

WEEKLY QUIZ

DATE : 14th April – 20th April

1) Consider the following statements about golden tigers:

1. Their coloration is the result of excessive **melanin deposition**.
2. **Golden tigers** are classified under **Schedule I** of the **Wildlife Protection Act** separately.
3. The **golden coat trait** is **dominant** and can pass to offspring even if only one parent carries the gene.

How many of the above are correct?

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

2) Which of the following best describes the core objective of UNESCO's BIOCOP Programme in Madagascar?

- a) Promotion of **trade and investment** in protected zones
- b) Military protection of **ecological reserves** from illegal logging
- c) Urban resettlement of **forest-dependent communities**
- d) Conservation of **biodiversity** alongside **inclusive community development**

3) Consider the following statements regarding GPS spoofing:

Statement-I: GPS spoofing poses a growing threat to **civilian and military infrastructure**.

Statement-II: Spoofers can hijack **satellite control systems** and change **global coordinates**.

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

4) What is the primary objective of the STELLAR model developed by the Central Electricity Authority (CEA)?

- a) To simulate **monsoon rainfall patterns** for **hydropower forecasting**
- b) To optimize **power trading** in **international markets**
- c) To forecast **coal demand** in **thermal power stations**
- d) To enable **integrated and dynamic power resource adequacy planning**

5) Q-Shield, developed under India's National Quantum Mission, primarily aims to:

- a) Enhance **signal processing** in **underwater military communication**
- b) Provide **quantum-safe cryptography** to protect **critical digital infrastructure**
- c) Create indigenous **quantum satellites** for secure **interstellar communication**
- d) Replace **blockchain-based security systems** with **classical cryptography**

6) Consider the following statements:

1. **Lake Tanganyika**, which borders **Tanzania**, is the world's largest freshwater lake by surface area.
2. **Mount Kilimanjaro** is Africa's highest peak and a **dormant volcano**.
3. The **Serengeti National Park** is a **UNESCO World Heritage Site** known for its **massive wildlife migration**.

How many of the above statements is/are correct?

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

7) Type 5 Diabetes is best characterized by which of the following?

- a) A **malnutrition-associated diabetes** seen in **lean individuals with protein deficiency**
- b) A **genetic disorder** common in **high-income countries with high obesity rates**
- c) A **metabolic disorder** linked primarily to **autoimmune pancreatic damage**
- d) A form of **gestational diabetes** observed only during **pregnancy**

8) Consider the following statements related to constitutional provisions cited in the 2024 Supreme Court Constitution Bench (7-judge) ruling on SC sub-classification:

1. **Article 341** allows Parliament to make **reasonable classification** among SCs for reservation.
2. **Article 14** prohibits any classification within **Scheduled Castes**.
3. **Article 16(4)** enables reservations in **public employment** based on **inadequate representation**.

Which of the above statements is/are correct?

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

9) Consider the following Tiger Variant, Genetic Basis, and Location:

Tiger Variant	Genetic Basis	Natural Location
A. Golden Tiger	1. Wideband gene mutation	i. Kaziranga National Park
B. White Tiger	2. Mutation in SLC45A2	ii. Originally Rewa, MP
C. Black Tiger	3. Pseudomelanism	iii. Simlipal Tiger Reserve

How many of the above are correctly matched?

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

10) Which of the following are features of the BIOCOP Programme?

1. Sustainable vocational training for local communities
2. Integration of nature-based solutions for flood prevention
3. Large-scale forest clearance for agribusiness development
4. Environmental awareness programs for women and youth

Select the correct answer:

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

11) Consider the following statements about the New Development Bank (NDB):

1. It provides funding exclusively to **BRICS member countries**.
2. It issues **local currency bonds** in member countries to support **de-dollarization**.
3. It offers **project loans** in both **sovereign** and **non-sovereign forms**.

How many of the above statements are incorrect?

- a) only one
- b) only two
- c) all three
- d) none

12) Consider the following statements regarding Gestational Diabetes Mellitus (GDM):

1. **GDM** is commonly diagnosed between the **8th and 12th week** of pregnancy.
2. **Foetal hyperinsulinemia** due to GDM can increase the risk of **obesity** in childhood.
3. **GDM** is a temporary condition with **no long-term risk** to the mother.

How many of the above statements are incorrect?

- a) only one
- b) only two
- c) all three
- d) none

13) Which of the following statements are correct regarding Thorium-Based Small Modular Reactor (SMR)?

