal opportunities for service providers globally.

Source: [Forum IAS](#)

40. Correct Answer is (C)

- Statements 1 and 3 are correct. The income distance criterion is one of the factors used by the Finance Commission to determine the allocation of resources to states. It is calculated as the difference between a state's per capita income and the state with the highest per capita income. Since southern states generally have higher per capita incomes, this can lead to a relative decrease in their resource allocation. Distance criterion means that the farther a State is from the highest income State, the higher its share. The Commission recommended a new fiscal management framework, which included targets for the Centre and states to reduce their fiscal deficits and debt levels over the medium term. The framework aimed to promote fiscal sustainability and improve the financial health of both central and state governments.
- Statement 2 is incorrect. The Fifteenth Finance Commission used population data from the 2011 Census for making recommendations on the distribution of resources between the Centre and states.

Source: [The Hindu](#)

41. Correct Answer is (B)

- The Reserve Bank of India (RBI) utilizes sell/buy swap agreements primarily to manage the short-term availability of cash (liquidity) in the Indian banking system. These agreements involve the RBI selling a certain amount of foreign currency (e.g., US dollars) to banks in the domestic market and agreeing to buy it back at a later date. This helps to increase the supply of foreign currency in the domestic market and manage liquidity conditions. Sell/buy swaps can also indirectly influence exchange rates between the Indian Rupee and other currencies by affecting the supply and demand for foreign currency in the domestic market. However, the primary purpose of these agreements is to manage liquidity and ensure the smooth functioning of the banking system rather than to directly target exchange rates or invest in foreign financial markets.

Source: [The Hindu](#)

42. Correct Answer is (B)

- High food inflation affects the Reserve Bank of India's (RBI) interest rate decisions by delaying interest rate cuts. When food inflation is high, it contributes to overall inflation in the economy. The RBI, as the central bank of India, has a primary objective of maintaining price stability in the economy. One of the tools it uses to achieve this goal is the manipulation of interest rates. When inflation is high, the RBI may choose to delay cutting interest rates or even increase interest rates to make borrowing more expensive. This, in turn, can help mitigate inflationary pressures by reducing the money supply in the economy and cooling down demand.

Source: [The Hindu](#)

43. Correct Answer is (B)

- Systemically Significant Digital Enterprises (SSDEs) is a term used to describe large digital enterprises with a significant market presence, which have the potential to impact the overall economy and financial stability. The concept of SSDEs has gained attention from regulators and policymakers due to concerns related to data privacy, market competition, and potential systemic risks arising from the operations of these large digital enterprises. These enterprises are deemed to have a substantial impact on the digital ecosystem due to their size, market dominance, and influence.

Source: [The Hindu](#)

10 PM Compilation March [Second Week] 2024

44. Correct Answer is (C)

- The National Payments Corporation of India (NPCI) is responsible for issuing Third-Party Application Provider (TPAP) licenses in India. NPCI is an umbrella organization for all retail payments systems in India, and it operates under the guidance of the Reserve Bank of India (RBI). TPAPs are entities that provide apps or platforms enabling customers and businesses to make and receive payments through India's popular Unified Payments Interface (UPI). The TPAP license ensures that the third-party application providers meet the prescribed security standards and adhere to the guidelines set by the RBI and NPCI, maintaining the safety and integrity of the digital payment ecosystem in India.

Source: [The Hindu](#)

45. Correct Answer is (A)

- Statement 1 is correct. India has become a prominent producer of academic talent, generating 40,813 PhDs annually, ranking third globally after the United States and China.
- Statement 2 is incorrect. Higher Education Institutions (HEIs) play a minor role in overall R&D investment, contributing only 8.8% (\$1.5 billion). In India, Gross Expenditure on Research and Development (GERD) is primarily driven by the government sector, including the central government (43.7%), State governments (6.7%), Higher Education Institutions (HEIs) (8.8%), and the public sector industry (4.4%), with the private sector industry contributing only 36.4% during 2020–21.

Source: [The Hindu](#)

46. Correct Answer is (C)

- Statement-I is correct. India lags behind China in e-commerce exports through MSMEs. There are various reasons for this, including logistical hurdles and regulatory complexities.
- Statement-II is incorrect. MSMEs in India have demonstrated significant potential and competitiveness in these sectors, and the Indian government has been implementing various schemes and initiatives to further promote their growth and export capabilities. The issue lies more in addressing challenges related to access to finance, technology, and global markets, as well as improving overall ease of doing business.

Source: [The Hindu](#)

47. Correct Answer is (B)

- When the Wholesale Price Index (WPI) decreases but food prices rise, it suggests that while there might be a decline in prices for some goods at the wholesale level, essential items like food are becoming more expensive. This situation can lead to an increase in the cost of living for consumers, as they need to spend more on essential goods despite the overall decrease in wholesale prices.

