

# WEEKLY QUIZ

**DATE : 14<sup>th</sup> July- 20<sup>th</sup> July**

**1) Which of the following best describes 'Post-quantum Cryptography'?**

- a) Utilizing blockchain technology to secure digital assets against quantum threats
- b) Developing encryption techniques resilient to quantum computer attacks while compatible with classical systems
- c) Employing artificial intelligence algorithms for quantum data protection
- d) Encryption methods using quantum key distribution for unbreakable security

**2) Which mineral is primarily found in the beach sands of Kerala and Orissa and is a significant source of thorium in India?**

- a) Rutile
- b) Monazite
- c) Zircon
- d) Ilmenite

**3) The National Mobile Monitoring System (NMMS) App was launched primarily to:**

- a) Monitor agricultural commodity prices in rural areas
- b) Disburse wages to workers through digital wallets
- c) Capture attendance of MGNREGS workers using geo-tagged, time-stamped photographs
- d) Provide financial assistance to rural households under MGNREGA directly

**4) Consider the following statements regarding Project INVICTUS:**

- 1. INVICTUS is a fully reusable aerospace vehicle developed to achieve sustained hypersonic flight at Mach 5.
- 2. INVICTUS is designed to prove the suitability of a hydrogen-fuelled precooled air-breathing propulsion system for vertical take-off.
- 3. INVICTUS is funded by the European Space Agency's General Support Technology Programme and Technology Development Element.

**Which one of the above statements is/are correct?**

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

**5) Consider the following statements:**

- 1. All airborne early warning and control systems globally are mounted exclusively on Airbus platforms.
- 2. The Netra MkII is equipped with mission control systems and extends national vigilance as a flying command center.

**Which one of the above statements is/are correct?**

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

**6) With reference to the administrative and technological steps in combating digital arrest fraud, consider the following statements:**

- 1. Police and Public Order are State subjects as per the Seventh Schedule of the Constitution of India.
- 2. The Samanvaya platform serves as a data repository and coordination system for interstate crime linkages.
- 3. The Indian Cyber Crime Coordination Centre (I4C) is the central coordinating body for all cybercrimes.
- 4. The Suspect Registry was launched solely by the Reserve Bank of India.

**Which one of the above statements is/are correct?**

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

**7) Consider the following statements regarding the International Criminal Court (ICC):**

- 1. The ICC investigates genocide, war crimes, crimes against humanity, and the crime of aggression.
- 2. Its headquarters is located in Geneva, Switzerland.
- 3. It was established under the Rome Statute, which entered into force in 2002.

4. India is a State Party to the Rome Statute.

**Which one of the above statements is/are correct?**

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

**8) Consider the following statements regarding the regulation and mining of atomic minerals in India:**

1. The Offshore Areas Mineral (Development and Regulation) Act, 2002, regulates the exploration and mining of atomic minerals such as uranium and thorium in offshore areas.
2. The rules apply regardless of the concentration of atomic minerals present in the offshore areas.
3. Only foreign entities can be granted exploration licenses or production leases in offshore areas related to atomic minerals.

**Which one of the above given statements is/are correct?**

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

**9) Consider the following statements regarding the regulation and characteristics of cryptocurrency and stablecoins in India:**

1. As per the Finance Act, 2022, all crypto assets in India are regulated by a central authority.
2. The definition of Virtual Digital Assets (VDAs) in the Income Tax Act, 1961, includes cryptocurrencies and non-fungible tokens (NFTs).
3. In India, capital gains from the transfer of VDAs are taxed at a rate of 30%.

**Which one of the above statements is/are correct?**

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

**10) With reference to the National Standards for Civil Service Training Institutes 2.0 (NSCSTI 2.0) Framework, consider the following statements:**

1. The Capacity Building Commission is an independent body with full executive power.
2. One of its objectives is to build future-ready civil service training institutes.
3. The framework was developed by the Capacity Building Commission (CBC).