1. India has an **operational thorium-based reactor** connected to the **national grid**.
2. **SMRs** are not subject to **AERB** or Central regulatory compliance if built by a state agency.
3. Generally, **Thorium fuel** produces **less long-lived radioactive waste** compared to uranium.

How many of the above statements is/are correct?

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

14) Consider the following statements regarding golden tigers:

1. They are considered a **separate subspecies** of Bengal tigers in **IUCN taxonomy**.
2. The **golden coat colour** arises from a **recessive gene mutation**.
3. The presence of multiple golden tigers in one region like **Kaziranga** may indicate **low genetic diversity**.

Which of the above statements is/are correct?

- (a) 2 only
- (b) 2 and 3 only

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

15) Which of the following statements are correct about Kaziranga National Park?

1. It is recognized as an **Important Bird Area** by **BirdLife International**.
2. The park lies entirely in **Arunachal Pradesh**.
3. It contains **semi-evergreen forests, grasslands, and marshes**.
4. It lies at the convergence of the **Eastern Himalayas** and the **Indo-Burma biodiversity hotspot**.

How many of the above statements is/are correct?

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

16) The primary purpose of the Rules of Origin clause in the ASEAN-India Trade in Goods Agreement (AITIGA) is to:

- a) Restrict imports from ASEAN countries to protect Indian industries
- b) Enable ASEAN to apply safeguard duties on Indian exports
- c) Remove customs procedures for all goods from ASEAN
- d) Ensure only goods **originating in ASEAN or India** benefit from **tariff preferences**

17) Which of the following features makes Phawngpui National Park ecologically unique among Indian protected areas?

- a) It is India's only home to the endangered **White-winged Wood Duck**
- b) It is the only park with **permanent glacial lakes** in the Eastern Himalayas
- c) It is the largest continuous patch of **tropical dry deciduous forest** in Northeast India
- d) It hosts the only known Indian population of **Mount Victoria Babax**

18) Consider the following statements regarding Thorium-Based Small Modular Reactor (SMR):

Statement-I: Thorium-based SMRs can help India achieve long-term energy self-sufficiency.

Statement-II: India's current nuclear infrastructure is optimized for thorium reprocessing and U-233 fuel handling.

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

19) Consider the following statements regarding Directed energy weapons:

Statement-I: Directed energy weapons are increasingly seen as essential for modern asymmetric warfare.

Statement-II: Their high cost-per-shot and complex logistics make them unsuitable for tactical use.

Which one of the following is correct?

- 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

20) The innovation of BatEchoMon, recently in news, lies primarily in:

- a) Using **ultrasonic rangefinders** to track nocturnal bird migrations
- b) Deploying an **AI-powered acoustic device** to classify **bat echolocation calls**
- c) Capturing **real-time spectrograms** from **human-generated audio signals**
- d) Using **infrared sensors** to track **bat flight paths** in caves

21) Consider the following statements:

1. **RNA editing** uses **adenosine deaminase acting on RNA (ADAR)** enzymes to make permanent changes to the genome.
2. **RNA editing effects** are **reversible** and fade over time.
3. **RNA editing** carries a **higher risk of immune reaction** compared to **DNA editing**.

How many of the above statements is/are incorrect?

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

22) Consider the following statements about the benefits of peatlands:

1. **Peatlands** store **less carbon** than the world's forests due to their smaller area.
2. **Peatlands** play a crucial role in **regulating water supplies** and **purifying water**.
3. The **waterlogged nature of peatlands** makes them unsuitable for **preserving archaeological sites**.

How many of the above statements is/are correct?

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

23) Consider the following statements regarding the applications of microplastics:

1. **Microplastics** are used in **air-blasting technology** for cleaning surfaces.
2. They are **completely biodegradable**.
3. **Synthetic textiles** shed **microplastic fibers** during washing.

How many of the above statements is/are correct?

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

24) Which of the following anthropogenic activities is the largest contributor to rising methane (CH_4) levels in the atmosphere?

- a) **Deforestation**
- b) **Waste management**
- c) **Fossil fuel combustion**
- d) **Agricultural activities**

25) Consider the following statements about volcanic activity and its impact on climate:

1. **Volcanic eruptions** release **aerosols** that can lead to **temporary cooling** of the Earth's atmosphere.
2. **Ash and gas** from eruptions may contribute to a **short-term warming effect** in the troposphere.
3. The **cooling effect** of volcanic aerosols often lasts for **decades**.

How many of the above statements is/are correct?

- (a) Only one

- (b) Only two
- (c) All three
- (d) None

26) Which of the following is NOT a feature of the federal structure of the Indian Constitution?

