WEEKLY QUIZ

DATE: 24th Feb- 2nd March

1) Consider the following statements regarding the Strait of Gibraltar:

- 1. The Strait of Gibraltar connects the Mediterranean Sea to the Atlantic Ocean.
- 2. It lies between the southern tip of Spain and northern Morocco.
- 3. It plays a key role in connecting the Black Sea with the Mediterranean Sea.

How many of the above statements is/are correct?

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

2) Consider the following statements:

- 1. India accounts for 2% of the global rare disease burden.
- 2. Thalassemia and Muscular Dystrophy are examples of rare diseases in India.
- Rare diseases in India are usually detected within two years of birth.

How many of the above statements is/are incorrect?

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

3) Which country in the Middle East shares borders with the most seas and water bodies?

- a) Iran
- b) Turkey
- c) Saudi Arabia
- d) Egypt

4) Match the following rare diseases with their corresponding types:

RARE DISEASES	DESCRIPTIONS
1. THALASSEMIA	a. Genetic disorder affecting oxygen
	transport in the blood
2. ACQUIRED APLASTIC	b. Condition where the bone marrow
ANAEMIA	fails to produce blood cells
3. PAEDIATRIC	c. Disease affecting the muscles of the
CARDIOMYOPATHY	heart

Choose the correct match:

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

5) Consider the following statements regarding the criteria for appointment of the Chief Justice of India (CJI):

- 1. The CJI can be appointed based on a rotation policy from different regional Supreme Court benches.
- Merit and integrity are considered alongside seniority in CJI appointments.
- 3. The CJI is selected by a committee of sitting Supreme Court judges and then recommended to the President.

How many of the above statements is/are incorrect?

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

6) Consider the following statements about the functioning of atomic clocks:

- 1. Quartz crystal oscillators are essential components of atomic clocks.
- 2. Atomic clocks primarily depend on the vibration of caesium atoms for timekeeping.
- Atomic clocks compare the vibrations of atoms with that of quartz oscillators to maintain precision.
- 4. Atomic clocks are less accurate than GPS satellites in time measurement.

How many of the above statements is/are correct?

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

7) Which of the following statements about the Global Stocktake and its relation to nuclear energy is incorrect?

- a) Nuclear energy is seen as a key component in enhancing climate ambition by providing low-carbon electricity.
- b) Nuclear energy was included in the Global Stocktake for the first time at COP28 in 2023.
- c) The Global Stocktake's primary focus is on monitoring fossil fuel consumption and reducing coal usage.
- d) The Global Stocktake assesses the progress of national contributions towards the Paris Agreement's goals.

8) Consider the following statements about the protection offered by GI registration in India:

- 1. The GI tag helps to protect products against unauthorized use by individuals or entities outside the registered geographic area.
- 2. GI registration helps promote exports by enhancing the marketability of products linked to their origin.
- **3.** A GI tag can be transferred or assigned to other producers outside the geographical region.



How many of the above statements is/are correct?

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

9) Consider the following statements regarding Unstructured Supplementary Service Data (USSD):

- 1. USSD works only in 4G and 5G networks.
- 2. USSD does not require an internet connection to function.
- **3.** USSD messages are limited to 182 characters.
- **4.** USSD can be used for various mobile services, including banking and call forwarding.

Which of the above statements is/are correct?

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

10) Which of the following statements is incorrect about how a hydrogen fuel cell works?

- a) The only byproducts of the fuel cell reaction are water vapor and heat.
- b) Electrons flow from the anode to the cathode through the electrolyte, generating an electric current.
- c) Water is formed at the cathode by combining protons, electrons, and oxygen from the air.
- d) Hydrogen molecules are split into protons and electrons at the anode of the fuel cell.

11) Consider the following statements about the Strait of Hormuz:

- 1. The Strait of Hormuz connects the Persian Gulf with the Gulf of Oman.
- **2.** A significant portion of the world's oil supply passes through the Strait of Hormuz.
- 3. The strait lies between the southern tip of Saudi Arabia and the Horn of Africa.

How many of the above statements is/are correct?

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

12) Consider the following statements regarding rare diseases in India:

- 1. Over 75% of rare disease cases in India are found in children.
- **2.** A majority of patients with rare diseases in India survive into adulthood.
- **3.** The National Policy for Rare Diseases 2021 provides financial assistance for rare disease treatments.

