WEEKLY QUIZ

DATE: 30th Dec-5th Jan

- 1. Which of the following factors poses the most significant challenge to the widespread adoption of satellite-based in-flight internet technology?
 - a) Signal latency due to geostationary satellite positioning
 - b) Interference from ground-based cellular towers
 - c) Limited compatibility with next-generation aircraft systems
 - d) High data compression reducing internet quality
- 2. Consider the following statements:
 - 1. Sree Narayana Guru promoted inter-caste marriages to combat caste-based discrimination.
 - 2. He actively supported the Vaikom Satyagraha, which aimed to achieve temple entry rights for oppressed communities.
 - 3. His teachings included the abolition of all forms of religious practices.

How many of the above statements is/are correct?

- a) Only one
- b) Only two
- c) All three
- d) None
- 3. Which of the following challenges does Project VISTAAR aim to address most directly?
 - a) The lack of mechanization in Indian agriculture
 - b) Gaps in the dissemination of accurate and timely agricultural information
 - c) Fragmentation of landholdings across India
 - d) Post-harvest infrastructure bottlenecks
- 4. Which of the following is the most distinguishing feature of the Open Data Kit (ODK) platform?
 - a) Support for cloud-based data analysis
 - b) Integration with blockchain for secure data storage
 - c) Offline data collection capabilities in remote areas
 - d) Real-time GPS tracking during data submission
- 5. Consider the following statements about satellite-based in-flight internet:
 - 1. It provides seamless coverage over oceans and remote areas.
 - 2. Signals are transmitted directly from satellites to passenger devices.
 - 3. It is more suitable for long-haul international flights than Air-to-Ground (ATG) in-flight internet systems. 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 injectable hydrogels:
 - 1. They are designed to release drugs in response to specific environmental triggers.
 - 2. They improve drug bioavailability at the tumor site.
 - 3. They require continuous external stimuli for drug release. How many of the above statements is/are correct?
 - a) Only one
 - b) Only two
 - c) All three
 - d) None
- 7. Consider the following statements about Project VISTAAR:
 - 1. It provides access to government schemes related to agriculture and rural development.

- 2. It focuses on integrating sustainable and climate-resilient farming practices.
- 3. It is exclusively implemented by the Ministry of Agriculture and Farmers' Welfare.

How many of the above statements is/are incorrect?

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

8. The Ramesh Chand Committee was formed primarily to:

- a) Assess the impact of MSP (Minimum Support Price) on inflation
- b) Develop a roadmap for doubling farmers' income
- c) Transition from the Wholesale Price Index (WPI) to the Producer Price Index (PPI)
- d) Evaluate India's agricultural export policies

9. Which of the following is not a feature of the Producer Price Index (PPI)?

- a) Tracks price changes before goods reach consumers
- b) Includes services sector
- c) Adheres to the System of National Accounts (SNA)
- d) Measures changes in consumer purchasing power

10. The Torrijos-Carter Treaties primarily aimed to:

- a) Establish joint U.S.-Panama control over the Panama Canal
- b) End all U.S. military presence in Panama
- c) Establish the Panama Canal as a tax-free trade zone
- d) Transfer full control of the Panama Canal to Panama by a specified date

11. Consider the following statements about Pradhan Mantri Fasal Bima Yojana (PMFBY):

- 1. It provides coverage for yield losses caused by natural calamities.
- 2. Farmers must pay 10% of the premium for horticultural crops.
- 3. Satellite technology is used for yield estimation. Which of the above statements are correct?
 - a) 1 and 2 only
 - b) 2 and 3 only
 - c) 1 and 3 only
 - d) 1, 2, and 3

12. Consider the following statements about incineration:

- 1. It involves controlled combustion of waste.
- 2. It generates energy in the form of heat or electricity.
- 3. It is effective in reducing wet waste. Which of the above statements are correct?
 - a) 1 and 2 only
 - b) 2 and 3 only
 - c) 1 and 3 only
 - d) 1, 2, and 3