Source: [The Hindu](#)

48. Correct Answer is (A)

- Statements 1 and 2 are correct. Prime Minister Narendra Modi recently inaugurated the strategically significant Sela Tunnel in Arunachal Pradesh. The tunnel is situated at an altitude of 13,700 feet in the West Kameng district of Arunachal Pradesh, on the Balipara-Chariduar-Tawang road connecting Tezpur (Assam) to Tawang (Arunachal Pradesh). It is world's longest twin tunnel built at an altitude of above 13,000 feet. The tunnel was constructed using the New Austrian Tunneling Method (NATM). It is the highest tunnel in the country. It provides all-weather connectivity to Tawang via the Sela Pass, as well as to other nearby areas along the border with China near the Line of Actual Control (LAC).

10 PM Compilation March [Second Week] 2024

- Statement 3 is incorrect. Sela Tunnel has immense strategic value for India, providing all-weather connectivity to Arunachal Pradesh and the Tawang region, bordering China. This enhances the Indian military's ability to move troops and equipment quickly. It also improves connectivity for the local population and aids in the economic development of the region. However, facilitating the movement of goods for international trade is not the aim of the tunnel.

Source: [Forum IAS](#)

49. Correct Answer is (A)

- Statements 1 and 2 are incorrect. The Directorate of Enforcement (ED) is a specialized financial investigation agency under the Ministry of Finance. The ED is not responsible for enforcing the Income Tax Act, 1961. The Income Tax Department is responsible for administering and enforcing this act.
- Statement 3 is correct. Investigation of financial frauds and money laundering fall under the purview of the Directorate of Enforcement, as per the provisions of the Prevention of Money Laundering Act, 2002 (PMLA) and the Fugitive Economic Offenders Act, 2018.

Source: [The Hindu](#)

50. Correct Answer is (C)

- The Consumer Price Index (CPI) is used for the following purposes:
- **Tracking Inflation:** CPI is the primary tool to measure changes in price levels over time.
- **Adjusting wages and pensions:** CPI helps ensure the purchasing power of wages and pensions remains stable against inflation.
- **Comparing cost of living:** CPI allows for comparisons of living expenses between different regions or cities. It can be used to compare the relative cost of living across various regions by assessing the differences in prices of goods and services.
- **Measuring the overall health of the economy:** Inflation rates, measured by CPI, are a key indicator of economic health.
- However, CPI is not directly used to determine individual tax rates. Tax policy is more often influenced by factors like income bracket and government spending needs.

Source: [The Hindu](#)

51. Correct Answer is (B)

- When a country experiences a large trade deficit due to rising imports, it typically leads to a depreciation of its domestic currency. A trade deficit means that the country is importing more goods and services than it is exporting. As a result, the demand for foreign currencies increases, causing the domestic currency to weaken or depreciate in the foreign exchange market. A depreciating currency may lead to higher inflation, as imported goods and services become more expensive for domestic consumers.

Source: [The Hindu](#)

Environment

52. Correct Answer is (C)

- Stratospheric aerosol injection (SAI) is a proposed geoengineering technique that involves injecting reflective aerosol particles (such as sulfate aerosols) into the stratosphere to combat climate change. The primary goal of SAI is to increase the Earth's albedo (reflectivity) by scattering incoming solar radiation back into space. This scattering effect reduces the amount of solar energy absorbed by the Earth, leading to a cooling effect that can help mitigate the impacts of global warming. It aims

10 PM Compilation March [Second Week] 2024

to replicate the cooling impact of volcanic eruptions by introducing sulphur dioxide (SO₂) directly into the stratosphere. Within the stratosphere, the SO₂ transforms into sulfate aerosols that reflect sunlight.

Source: [Forum IAS](#)

53. Correct Answer is (C)

- Statements 1 and 3 are correct. The North Atlantic Right Whale is considered critically endangered (as per the IUCN), with an estimated population of fewer than 400 individuals. One of the distinguishing features of the North Atlantic Right Whale is the absence of a dorsal fin. Instead, they have a broad, rounded back with a series of callosities (rough, hardened patches of skin) on their head and lips, which are unique to each individual whale. Right whales communicate using low-frequency moans, groans, and pulses.
- Statement 2 is incorrect. North Atlantic Right Whales belong to a group of whales known as baleen whales. Baleen whales are characterized by the presence of baleen plates in their mouths instead of teeth. These plates are made of keratin and are used to filter small organisms, such as krill and plankton, from the water as the whale feeds.