How many of the above statements is/are incorrect?

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

13) Consider the following statements regarding Fluorescent Nanodiamonds (FNDs) in strategic industries:

1. FNDs are used in high-resolution imaging due to their ability to withstand harsh environments.

- **2.** Their sensitivity to electric fields makes FNDs valuable for detecting electromagnetic signals.
- **3.** FNDs are being explored as a replacement for traditional energy sources in renewable energy technologies.

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 about superconductors and their applications:

- 1. Superconductors are primarily used in MRI machines due to their ability to carry large currents without resistance.
- **2.** Superconductors are widely used in electrical grids for efficient energy transmission without losses.
- 3. High-temperature superconductors require temperatures below -100°C to function optimally.
- **4.** Superconductors can be used in magnetic levitation trains (maglev) for frictionless transportation.

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

15) Which of the following is NOT a method used for age estimation in forensic science?

- a) Radiographic techniques
- b) Epigenetic clock technique
- c) Ossification test
- d) Blood type analysis

16) Consider the following statements regarding the role of the President of India in appointing the Chief Justice of India (CJI):

- **1.** The President can appoint the Chief Justice of India on the advice of the Prime Minister.
- **2.** The President can reject the recommendation of the outgoing CJI for any reason.
- 3. The President appoints the CJI based on the Memorandum of Procedure, which is a guideline document.

Which of the above statements is/are correct?

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

17) Consider the following statements about the Mekong River:

- **1.** The Mekong River is the longest river in Asia.
- **2.** The Mekong River originates from the Tibetan Plateau and flows into the Bay of Bengal.
- **3.** The entire length of the Mekong River is navigable year-round for large vessels.

How many of the above statements is/are incorrect?

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



18) Consider the following statements about the Citizenship Act, 1955 and Section 6A of the Act:

- 1. The Citizenship Act, 1955 bars illegal immigrants from obtaining citizenship in India.
- **2.** Section 6A was inserted to address the specific demographic challenges in Assam post-1971 due to illegal migration.
- 3. Citizenship in India is governed under Part II of the Indian Constitution, and matters of citizenship fall under the Union List.

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

19) Consider the following statements regarding the international legal framework for Geographical Indications (GIs):

- 1. The Paris Convention was the first international agreement to recognize Geographical Indications.
- **2.** GIs are protected under the TRIPS Agreement of the World Trade Organization (WTO).
- **3.** The Madrid Agreement is exclusively focused on the protection of GIs.

Which 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

20) Which of the following statements about Association for Democratic Reforms (ADR) is incorrect?

- a) ADR advocates for transparency in inner-party democracy and political party functioning.
- b) ADR has led campaigns to ensure political parties disclose their sources of funding.
- c) ADR is a partisan organization that aligns itself with specific political parties
- d) ADR promotes the empowerment of voters by providing them with information on political candidates' backgrounds.

21) Which of the following is a core objective of the Global Digital Compact (GDC)?

- a) Mandating national-level AI regulatory frameworks
- b) Providing economic sanctions for unethical AI use
- c) Establishing legally binding global data privacy laws
- d) Promoting global cooperation in technology governance

22) Consider the following statements about the Red Sea:

- **1.** The Red Sea separates the Arabian Peninsula from Africa.
- **2.** Egypt and Saudi Arabia are the only countries bordering the Red Sea.
- 3. The Red Sea connects to the Mediterranean Sea through the Suez Canal.

How many of the above statements is/are incorrect?

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

23) Consider the following statements about rare diseases in India:

- 1. A digital portal allows for crowdfunding to support treatment for rare disease patients.
- **2.** The Production Linked Incentive (PLI) scheme provides financial support for manufacturing orphan drugs in India.
- **3.** Customs duty waivers are available for imported rare disease drugs only when purchased for commercial purposes.

Which 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

24) The Bab el-Mandeb Strait is strategically important because it connects which two major water bodies?

- a) Mediterranean Sea and Atlantic Ocean
- b) Persian Gulf and Gulf of Aden
- c) Red Sea and Gulf of Aden
- d) Red Sea and Mediterranean Sea

25) Which of the following accurately describes the Chemical Vapor Deposition (CVD) method used for lab-grown diamond production?