13. Which of the following accurately distinguishes 6th generation fighter jets from their predecessors?

- a) Introduction of stealth design
- b) Incorporation of multi-role capabilities
- c) Use of afterburners for supersonic speeds
- d) Development of hypersonic capabilities and AI integration



14. Which of the following is a key goal of the "Year of Reforms" initiative in India?

- a) Achieving hypersonic capability in defense
- b) Modernizing India's agriculture sector
- c) Introducing autonomous judiciary reforms
- d) Streamlining defense procurement processes

15. Consider the following statements about the India Meteorological Department (IMD):

- 1. It is responsible for short-term and long-term weather forecasts.
- 2. It operates under the Ministry of Environment, Forest, and Climate Change.
- 3. It conducts research on monsoon dynamics and climate change. Which of the above statements are correct?
 - a) 1 and 2 only
 - b) 2 and 3 only
 - c) 1 and 3 only
 - d) 1, 2, and 3

16. Consider the following statements about IMD's regional centers:

- 1. They are responsible for localized weather forecasts.
- 2. They operate independently from the central IMD headquarters.
- 3. They provide sector-specific weather services for agriculture and aviation.

Which of the above statements are correct?

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

17. What type of waste is least suitable for incineration?

- a) High-calorific-value plastics
- b) Wet organic waste
- c) Hazardous biomedical waste
- d) Paper and cardboard

18. Consider the following statements about incineration processes:

- 1. It reduces the volume of waste by approximately 90%.
- 2. It completely eliminates the need for landfills.
- 3. It can recover energy in the form of electricity or heat. Which of the above statements 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 about nitrate contamination mitigation strategies:

- 1. Crop rotation and cover cropping reduce nitrate leaching.
- 2. Reverse osmosis is an effective method for nitrate removal from drinking water.
- 3. Constructed wetlands increase nitrate levels in water bodies. Which of the above statements are correct?
 - a) 1 and 2 only
 - b) 2 and 3 only
 - c) 1 and 3 only
 - d) 1, 2, and 3

20. Consider the following statements about the Saraswati River:

- 1. It is mentioned in both the Rigveda and Mahabharata.
- 2. It originates near Kailash Mansarovar in the Himalayas.
- 3. It flows through present-day Gujarat, Haryana, and Rajasthan. Which of the above statements are correct?
 - a) 1 and 2 only
 - b) 2 and 3 only
 - c) 1 and 3 only
 - d) 1, 2, and 3

21. Consider the following statements regarding a Private Member's Bill:

- 1. It can only be introduced by MPs from the opposition parties.
- 2. A Private Member's Bill, if rejected, does not affect the government's stability.
- 3. Discussion of such Bills is limited to specific days in Parliament. How many of the above statements is/are correct?
 - a) Only one
 - b) Only two
 - c) All three
 - d) None

22. Consider the following statements about Exercise Surya Kiran:

- 1. It is an annual bilateral exercise between India and Nepal.
- 2. The exercise primarily focuses on maritime security and counterpiracy operations.
- 3. It includes training in jungle warfare and disaster response. How many of the above statements is/are correct?
 - a) Only one
 - b) Only two
 - c) All three
 - d) None

23. What is the primary reason for a belly landing of Aircraft?

- a) Pilot error during approach.
- b) Deliberate decision during routine landings.
- c) Landing gear malfunction or emergency conditions.
- d) Structural flaws in the fuselage design.

24. What is the primary focus of Google's Willow quantum processor?

- a) Enhancing artificial intelligence applications.
- b) Increasing data storage capacity.
- c) Improving quantum error correction and scalability.
- d) Developing room-temperature quantum computing.

25. Which of the following is true regarding the geographic location of Trinidad and Tobago?

- a) It is located in the Pacific Ocean near the coast of South America.
- b) It is a landlocked country in South America.
- c) It lies between the Indian Ocean and the Arabian Sea.
- d) It is an island nation in the Caribbean, located in the Atlantic Ocean.

26. Which of the following is the primary goal of NASA's Kessler Syndrome Mitigation efforts?

- a) To develop reusable launch vehicles for space missions.
- b) To regulate international cooperation on space missions.
- c) To prevent cascading collisions in orbit by limiting debris generation.
- d) To remove defunct satellites and large debris from orbit.

