

**NARUMALAR ACADEMY – ONLINE COACHING CENTRE**

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**PGTRB – GEOGRAPHY**

**1. Which agricultural theory explains the concentric land-use zones around a central market based on transport costs?**

- A) Weber's Theory of Industrial Location
- B) Von Thünen's Model
- C) Losch's Central Place Model
- D) Rostow's Stages of Growth

**Correct Answer: B) Von Thünen's Model**

**Explanation:** Von Thünen's agricultural model (1826) explains land-use in concentric zones around a market, determined by transportation cost and land rent.

**2. The \_\_\_\_ climate classification emphasizes vegetation as the basis for delineating climatic regions.**

- A) Köppen
- B) Thornthwaite
- C) Trewartha
- D) Holdridge

**Correct Answer: A) Köppen**

**Explanation:** Köppen's classification is vegetation-based, correlating temperature and precipitation with natural vegetation distribution.

**3. Assertion (A): The Green Revolution in India led to regional disparities. Reason (R): It was primarily confined to irrigated, high-input regions like Punjab and Haryana.**

- A) Both A and R are true, and R is the correct explanation of A.
- B) Both A and R are true, but R is not the correct explanation of A.
- C) A is true, R is false.
- D) A is false, R is true.

**Correct Answer: A) Both A and R are true, and R is the correct explanation of A.**

**Explanation:** The Green Revolution benefited regions with irrigation and infrastructure, neglecting rainfed states, thus increasing disparity.

**4. Match the following concepts with their proponents:**

- a) Heartland Theory – 1. Mackinder
- b) Rimland Theory – 2. Spykman
- c) Organic State Theory – 3. Ratzel
- d) Centripetal and Centrifugal Forces – 4. Hartshorne

Options:

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

**Correct Answer: A) a-1, b-2, c-3, d-4**

**Explanation:** Each theory corresponds to its classical proponent in political geography; Mackinder (Heartland), Spykman (Rimland), Ratzel (Organic State), Hartshorne (centripetal/centrifugal).

**5. Which agricultural region is characterized by high labor input, double-cropping, and dominance of rice cultivation?**

- A) Indo-Gangetic Plain
- B) Pampas of Argentina
- C) Prairies of North America
- D) Mediterranean Basin

**Correct Answer: A) Indo-Gangetic Plain**

**Explanation:** The Indo-Gangetic region is the heart of intensive subsistence farming with rice-wheat systems and very high cropping intensity.

**6. Which ocean current is warm and flows along the eastern coast of Africa?**

- A) Canary Current
- B) Benguela Current

- C) Agulhas Current
- D) Peru Current

**Correct Answer: C) Agulhas Current**

**Explanation:** The Agulhas Current is a warm western boundary current flowing southward along Mozambique and South Africa.

**7. The \_\_\_\_ model of urban land use describes cities as concentric rings expanding outward.**

- A) Sector Model
- B) Multiple Nuclei Model
- C) Concentric Zone Model
- D) Central Place Theory

**Correct Answer: C) Concentric Zone Model**

**Explanation:** Burgess's Concentric Zone Model explains urban growth in rings, with CBD at the center.

**8. Which economic concept is measured by the Lorenz Curve and Gini Coefficient?**

- A) Productivity
- B) Inequality
- C) Purchasing Power
- D) Trade Balance

**Correct Answer: B) Inequality**

**Explanation:** Lorenz curve and Gini index measure income or wealth inequality within a society.

**9. Assertion (A): Monsoon Asia has high agricultural intensity.**

**Reason (R): Population density is low and land-man ratio is high.**

- A) A true, R false
- B) A false, R true
- C) Both true and R explains A
- D) Both true but R not explanation

**Correct Answer: A) A true, R false**

**Explanation:** Monsoon Asia is agriculturally intense due to high population density, not low. Land-man ratio is actually low.

**10. Who proposed the concept of “Spatial Interaction and Gravity Model” in human geography?**

- A) Christaller
- B) Ullman
- C) Reilly
- D) Lösch

**Correct Answer: C) Reilly**

**Explanation:** William J. Reilly’s Law of Retail Gravitation (1931) is based on Newton’s gravity analogy in spatial interaction.