Source: [Forum IAS](#)

54. Correct Answer is (B)

- Statement 1 is correct. Water hyacinth (*Eichhornia crassipes*) is a freshwater aquatic plant that is characterized by its purple flowers. The plant has broad, glossy green leaves and produces clusters of flowers on a single stalk. Water hyacinths are native to the Amazon Basin in South America but have been introduced to various parts of the world, where they often become invasive.
- Statements 2 and 3 are incorrect. The rapid growth of water hyacinth can actually decrease water clarity. When water hyacinth populations explode, the dense mats they form on the water's surface can block sunlight penetration, preventing photosynthesis in submerged aquatic plants. This can lead to decreased oxygen levels in the water, which can negatively impact aquatic life and contribute to the decline of water clarity. Additionally, as water hyacinths die and decompose, the decomposition process can release nutrients and organic matter into the water, further reducing water clarity. Water hyacinth is a tropical plant and thrives in warm climates. It prefers water temperatures between 20°C and 30°C and grows best in areas with high nutrient levels and abundant sunlight.

Source: [The Hindu](#)

55. Correct Answer is (B)

- Statements 1 and 3 are correct. Pobitora Wildlife Sanctuary is located in the Morigaon district of Assam, India. It covers an area of approximately 38.81 square kilometers and is known for its diverse flora and fauna. According to the provisions of the Wild Life (Protection) Act, 1972, the proposal for denotification of any Sanctuary or National Park requires the recommendation of the National Board for Wildlife. The National Board for Wildlife is a statutory body responsible for promoting the conservation and development of wildlife and forests in India. It is the apex advisory body for the Central Government in matters relating to wildlife conservation and management.
- Statement 2 is incorrect. Pobitora Wildlife Sanctuary in Assam is known for its great Indian One-horned rhinoceros. The sanctuary has the highest density of rhinos in the world.

Source: [The Hindu](#)

Science & Technology

56. Correct Answer is (B)

- Deep-tech innovation refers to technological advancements based on cutting-edge scientific research and engineering innovations that have the potential to significantly impact industries, economies, and society as a whole. These innovations often involve complex, high-risk, and capital-intensive research and development (R&D) processes that require specialized knowledge and expertise. Examples: Artificial Intelligence (AI), Quantum Computing, Biotechnology, Advanced Materials, etc.

Source: [Forum IAS](#)

57. Correct Answer is (D)

- Statements 1 and 2 are incorrect. The Genome India Project is primarily focused on mapping the genetic diversity of India's population and creating a database of genetic diseases prevalent in the country. It focuses on understanding the unique genetic variations of the Indian population. Genome sequencing can help identify specific genes of interest, but the process of creating GMOs involves manipulating those genes (inserting, deleting, or altering them) using genetic engineering techniques. These techniques, such as CRISPR-Cas9 or other gene editing tools, are separate from genome sequencing. Thus, while genome sequencing can inform the process of creating GMOs, it is not directly responsible for their production.

Source: [Forum IAS](#)

58. Correct Answer is (D)

- LLMs (Large Language Models) are primarily designed for natural language processing tasks. They are not typically used for recognizing objects and scenes in images, which falls under the domain of computer vision and convolutional neural networks. LLMs are primarily designed to understand and generate human-like text.

Source: [Forum IAS](#)

59. Correct Answer is (A)

- Statements 1 and 3 are incorrect. Miracle drugs are pharmaceutical substances that have a transformative impact on the treatment of certain medical conditions. These drugs are often characterized by their exceptional efficacy, groundbreaking therapeutic outcomes, and the ability to significantly improve patient outcomes. Almost every medication has the potential for side effects, even if they are mild or rare. Miracle drugs might have very tolerable side effects compared to conventional treatments, but they are not guaranteed to be side-effect-free. Miracle drugs are effective for specific conditions, and they aren't cure for everything.
- Statement 2 is correct. Miracle drugs are known for their ability to produce remarkable improvements in treating specific medical conditions, often surpassing the efficacy of conventional medications or therapies.

Source: [Forum IAS](#)

60. Correct Answer is (C)

- Statements 1 and 2 are correct. According to the World Health Organization (WHO), obesity is defined as an abnormal or excessive accumulation of fat that poses health risks. A sedentary lifestyle, poor dietary choices, and lack of physical activity are significant contributing factors to the rise in obesity rates in India.

Source: [Forum IAS](#)

61. Correct Answer is (C)

- Statements 1 and 3 are correct. MIRV technology allows a single missile to carry multiple warheads, which can be independently targeted, making it possible to hit various locations with a single missile launch. MIRV technology contributes to nuclear deterrence by increasing the effectiveness and survivability of a country's nuclear arsenal, offering flexible targeting options, and providing a more cost-effective solution for maintaining a credible nuclear deterrent.
- Statement 2 is incorrect. MIRV technology is not typically utilized for launching vehicles into space to deploy satellites into orbit. This task is commonly accomplished using dedicated space launch vehicles designed explicitly for deploying satellites into orbit around the Earth or for interplanetary missions. MIRV technology primarily serves military purposes, particularly in the domain of strategic nuclear weapons delivery systems.