**Which one of the above given statements is/are correct?**

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

**11) Consider the following pairs:**

Scheme/Project	Implementing Ministry
Economic Census	Ministry of Finance
Swachh Survekshan	Ministry of Housing and Urban Affairs
PM VIKAS	Ministry of Minority Affairs

**How many of the above pairs are correctly matched?**

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

**12) Which of the following is a key provisioning service provided by wetlands?**

- a) Genetic resources
- b) Moderation of extreme events
- c) Erosion prevention
- d) Biological control

**13) Which ministry is responsible for implementing the PM VIKAS scheme?**

- a) Ministry of Labour and Employment
- b) Ministry of Minority Affairs
- c) Ministry of Skill Development and Entrepreneurship
- d) Ministry of Social Justice and Empowerment

**14) Consider the following statements:**

1. The Urban Wind Stilling Effect is caused by the strengthening of surface winds due to urban structures.
2. Urban Aerosol Clean Islands refer to cities where aerosol levels are lower than those in neighboring rural areas.

**Which of the above is/are correct?**

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

**15) Consider the following statements:**

1. The SIMBEX exercise was first initiated in 1994 as Exercise Lion King.
2. The SIMBEX exercise is an annual maritime drill held between the Indian Navy and the Republic of Singapore Navy.

**Which of the above is/are correct?**

- a) 1 only
- b) 2 only
- c) 1 and 2 only
- d) None

**16) Consider the following statements:**

1. According to modern physics, the Big Bang should have produced equal amounts of matter and antimatter.
2. Matter-antimatter asymmetry refers to the observed imbalance between matter and antimatter in the universe.
3. The observable universe consists almost entirely of antimatter.

**Which of the above is/are correct?**

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

**17) Consider the following statements:**

1. Aerosols are colloids in which solids or liquids are dispersed in a gaseous medium.
2. Fog, cloud, and smoke are examples of aerosols.
3. All cities in the Indo-Gangetic Plain have higher aerosol levels than surrounding rural areas.

**Which of the above is/are correct?**

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

**18) Consider the following statements regarding the global status and importance of wetlands:**

1. Africa's wetlands are among the most degraded in the world.
2. The Ramsar Convention's strategic goals align with the Kunming-Montreal Global Biodiversity Framework (KM-GBF) Targets.
3. Wetlands provide both provisioning and regulating services such as food, water, air quality regulation, and climate regulation.

**Which of the above is/are correct?**

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

**19) Consider the following statements regarding Akash Prime:**

1. Akash Prime is an indigenous surface-to-air missile system.
2. Akash Prime was developed by ISRO.

**Which of the above is/are correct?**

- a) 1 only
- b) 2 only
- c) Both
- d) None

**20) Consider the following statements regarding the National Financial Reporting Authority (NFRA):**

1. NFRA has no role in monitoring compliance with accounting standards.
2. NFRA recommends accounting and auditing policies and standards to be adopted by companies.
3. NFRA was constituted by the Government of India under the Companies Act, 2013.

**Which of the above is/are correct?**

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

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

**21) Which of the following best describes Coronal Mass Ejections (CMEs)?**

- a) Localized flares on the Sun with no impact beyond its atmosphere
- b) Expulsions of plasma and magnetic field from the Sun's corona that can disrupt Earth's satellites and power grids
- c) Minor changes in solar temperature causing sunspots
- d) Sudden releases of solar wind that only affect the Sun's surface

**22) Which of the following statements about the Banni Grassland is correct?**

- a) It is the largest tropical grassland in Asia, located in Kutch district, Gujarat
- b) It is a protected wetland in Assam
- c) It is a mangrove ecosystem found in the Sundarbans
- d) It is a high-altitude meadow in Himachal Pradesh

**23) The Group of Friends (GOF), launched in 2022, is primarily associated with which of the following objectives?**

- a) Advancement of global climate change negotiations
- b) Facilitation of international educational exchanges
- c) Promotion of global trade facilitation
- d) Promotion of accountability for violence against UN peacekeepers

**24) Consider the following statements:**

**Statement-I:** India was the top producer of cotton in the world in 2023.

**Statement-II:** Weak infrastructure in India's agricultural sector contributes to significant post-harvest losses.

**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 explains Statement-I
- b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- c) Statement-I is correct, but Statement-II is incorrect
- d) Statement-I is incorrect, but Statement-II is correct

**25) Consider the following statements:**

1. The Supreme Court has held that the state is constitutionally bound to provide alternative accommodation in all land acquisition cases.
2. Rehabilitation has been recognized as a fundamental right under the Indian Constitution.