- a) Uses a carbon-rich gas under controlled temperature and pressure to form diamonds
- b) Requires the use of graphite carbon in a vacuum chamber
- c) Involves the crystallization of silicon-based materials
- d) Utilizes high pressure and temperature similar to volcanic conditions

26) Which of the following is a key objective of the Square Kilometre Array Observatory?

- a) Launch space probes for Mars exploration
- b) Build communication satellites for global internet
- c) Search for new energy sources
- d) Detect and study gravitational waves

27) Which strait connects the Coral Sea and the Arafura Sea, and is crucial for maritime navigation between Australia and New Guinea?

- a) Taiwan Strait
- b) Davis Strait
- c) Cook Strait
- d) Torres Strait

28) Consider the following statements about the fluorescence properties of Fluorescent Nanodiamonds (FNDs):

- 1. FNDs emit light at a higher frequency than the light they absorb.
- **2.** FNDs have a longer fluorescence lifespan compared to other materials.
- **3.** FNDs can be used in quantum technologies due to their unique optical properties.

How many of the above statements is/are incorrect?

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



29) Consider the following statements about iron ore extraction in India:

- **1.** Bailadila mines in Chhattisgarh are known for high-grade iron ore.
- **2.** The majority of India's iron ore reserves are hematite, while magnetite reserves are comparatively lower.
- **3.** India's iron ore mines are located primarily in coastal areas for easy export.

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 about the difference between broadband and broadcast:

- Broadband provides high-speed internet access and allows for two-way communication.
- Broadcast is primarily used for transmitting content like TV and radio signals to a large audience.
- Both broadband and broadcast enable real-time two-way communication for multimedia content.

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

31) Consider the following statements regarding Chhatrapati Shivaji Maharaj:

- 1. He was the first ruler to establish a standing army in India.
- 2. He implemented guerrilla warfare tactics effectively against the Mughals.
- 3. His administration was highly centralized, similar to the Mughal Empire.

How many of the above statements are correct?

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

32) Which of the following ocean currents influence the Andaman Sea's climate and marine ecosystem?

- a) Agulhas Current
- b) North Equatorial Current
- c) Benguela Current
- d) Humboldt Current

33) Which of the following best describes the primary objective of the Naxalite movement when it originated in Naxalbari, West Bengal?

- a) To promote communal harmony
- b) To demand constitutional reforms
- c) To redistribute land and resources to oppressed communities
- d) To impede industrialization in tribal areas

34) Consider the following statements about the flora of Eturnagaram Wildlife Sanctuary:

1. The sanctuary is dominated by tropical rainforests with evergreen species.

- 2. Teak and bamboo are commonly found in the sanctuary's dry deciduous forests.
- **3.** The sanctuary's flora is predominantly influenced by mangrove ecosystems.

How many of the above statements is/are correct?

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

35) Consider the following statements about the National Agriculture Code (NAC):

- **1.** The NAC will provide crop-specific standards for paddy, wheat, oilseeds, and pulses.
- **2.** The NAC exclusively focuses on organic farming practices and disregards other agricultural methods.
- 3. The NAC aims to enhance sustainability and introduce modern farming techniques like SMART farming and traceability.

How many of the above statements is/are correct?

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

36) The Global Digital Compact (GDC) was adopted during which significant UN event?

- a) UN World Digital Summit
- b) UN Sustainable Development Goals Summit
- c) UN 'Summit of the Future'
- d) UN General Assembly

37) Consider the following statements about the PM-MITRA Scheme:

- 1. PM-MITRA aims to create world-class industrial infrastructure for the textile industry.
- 2. The scheme establishes integrated textile parks to attract investments and boost exports.
- **3.** It focuses solely on traditional textile manufacturing methods and local markets.

How many of the above statements is/are incorrect?

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

38) Consider the following statements about the role of slag in artificial ground:

- 1. Slag can mimic natural geological processes by forming sedimentary rock through lithification.
- 2. The process of slag lithification can sequester carbon dioxide, reducing atmospheric greenhouse gas levels.
- **3.** Slag use in artificial ground contributes to increased soil acidity, hindering plant growth.