- a) The existence of an **independent judiciary** to resolve Union-state disputes.
- b) Provisions for **amending the Constitution** to adapt to changing federal dynamics.
- c) A **strong Union** with authority over subjects in the Union List.
- d) **Equal division of powers** between the Union and the states.

27) Consider the following statements about diabetes:

1. **Type 1 Diabetes** is an **autoimmune condition** that destroys insulin-producing cells in the pancreas.
2. **Type 2 Diabetes** is more common than **Type 1 Diabetes**.
3. Both **Type 1 and Type 2 Diabetes** can cause long-term complications like **neuropathy** and **retinopathy**.
4. **Insulin therapy** is mandatory for managing **Type 2 Diabetes**.

Which of the above statements is/are correct?

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

28) Consider the following:

Statement-I: Gestational diabetes occurs in pregnant women and usually **resolves after childbirth**.

Statement-II: Gestational diabetes is caused by **insulin resistance** due to **hormonal changes** during pregnancy.

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

29) Consider the following statements about the International Maritime Organization (IMO):

1. The **IMO** is a **specialized UN agency** focused on **regulating shipping** and **preventing marine pollution** from ships.
2. **India** was one of the **founding members** of the IMO.
3. The **IMO** creates a **regulatory framework** for the **shipping industry** and addresses **legal issues** such as liability and international maritime traffic facilitation.

How many of the above statements is/are correct?

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

30) Consider the following statements regarding sea groynes:

1. **Sea groynes** are always built **parallel to the shoreline** to facilitate **sediment accumulation** along the coast.
2. The construction of **sea groynes** can lead to **sediment buildup on the updrift side**, while potentially causing **erosion on the downdrift side**.
3. **Sea groynes** are primarily constructed to **increase the salinity** of coastal waters, benefiting **marine biodiversity**.

How many of the above statements is/are correct?

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

31) Consider the following statements about the significance and applications of Salt Chimneys:

1. They can serve as **natural barriers** preventing the spread of **pollutants**.
2. They are indicators of **karstification** and potential **ground collapse**.
3. **Autonomous mapping** of salt chimneys can help mitigate **sinkhole risks**.

Which of the above statements is/are correct?

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

32) Consider the following:

Statement-I: The **International Criminal Court (ICC)** is a **judicial body** established to prosecute individuals for **genocide, war crimes, crimes against humanity, and crimes of aggression**.

Statement-II: The ICC has **universal jurisdiction** over all crimes committed anywhere in the world.

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

33) Consider the following statements regarding **Bhimbetka rock shelters**:

1. They depict **hunting scenes, social life, and rituals** through **rock paintings**.
2. They are located in the **Vindhya Range**, near the **Narmada Valley**.
3. Bhimbetka was first excavated during the **Indus Valley Civilization period**.

How many of the above statements is/are correct?

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

34) Consider the following statements regarding the Climate Change Performance Index (CCPI):

1. It uses indicators like **GHG emissions, renewable energy, energy use, and climate policy**.
2. The index is aimed at enhancing **transparency** in global climate policies.
3. The **United States** is consistently ranked in the **top five countries**.

How many of the above statements is/are incorrect?

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

35) Which of the following statements correctly describes the withdrawal process from a treaty under the Paris Agreement?

- a) Participation is terminated **immediately** after withdrawal notification.
- b) Withdrawal becomes effective **immediately upon written notification** to the UN's Office of Legal Affairs.
- c) A country can withdraw only **after three years** of the treaty's entry into force for that party.
- d) A country can withdraw **at any time** without prior notification.

36) Consider the following statements about the long-term ripple effects of space junk:

1. It can harm **terrestrial ecosystems** indirectly by altering the **upper atmosphere**.
2. Changes in the **stratosphere** due to space debris can disrupt **weather patterns**.
3. Burning space junk increases the concentration of **ozone** in the **upper atmosphere**.
4. **Metals from space debris** can catalyze **chemical reactions** affecting **climate systems**.

How many of the above statements is/are correct?

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

37) Consider the following statements about tuberculosis (TB):

1. **Pulmonary TB** is caused by the **Mycobacterium leprae** bacterium.
2. **Weight loss, fatigue, and fever** are common symptoms of **TB**.
3. **TB** can be transmitted through **droplets** expelled when an infected person **coughs or sneezes**.

Which of the above statements is/are correct?