27. Consider the following statements regarding the Air Independent Propulsion System (AIP):

- 1. AIP technology is exclusively used in nuclear submarines.
- 2. AIP systems carry liquid oxygen to enable underwater operations.
- 3. AIP reduces the detection vulnerability of submarines.
- 4. The AIP system is less compact compared to conventional dieselelectric systems.
 - How many of the above statements is/are correct?
 - a) Only one
 - b) Only two
 - c) Only three
 - d) All four

28. Consider the following statements about the procedure for a Private Member's Bill:

- 1. It requires a one-month notice before introduction in the House.
- 2. The Bill can be referred to a parliamentary committee for detailed examination.
- 3. It must be approved by the President before introduction in Parliament.
 - Which of the above statements are correct?



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

29. Consider the following statements regarding superconducting qubits in the Willow processor:

- 1. They operate at near absolute zero temperatures.
- 2. They enhance coherence time, enabling longer computations.
- 3. They use photonic states for quantum information processing. Which of the above statements are correct?
 - a) 1 and 2
 - b) 2 and 3
 - c) 1 and 3
 - d) 1, 2, and 3

30. Which of the following is critical for preventing an aircraft from flipping during a belly landing?

- a) Rapid descent with full throttle.
- b) Complete shutdown of aerodynamic surfaces.
- c) Level alignment with wings parallel to the ground.
- d) Full deployment of the landing gear.

31. Consider the following statements regarding Norovirus infections:

- 1. Norovirus primarily infects individuals through vector-borne transmission from animals.
- 2. High-risk locations for Norovirus outbreaks include isolated rural areas with sparse populations.
- 3. Norovirus infections occur exclusively in cold climates. How many of the above statements is/are correct?
 - a) Only one
 - b) Only two
 - c) All three
 - d) None

32. What makes the Fishing Cat a significant species for wetland ecosystems?

- a) It acts as an indicator species for wetland health.
- b) It is the apex predator in all wetland ecosystems.
- c) It exclusively feeds on aquatic plants.
- d) It contributes to pollination in mangrove ecosystems.

33. What was the primary focus of the Carter Doctrine?

- a) Promoting nuclear disarmament in the Middle East
- b) Advocating for peaceful resolution of Cold War conflicts
- c) Establishing diplomatic ties with the Soviet Union post-Afghanistan invasion
- d) Asserting U.S. willingness to use military force to defend its interests in the Persian Gulf

34. Consider the following statements about the H-1B visa:

- 1. The H-1B visa is applicable only to workers in the IT sector.
- 2. Employers must prove a lack of available qualified U.S. workers to hire H-1B visa holders.
- 3. H-1B visa holders can work for multiple employers without restrictions.
 - 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 regarding Vembanad Lake's significance:

- 1. It is the largest backwater ecosystem in India.
- 2. The Nehru Trophy Boat Race is held annually on its waters.
- 3. It is separated from the Arabian Sea by the Western Ghats. How many of the above statements is/are correct?
 - a) Only one
 - b) Only two

- c) All three
- d) None

36. What is the primary advantage of an Air Independent Propulsion (AIP) system for submarines?

- a) Allows submarines to operate at higher speeds underwater
- b) Reduces the need for conventional fuel in submarines
- c) Improves surface visibility of submarines for better navigation
- d) Enables submarines to operate underwater without surfacing for extended durations

37. What is the primary objective of the World Audio Visual Entertainment Summit (WAVES)?

- a) To address global climate change through media
- b) To regulate intellectual property laws in the entertainment industry
- c) To promote traditional cultural heritage exclusively
- d) To position India as a global leader in the media and entertainment industry

38. Consider the following statements regarding the Parker Solar Probe:

- 1. The Parker Solar Probe is part of NASA's Living with a Star program.
- 2. The probe was designed to explore the magnetic fields of Earth's atmosphere.
- 3. The data gathered is crucial for advancing space weather forecasting.
 - How many of the above statements is/are correct?
 - a) Only one
 - b) Only two
 - c) All three
 - d) None

39. Consider the following statements regarding Scorpene class submarines:

Statement-I: Scorpene class submarines are exclusively nuclear-powered vessels

Statement-II: They are designed to accommodate Air Independent Propulsion (AIP) systems as upgrades.