**11. The \_\_\_\_ desert is an example of a cold desert influenced by rain-shadow effect.**

- A) Kalahari
- B) Gobi
- C) Sahara
- D) Thar

**Correct Answer: B) Gobi**

**Explanation:** The Gobi Desert is a cold desert located in the rain shadow of the Himalayas and Altai ranges.

**12. Match the following agricultural types with their regions:**

- a) Plantation agriculture – 1. Assam
- b) Mediterranean agriculture – 2. California
- c) Dairy farming – 3. Netherlands
- d) Mixed farming – 4. France

Options:

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

**Correct Answer: A) a-1, b-2, c-3, d-4**

**Explanation:** Plantation (Assam tea), Mediterranean (California citrus), Dairy (Netherlands), Mixed farming (France).

**13. Which transport model emphasizes least cost location of industries considering material index and transportation cost?**

- A) Christaller's Central Place
- B) Weber's Industrial Location Theory
- C) Smith's Industrial Linkage Theory
- D) Lösch's Profit Maximization Model

**Correct Answer: B) Weber's Industrial Location Theory**

**Explanation:** Alfred Weber stressed minimizing transport and labor costs in industrial location.

**14. "ENSO affects Indian Monsoon variability." Choose the correct answer.**

- A) True, because El Niño weakens monsoon rainfall.
- B) True, because La Niña reduces rainfall.
- C) False, ENSO has no impact.
- D) False, only IOD impacts Indian Monsoon.

**Correct Answer: A) True, because El Niño weakens monsoon rainfall.**

**Explanation:** El Niño is associated with droughts in India; La Niña often brings stronger monsoon rains.

**15. The \_\_\_\_ index is used to measure the degree of urban primacy.**

- A) Hoover Index
- B) Rank-Size Rule
- C) Gini Index
- D) Entropy Index

**Correct Answer: B) Rank-Size Rule**

**Explanation:** Rank-Size rule compares actual city size distribution with expected order, showing urban primacy deviations.

**16. Assertion (A): Indian agriculture is predominantly subsistence-oriented. Reason (R): Commercial crops occupy the largest share of cultivated area.**

- A) Both A and R true, R explains A
- B) Both A and R true, R not explanation
- C) A true, R false
- D) A false, R true

**Correct Answer: C) A true, R false**

**Explanation:** Indian agriculture is still largely subsistence, as cereals dominate; commercial crops occupy limited area.

**17. Match the following oceanographic phenomena with their characteristics:**

- a) Upwelling – 1. Brings nutrients to surface
- b) El Niño – 2. Warming of Eastern Pacific
- c) Thermohaline circulation – 3. Driven by density differences
- d) Tsunami – 4. Caused by tectonic disturbances

Options:

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

**Correct Answer: A) a-1, b-2, c-3, d-4**

**Explanation:** Each phenomenon matches uniquely: Upwelling (nutrients), El Niño (warming), Thermohaline (density), Tsunami (tectonics).

**18. Who coined the term "Geopolitics" emphasizing spatial aspects of power?**

- A) Haushofer
- B) Mackinder
- C) Ratzel
- D) Mahan

**Correct Answer: A) Haushofer**

**Explanation:** Karl Haushofer, influenced by Ratzel, popularized the term "Geopolitik" in early 20th century Germany.

**19. The \_\_\_\_ scale is used to measure hurricane intensity.**

- A) Fujita
- B) Mercalli
- C) Saffir-Simpson
- D) Beaufort

**Correct Answer: C) Saffir-Simpson**

**Explanation:** Saffir-Simpson scale categorizes hurricanes (Category 1–5) based on wind speed and potential damage.

**20. The \_\_\_\_ concept in political geography emphasizes that “who rules East Europe commands the Heartland; who rules the Heartland commands the World Island.”**

- A) Rimland Theory
- B) Heartland Theory
- C) Organic State Theory
- D) Sea Power Theory

**Correct Answer: B) Heartland Theory**

**Explanation:** Mackinder’s Heartland dictum emphasized Eurasian control as the pivot for global supremacy.

**21. Which agricultural practice is characterized by shifting cultivation with short fallow periods, leading to soil degradation?**

- A) Intensive Subsistence with Rice Dominance
- B) Extensive Commercial Grain Farming
- C) Slash-and-Burn (Jhum)
- D) Mediterranean Farming

**Correct Answer: C) Slash-and-Burn (Jhum)**

**Explanation:** Shifting cultivation with shortened fallow cycles causes nutrient depletion and soil erosion, common in tropical uplands.