**Which one of the above statements is correct?**

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

**26) Consider the following statements:**

1. Only countries in Asia are affected by the Pacific Ring of Fire's seismic activity.
2. The Mariana Trench, the world's deepest point, is formed through tectonic activity associated with the Ring of Fire.
3. The Pacific Ring of Fire is a zone with significant volcanic and seismic activity due to tectonic plate movements.

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

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

**27) Consider the following statements about the Gujarat Tribal Genome Project:**

1. The primary focus of the project is to develop agricultural biotechnology in tribal areas.
2. The Gujarat tribal genome project aims to sequence the genomes of individuals from tribal communities across 17 districts.
3. The project is implemented by the Gujarat Biotechnology Research Centre (GBRC).

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

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

**28) Consider the following statements regarding Mitochondrial Replacement Therapy (MRT):**

1. MRT involves replacing abnormal mitochondrial DNA with healthy donor DNA, resulting in a child with genetic material from three individuals.
2. Both maternal spindle transfer (MST) and pronuclear transfer (PNT) techniques are performed before fertilization.
3. Mitochondrial DNA inherited via MRT influences the child's physical traits.
4. The preferred MRT technique is MST, as it carries a lower risk of defective mitochondria transfer compared to PNT.

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

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

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

**29) Consider the following statements about the PMDDKY scheme:**

1. The scheme will be implemented over a period of eight years, starting from 2024–25.
2. It is the first central government initiative focusing exclusively on agriculture and allied sectors in 100 districts.
3. The selection of districts under the scheme is based on the share of the net cropped area and operational holdings, with a minimum of one district per state.
4. Committees at district, state, and national levels will be established to oversee planning and monitoring.

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

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

**30) Consider the following characteristics of earthquake swarms:**

1. They are sequences of many earthquakes occurring without a specific main shock.
2. They are observed exclusively in volcanic environments.
3. They are typically restricted to tectonic ridge environments only.
4. Earthquake swarms can last for weeks and produce many thousands of earthquakes.

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

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

**31) Consider the following statements:**

1. The PATRIOT Missile Air Defense System is designed to intercept only aircraft and cannot target ballistic missiles.
2. The guidance system of the PATRIOT missile receives midcourse correction commands from the mobile engagement control center.

**Which one of the following is correct?**

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

**32) The Corporate Average Fuel Efficiency (CAFE) norms notified in 2017 under the Energy Conservation Act, 2001, primarily aim to:**

- a) Promote the use of renewable fuels in commercial vehicles
- b) Set minimum requirements for electric vehicle production
- c) Lower CO<sub>2</sub> emissions by reducing fuel consumption
- d) Increase the maximum speed limits for passenger vehicles

**33) Which of the following countries is NOT a member of BIMSTEC?**

- a) Sri Lanka
- b) Thailand
- c) Indonesia
- d) Bangladesh

**34) Which ministry is responsible for implementing the ADEETIE scheme aimed at enhancing energy efficiency in MSMEs?**

- a) Ministry of New and Renewable Energy
- b) Ministry of Commerce and Industry
- c) Ministry of Micro, Small and Medium Enterprises
- d) Ministry of Power

**35) K. Kamaraj, recently commemorated on his birth anniversary, is known for:**

- a) Serving as the first President of independent India
- b) Founding the Dravida Munnetra Kazhagam (DMK)
- c) Leading the Kamaraj Plan to rebuild the Congress party
- d) Organizing the Bardoli Satyagraha

**36) Under India's Universal Immunization Programme (UIP), which of the following diseases is covered only in specific regions and not nationwide?**

- a) Tetanus
- b) Japanese Encephalitis
- c) Hepatitis B
- d) Measles

**37) Which of the following best describes gravitational waves?**

- a) 'Ripples' in space-time caused by violent processes in the Universe
- b) Magnetic field disturbances resulting from solar flares
- c) Oscillations in the Earth's crust due to tectonic shifts
- d) High-energy cosmic rays traveling at the speed of light

38) Consider the following statements:

**Statement-I:** CAFE norms aim to reduce oil dependency and air pollution in India.

**Statement-II:** CAFE norms are applicable to passenger vehicles of all fuel types with gross vehicle weight below 3500 kgs. CAFE norms have been notified for the period 2027 to 2032 only for electric vehicles.