Source: [The Hindu](#)

62. Correct Answer is (C)

- The color change observed in galaxies as star formation activity ceases is from blue to red. This occurs due to the aging of the stellar population within the galaxy. Young, newly-formed stars are generally hot and emit light primarily in the blue and ultraviolet wavelengths. These stars are often found in regions of active star formation within galaxies, such as spiral arms. As a result, galaxies with high rates of star formation tend to appear blue or blue-white in color. However, as star formation activity decreases, the hot, short-lived stars begin to die out, and the galaxy's overall color starts to shift towards longer, redder wavelengths. The remaining stars are generally older, cooler, and emit light primarily in the red and infrared wavelengths. This aging process causes the galaxy to appear redder in color.

Source: [The Hindu](#)

63. Correct Answer is (B)

- In the context of malnutrition, the term "Zero-food children" refers to children who did not consume any animal milk, formula, or solid or semi-solid food during the last 24 hours. This definition is often used in emergency food insecurity situations or when assessing the immediate dietary intake of children. It highlights the severe short-term and long-term consequences of inadequate food intake and malnutrition on children's health and development.

Source: [Forum IAS](#)

64. Correct Answer is (A)

- Statement 1 is correct. ANNs are computational models inspired by the structure and functioning of the human brain. They consist of interconnected nodes, often organized into layers, which process information and perform tasks such as pattern recognition, prediction, and decision-making. The nodes in an ANN are typically arranged into an input layer, one or more hidden layers, and an output layer, with each node connected to others in the adjacent layers. These connections have associated weights that determine the strength of the signal transmitted between nodes, and the network learns by adjusting these weights based on training data.
- Statement 2 is incorrect. A graphic processing unit (GPU) is the physical processor that powers artificial neural networks (ANNs). Originally designed for rendering graphics in video games, GPUs excel at running computing tasks simultaneously, making them ideal for ANNs.

Source: [The Hindu](#)

65. Correct Answer is (B)

- Recently, the Bharat Shakti exercise was conducted showcasing the prowess of indigenously manufactured defence equipment across the three services. Exercise Bharat Shakti showcased various indigenously manufactured defence equipment, such as radar systems, UAV-launched precision-guided munitions, Quick Reaction Fighting Vehicles, and drones, etc. Exercise Bharat Shakti was a tri-service exercise involving the Indian Army, Navy, and Air Force. However, disaster relief is not a focus of this particular exercise.

Source: [The Hindu](#)

66. Correct Answer is (B)

- AlphaGeometry is an AI tool that could solve geometry problems at the level of the International Mathematical Olympiad, almost reaching the proficiency of gold medallists. AlphaGeometry's capability in solving geometry problems is primarily due to its use of advanced machine learning techniques. AlphaGeometry leverages the combined power of a 'Deductive Database' and 'Algebraic Rules' programs to achieve its remarkable problem-solving abilities.

Source: [The Hindu](#)

67. Correct Answer is (C)

- Statement 1 is incorrect. Photovoltaics is the process of converting light energy (such as sunlight) into electrical energy. They are primarily made of semiconductor materials like silicon, which is often doped with other elements such as boron or phosphorus to create an electric field. The top and bottom layers of the cell are usually made of transparent conductive materials, like indium tin oxide or fluorine-doped tin oxide, which allow sunlight to pass through and help collect the generated electric current.
- Statements 2 and 3 are correct. Conventional solar cells, made from crystalline silicon, can convert about one-third of incident solar energy into electricity. The Shockley-Queisser limit, named after physicists William Shockley and Hans-Joachim Queisser, defines the maximum achievable efficiency of a solar cell.

Source: [The Hindu](#)

68. Correct Answer is (B)

- Statement 1 is incorrect. Rhodamine-B is not primarily used in agricultural pesticides for its effectiveness against pests; it is a synthetic dye with various industrial applications.
- Statements 2 and 3 are correct. Rhodamine-B is utilized in the textile industry as a dye for coloring fabrics, due to its fluorescent properties. Rhodamine-B has been shown to have potential cytotoxic effects, which means it can cause cell death or damage when cells are exposed to the substance. Rhodamine-B was used as the coloring agent in the cotton candy and others. However, due to its harmful health effects the govt. of Tamil Nadu has banned its use.

Source: [The Hindu](#)

69. Correct Answer is (D)

- Statements 1, 2 and 3 are correct. Lyme disease is a vector-borne infectious disease. It is primarily transmitted to humans through the bite of infected black-legged ticks, often referred to as deer ticks. It is most commonly reported in North America, Europe, and some parts of Asia. The standard treatment for Lyme disease is an antibiotic taken as a pill. The treatment usually lasts 10 to 14 days. Treatment may be longer depending on symptoms.

Source: [Forum IAS](#)