**22. The \_\_\_\_ index is used to measure the development of transport networks in terms of connectivity and efficiency.**

- A) Connectivity Index
- B) Detour Index
- C) Gamma Index
- D) Accessibility Index

**Correct Answer: C) Gamma Index**

**Explanation:** Gamma index evaluates transport connectivity as the ratio of actual edges to maximum possible edges in a network.

**23. Assertion (A): The Suez Canal has strategic geopolitical importance. Reason (R): It provides a shorter route between the Atlantic and Indian Oceans via the Arctic.**

- A) Both A and R are true, and R is correct explanation
- B) Both A and R are true, but R is not explanation
- C) A is true, R is false
- D) A is false, R is true

**Correct Answer: C) A is true, R is false**

**Explanation:** Suez Canal links Mediterranean and Red Sea, not via Arctic; its strategic importance lies in connecting Europe and Asia.

**24. Match the following economic theories with their focus:**

- a) Rostow's Theory – 1. Stages of growth
- b) Myrdal's Theory – 2. Cumulative causation
- c) Hirschman's Theory – 3. Unbalanced growth
- d) Perroux's Theory – 4. Growth poles

Options:

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

**Correct Answer: A) a-1, b-2, c-3, d-4**

**Explanation:** Rostow (linear stages), Myrdal (cumulative causation), Hirschman (unbalanced growth), Perroux (growth poles).

**25. Which of the following regions best represents a *polycentric urban region* in Europe?**

- A) London Metropolitan Area
- B) Randstad (Netherlands)
- C) Paris Basin
- D) Ruhr Valley (Germany)

**Correct Answer: B) Randstad (Netherlands)**

**Explanation:** Randstad is a polycentric urban system comprising Amsterdam, Rotterdam, The Hague, Utrecht, functioning as a mega-city region.

**26. Which transport phenomenon explains the dominance of nodal centers in global air routes?**

- A) Hub-and-Spoke Model
- B) Linear Corridor Model
- C) Central Place Theory
- D) Gravity Model

**Correct Answer: A) Hub-and-Spoke Model**

**Explanation:** Hub-and-Spoke system organizes global aviation through central hubs like Dubai, London, Singapore.

**27. The \_\_\_\_ scale measures wind force at sea, ranging from calm to hurricane.**

- A) Beaufort Scale
- B) Saffir-Simpson Scale
- C) Fujita Scale
- D) Mercalli Scale

**Correct Answer: A) Beaufort Scale**

**Explanation:** Beaufort Scale (0–12) measures wind intensity based on observed sea conditions.

**28. Assertion (A): Urban heat islands form due to surface modifications and anthropogenic heat release. Reason (R): Rural areas absorb more solar radiation than urban areas.**

- A) Both A and R true, R explains A

- B) Both A and R true, but R not explanation
- C) A true, R false
- D) A false, R true

**Correct Answer: C) A true, R false**

**Explanation:** Urban surfaces trap heat; rural areas absorb less due to vegetation cover and evapotranspiration.

**29. Match the following ocean currents with their type:**

- a) Kuroshio – 1. Warm current
- b) Canary – 2. Cold current
- c) Peru (Humboldt) – 3. Cold current
- d) Gulf Stream – 4. Warm current

Options:

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

**Correct Answer: A) a-1, b-2, c-3, d-4**

**Explanation:** Kuroshio and Gulf Stream (warm), Canary and Humboldt (cold).

**30. Who proposed the concept of “Political Pivot of Geography” highlighting Heartland’s global strategic role?**

- A) Spykman
- B) Mackinder
- C) Mahan
- D) Haushofer

**Correct Answer: B) Mackinder**

**Explanation:** Mackinder’s Heartland Theory (1904) identified Eurasia as the geopolitical pivot controlling global power.