Which of the above statements is/are correct?

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



Which of the following seas is located between Turkey and Russia?

- a) Caspian Sea
- b) Red Sea
- c) Mediterranean Sea
- d) Black Sea

40) Consider the following statements regarding lab-grown diamonds (LGDs):

- 1. LGDs are created in laboratories using different processes than those involved in the formation of natural diamonds.
- 2. The Chemical Vapor Deposition (CVD) method is used to grow LGDs at temperatures around 800°C.
- 3. LGDs are chemically different from natural diamonds due to their artificial creation.

How many of the above statements is/are correct?

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

41) Match the following Panchayati Raj-related Committees with their recommendations:

COMMITTEE NAME	RECOMMENDATION
A) BALWANT RAI	1) Role of Zilla Parishads in rural
MEHTA	development
B) ASHOK MEHTA	2) Constitutional status for PRIs
C) GVK RAO	3) Three-tier Panchayati Raj system
D) LM SINGHVI	4) Two-tier Panchayati Raj structure

Select the correct option:

- a) A-2, B-3, C-4, D-1
- b) A-1, B-2, C-3, D-4
- c) A-3, B-4, C-1, D-2
- d) A-4, B-3, C-1, D-2

42) Consider the following statements regarding Constitutional Morality:

- Assertion (A): Constitutional Morality is essential for safeguarding individual rights in a diverse democracy like India.
- **Reason (R):** It ensures that governance is based on popular opinion rather than constitutional values.

Which one 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.

43) Consider the following statements regarding Agricultural and Processed Food Products Export Development Authority (APEDA)'s export initiatives:

- **1.** APEDA has the exclusive authority to regulate tea and coffee exports.
- **2.** APEDA has established the ANARNET system for tracking dairy product exports.
- **3.** APEDA supports farmers and exporters by promoting GI-tagged agricultural products in global markets.

How many of the above statements are correct?

- a) Only one
- b) Only two

- c) All three
- d) None

44) Consider the following statements regarding the independence of the Election Commission of India (ECI):

- 1. The salaries and allowances of the CEC and ECs are charged directly from the Consolidated Fund of India.
- **2.** The government has the power to remove Election Commissioners through an executive order without parliamentary approval.
- **3.** The Election Commission can independently amend the Representation of the People Act, 1951, without Parliament's approval.

How many of the above statements are incorrect?

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

45) Consider the following statements regarding the DICGC deposit insurance system:

- 1. The insurance premium charged by DICGC is uniform across all banks, regardless of their financial condition.
- **2.** Depositors can claim compensation from DICGC independently without waiting for bank liquidation.

Which of the above statements is/are correct?

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

46) Consider the following battles fought by Chhatrapati Shivaji Maharaj:

- 1. Battle of Pratapgad
- 2. Battle of Palkhed
- 3. Battle of Purandar
- 4. Battle of Sinhagad

How many of the above battles were personally led or involved by Shivaji Maharaj?

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

47) Which of the following measures can prevent an MP from losing their seat under Article 101(4)?

- a) Applying for leave of absence from the Committee on Members' Absence
- b) Requesting an exemption from the Election Commission of India
- c) Seeking permission from the Prime Minister's Office $\,$
- d) Challenging the decision in the Supreme Court before the 60-day mark

48) Consider the following economic activities in the Andaman Sea:

- 1. Fishing industry, including tuna and deep-sea fisheries
- **2.** Hydrocarbon exploration for oil and natural gas
- **3.** Coral reef mining for construction materials

How many of the above activities are legally permitted under India's environmental laws?



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

49) Consider the following statements regarding the implementation of the National Credit Framework (NCrF):

- 1. The NCrF is compulsory for all higher education institutions in India.
- **2.** It allows for the flexible transfer of credits across various educational streams.
- **3.** The NCrF promotes experiential learning through activities like on-the-job training and apprenticeships.
- **4.** It emphasizes the integration of performing arts and social work into the credit system.

How many of the above statements is/are correct?

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

50) What is the main source of power in Wave Energy Conversion systems?

- a) Gravitational pull from the Moon
- b) Salt concentration difference between freshwater and seawater
- c) Temperature difference between surface and deep water
- d) Kinetic energy from ocean waves