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

40. Where is the Coringa Wildlife Sanctuary located, and what is it known for?

- a) Tamil Nadu; famous for grassland ecosystems
- b) Andhra Pradesh; supports a thriving mangrove ecosystem
- c) Kerala; home to extensive freshwater lakes
- d) Odisha; a critical habitat for Olive Ridley turtles

41. What is the primary objective of the SpaDeX Mission?

- a) Deployment of communication satellites
- b) Establishment of a geostationary orbit for surveillance
- c) Demonstration of rendezvous, docking, and undocking of two spacecraft
- d) Testing solar power generation in space

42. Consider the following statements about UNESCO's National Inventory of Intangible Cultural Heritage:

- 1. It aims to safeguard cultural expressions endangered by globalization.
- 2. It only includes practices that are actively supported by governments.
- 3. It requires alignment with principles of sustainable development. Which of the above statements are correct?
 - a) 1 and 2
 - b) 1, 2, and 3
 - c) 2 and 3
 - d) 1 and 3

43. Consider the following statements about the Upper Siang Multipurpose Project:

- 1. It aims to generate hydropower and mitigate floods.
- 2. It is located near the Dibang River in Assam.
- 3. It involves collaboration between National Hydroelectric Power Corporation (NHPC) and North Eastern Electric Power Corporation Limited (NEEPCO).
- 4. Its reservoir is designed to maintain river flow during lean seasons. Which of the above statements are correct?
 - a) 1 and 3
 - b) 2, 3, and 4
 - c) 1, 3, and 4
 - d) 1, 2, and 4

44. The recently discovered Sanskrit inscription in Gilgit, Pakistan-Occupied Kashmir, is associated with which script?

- a) Sharada script
- b) Grantha script
- c) Kharosthi script
- d) Brahmi script

45. Consider the following statements regarding the features of the India-Australia Economic Cooperation and Trade Agreement:

- 1. The agreement excludes trade in new areas such as turbojets and gold-studded diamonds.
- 2. The agreement provides preferential market access for key goods, including textiles, chemicals, and agriculture products.
 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 statements regarding Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD):

- 1. It is caused exclusively by high cholesterol levels.
- 2. Advanced MASLD may progress to hepatocellular carcinoma.
- 3. MASLD has no connection with cardiovascular diseases. How many of the above statements is/are correct?
 - a) Only one
 - b) Only two
 - c) All three
 - d) None

47. Which strait connects the Crimea Peninsula to mainland Russia?

- a) Bosporus Strait
- b) Gibraltar Strait
- c) Dardanelles Strait
- d) Kerch Strait

48. Consider the following statements:

- 1. BBIN energy grid facilitates trade connectivity between India, Myanmar, and Bangladesh.
- 2. India supports e-governance projects in neighboring countries to boost trade facilitation.
- 3. The Kaladan Multimodal Project includes both waterways and roadways.
 - How many of the above statements is/are correct?
 - a) Only one
 - b) Only two
 - c) All three
 - d) None

49. Consider the following statements regarding Renewable Energy Certificates (REC):

Statement-I: India's Renewable Energy Certificates (REC) mechanism allows industries to meet renewable energy compliance without directly sourcing renewable power.

Statement-II: REC mechanisms were introduced to promote renewable energy deployment and ensure market-driven compliance flexibility.

- 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

50. Consider the following statements regarding India's association with UNESCO:

- 1. India is a current member of UNESCO's Intangible Cultural Heritage (ICH) Committee.
- 2. The Ministry of External Affairs is responsible for preparing nomination dossiers for the UNESCO Representative List.
- 3. The Archaeological Survey of India (ASI) is the nodal office for UNESCO's Intangible Cultural Heritage matters. How many of the above statements is/are correct?
 - a) Only one
 - b) Only two
 - c) All three
 - d) None