**31. The \_\_\_\_ theory in climatology explains the relationship between latitude and precipitation through Hadley cell circulation.**

- A) Ferrel’s
- B) Bergeron’s

C) Walker's

D) Hadley's

**Correct Answer: D) Hadley's**

**Explanation:** Hadley cell circulation explains tropical rainfall patterns and subtropical deserts.

**32. The \_\_\_\_ oscillation explains the irregular warming of equatorial Pacific waters with significant global teleconnections.**

A) North Atlantic Oscillation

B) El Niño Southern Oscillation

C) Pacific Decadal Oscillation

D) Walker Oscillation

**Correct Answer: B) El Niño Southern Oscillation**

**Explanation:** ENSO is the key driver of climate variability affecting rainfall, monsoons, and global ocean-atmosphere systems.

**33. Assertion (A): Exclusive Economic Zone (EEZ) extends 200 nautical miles. Reason (R): It was defined under the UNCLOS agreement.**

A) Both A and R true, R explains A

B) Both A and R true, R not explanation

C) A true, R false

D) A false, R true

**Correct Answer: A) Both A and R true, R explains A**

**Explanation:** UNCLOS (1982) formalized EEZ as 200 nautical miles for coastal resource rights.

**34. Match the following urban models with their proponents:**

a) Sector Model – 1. Hoyt

b) Concentric Zone Model – 2. Burgess

c) Multiple Nuclei Model – 3. Harris & Ullman

d) Central Place Theory – 4. Christaller

Options:

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

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

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

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

**Correct Answer: A) a-1, b-2, c-3, d-4**

**Explanation:** Urban models: Sector (Hoyt), Concentric (Burgess), Multiple Nuclei (Harris & Ullman), Central Place (Christaller).

**35. Which phenomenon explains the oscillation of atmospheric pressure between the Indian and Pacific Oceans?**

- A) ENSO
- B) Walker Circulation
- C) Madden-Julian Oscillation
- D) Indian Ocean Dipole

**Correct Answer: B) Walker Circulation**

**Explanation:** Walker circulation links pressure variations between Indian and Pacific Oceans, driving ENSO patterns.

**36. The \_\_\_\_ desert in Chile is the driest place on Earth due to cold current and rain shadow.**

- A) Mojave
- B) Atacama
- C) Gobi
- D) Kalahari

**Correct Answer: B) Atacama**

**Explanation:** Atacama Desert remains extremely arid due to Humboldt Current and Andes rain shadow.

**37. Assertion (A): Hinterlands are essential for the growth of ports. Reason (R): Ports without productive hinterlands cannot sustain large trade volumes.**

- A) Both A and R true, R explains A
- B) Both A and R true, R not explanation
- C) A true, R false
- D) A false, R true

**Correct Answer: A) Both A and R true, R explains A**

**Explanation:** Ports thrive only with resource-rich hinterlands providing trade goods; otherwise, they decline.

**38. Match the following climatic classifications with their basis:**

- a) Thornthwaite – 1. Water balance & PET
- b) Köppen – 2. Vegetation & temperature-precipitation
- c) Strahler – 3. Air mass properties
- d) Trewartha – 4. Population-relevant modifications

Options:

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

**Correct Answer: A) a-1, b-2, c-3, d-4**

**Explanation:** Thornthwaite (PET), Köppen (vegetation), Strahler (air masses), Trewartha (population modifications).

**39. Which transport corridor is called the “Silk Road of the Sea” due to its trade dominance?**

- A) Trans-Siberian Corridor
- B) Panama Canal Route
- C) Malacca Strait Route
- D) Cape of Good Hope Route

**Correct Answer: C) Malacca Strait Route**

**Explanation:** Strait of Malacca connects Indian and Pacific Oceans, historically dominating Asian maritime trade.