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

- Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- Statement-I is correct, but Statement-II is incorrect
- Statement-I is incorrect, but Statement-II is correct

39) Consider the following statements:

**Statement-I:** The objective of the Protection of Civil Rights Act, 1955 is to prescribe punishment for the preaching and practice of untouchability.

**Statement-II:** The Act defines various manifestations of untouchability and prescribes penalties for them.

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

- Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- Statement-I is correct, but Statement-II is incorrect
- Statement-I is incorrect, but Statement-II is correct

40) Consider the following pairs:

Gravitational Wave Detector	Country of Location
KAGRA	United States
LIGO	France
Virgo	Japan

In how many of the above rows is the given information correctly matched?

- Only one
- Only two
- Only three
- None

41) Consider the following statements about the National Pharmaceutical Pricing Authority (NPPA):

- It is an independent regulator responsible for fixing drug prices in India.
- It was established as an attached office of the Ministry of Chemicals & Fertilizers.

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

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

42) Consider the following statements regarding the Pradhan Mantri Kaushal Vikas Yojana (PMKVY):

- PMKVY is operating under the Central Sector Scheme of the Skill India Programme.
- Recognition of Prior Learning (RPL) provides industry-recognized certification for pre-existing skills.

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

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

43) Consider the following statements regarding the Consumer Price Index (CPI) in India:

- The Central Statistical Office (CSO) under the Ministry of Statistics and Programme Implementation releases CPI data in India.
- The CPI is used as a macroeconomic indicator of inflation and for indexing dearness allowance.
- The CPI measures the general level of prices of goods and services acquired by households for consumption.
- The base year for the current CPI series in India is 2020.

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

- 1 and 3 only
- 1, 2 and 3 only
- 1, 2, 3 and 4
- 4 only

44) In the context of India's services sector, what are Global Capability Centres (GCCs)?

- Public-private partnerships established to train IT professionals for rural India
- Offshore service units set up by multinational companies to deliver global business functions

- c) Government-owned research hubs aimed at developing indigenous digital platforms
- d) Regional offices of the WTO facilitating trade compliance in emerging markets

45) Which of the following freedoms is not explicitly guaranteed under Article 19(1) of the Indian Constitution?

- a) Freedom of speech and expression
- b) Freedom to form associations or unions
- c) Freedom to own property
- d) Freedom to move freely throughout the territory of India

46) Consider the following statements regarding Eco-Sensitive Zones (ESZ) in India:

1. The concept of ESZ was introduced in the National Wildlife Action Plan, 1992.
2. The Supreme Court has allowed states to alter the minimum width of ESZs in public interest.
3. The Ministry of Environment, Forest and Climate Change notifies ESZs based on recommendations from State Governments.
4. Commercial mining is classified as a prohibited activity within ESZs.

Which of the statements given above is/are correct?

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

47) Consider the following statements regarding Flue Gas Desulphurisation (FGD) systems and sulphur dioxide (SO<sub>2</sub>) pollution:

1. FGD systems use an alkaline reagent to neutralize SO<sub>2</sub> emissions from flue gas.
2. All thermal power plants in India are mandatorily required to install FGD systems by 2027.
3. Sulphates in the atmosphere contribute exclusively to global warming.
4. In India, ambient SO<sub>2</sub> levels are typically much lower than the national standard.

Which of the statements given above is/are correct?

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

48) Consider the following statements regarding the nominated members of the Rajya Sabha:

1. The President of India nominates 12 people to the Rajya Sabha only from the field of literature.
2. Article 80 specifies that the President nominates members with special knowledge or experience in literature, science, art, or social service.
3. The Ministry of Home Affairs notifies the appointments of nominated members after the President nominates them.

Which of the statements given above is/are correct?

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

49) Consider the following statements about Super-Earths:

1. The term Super-Earth refers strictly to the planet's size and mass, not to its similarity to Earth in other features.
2. Super-Earths are exoplanets that are always smaller than Neptune and always have a rocky composition.
3. Some Super-Earths are also referred to as sub-Neptunes or mini-Neptunes.

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

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

Nano-fertilizers are characterized by:

- a) Encapsulation of nutrients within nanomaterials of 100 nanometres or less
- b) Release of only phosphorus-based nutrients
- c) Use of genetically modified organisms for nutrient delivery
- d) Functioning as biostimulants to alter plant DNA