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

38) Consider the following statements about uranium isotopes and fission:

1. **U-235** is the only isotope of uranium capable of undergoing **nuclear fission**.
2. **U-238** is the dominant isotope in **natural uranium** and is **non-fissile**.
3. **U-235** in nuclear reactors undergoes **fusion** to release energy.

How many of the above statements is/are correct?

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

39) RNA editing is primarily characterized by:

- a) Irreversible protein changes
- b) **Temporary and reversible modifications** in **RNA molecules**
- c) Permanent changes in RNA molecules
- d) Permanent alterations in the genome

40) Consider the following:

Statement-I: India, along with the **United States** and **China**, is not a party to the **International Criminal Court (ICC)'s Rome Statute**.

Statement-II: India has not joined the ICC due to concerns about the court's **jurisdiction** and potential **interference with domestic legal matters**.

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

41) Consider the following statements regarding Taiwan Strait:

Assertion (A): The Taiwan Strait is increasingly militarised due to U.S. and Chinese naval activity.

Reason (R): Both U.S and China treat the Strait as sovereign territory under exclusive jurisdiction.

Which of the following is correct?

- a) Both A and R are correct and R is the correct explanation of A
- b) Both A and R are correct but R is not the correct explanation of A
- c) A is correct but R is incorrect
- d) A is incorrect but R is correct

42) Which of the following statements best explains why translocation of One-Horned Rhinoceros is a conservation priority in India?

- a) To prevent competition between rhinos and elephants in Kaziranga
- b) To reduce grazing pressure on grasslands in Terai and Brahmaputra floodplains
- c) To increase ecotourism potential across national parks in semi-arid zones
- d) To distribute the population more evenly and mitigate extinction risk from localized threats

43) Consider the following regarding the accommodative policy stance and its fiscal-monetary linkages:

1. Accommodative stance supports fiscal consolidation by reducing interest expenditure.
2. It can trigger crowding out of private investment by raising interest rates.
3. It is maintained only during revenue surplus years by the government.

How many of the above are correct?

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

44) Which of the following are correct about Mahatma Jyotiba Phule's contributions?

1. He coined the term "Dalit" and was the first to use it for oppressed communities.
2. He founded India's first school for girls and was opposed to widow remarriage.
3. He co-founded the Bombay Millhands Association and wrote **Gulangiri**.
4. He advocated using military labor for rural infrastructure development.

Select the correct answer code:

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

45) Which of the following are thematic pillars used in the Panchayat Advancement Index (PAI) Report 2022–23 to evaluate panchayat performance?

1. Health and Nutrition
2. Biodiversity and Sustainable Livelihoods
3. Governance and Capacity Building
4. Global Trade Competitiveness

Select the correct option:

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

46) The Nilgiri Tahr is endemic to which of the following specific ecosystems?

- a) Semi-arid tropical thorn scrub forests
- b) Lowland wet evergreen forests of the Western Ghats
- c) Montane grasslands interspersed with shola forests in the Southern Western Ghats
- d) Alluvial savannahs and open floodplain grasslands

47) Consider the following statements regarding Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)'s implementation structure:

1. It involves multiple ministries with distinct functional roles.
2. The State Irrigation Plans (SIPs) are finalised centrally by the Ministry of Jal Shakti.
3. District Irrigation Plans (DIPs) ensure decentralised planning and identification of gaps at grassroots level.

How many of the above are correct?

- a) only one
- b) only two
- c) all three
- d) none

48) Which of the following best reflects the shift in policy under the Modernisation of Command Area Development and Water Management (M-CADWM) Scheme?

- a) Transition from canal-based irrigation to river-lift irrigation in arid zones
- b) Replacement of major irrigation projects with micro-dams in hilly terrain
- c) Movement from gravity-based flow irrigation to digitally controlled pressurised systems
- d) Conversion of groundwater irrigation networks into solar-operated tube wells

49) Which of the following are conservation challenges facing the Nilgiri Tahr population?

1. Habitat fragmentation due to hydropower and tea plantations
2. Competition with invasive herbivores such as sambar deer
3. High vulnerability to heat stress due to narrow thermal niche
4. Disruption of breeding patterns due to altered monsoon cycles

Select the correct code:

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

50) Which of the following are proposed translocation or reintroduction sites under the latest National Action Plan for One-Horned Rhinoceros?

1. Valmiki Tiger Reserve, Bihar
2. D'Ering Memorial Wildlife Sanctuary, Arunachal Pradesh
3. Surai Range, Uttarakhand
4. Ranthambore National Park, Rajasthan

Select the correct answer using the code below:

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