



# All India Civil Services Coaching Centre

(Under the aegis of Government of Tamil Nadu)

## TEST BOOKLET

### Geography

Time Allowed: 2 Hours

Maximum Marks: 200

#### INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET
2. You have to enter your Name on the Test Booklet
3. This Test Book contains 100 items (questions). Each it comprises four responses (answers). You will select the response, which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response, which you consider the best. In any case, choose ONLY ONE response for each item.
4. You have to mark all your response ONLY on the separate sheet provided along with the Test Booklet.
5. All items Carry equal marks. There will be **penalty (negative marking)** for wrong answers marked by you in the Answer sheet.
6. There are four alternatives for the answers to every question. For each question for which a wrong answer has been given by the candidate, one third ( $\frac{1}{3}$ ) of the marks assigned to that question will be deducted as penalty.
7. If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will same penalty as above for that question.
8. If a question is left blank i.e., no answer is given by the candidate, there will be no penalty for that question.

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- Which of the following best describes the South Atlantic Anomaly?
  - It is an unusually weak spot in the Earth's Magnetic Field that allows charged particles from the Sun to dip closer to the Earth's surface than normal.
  - It is a name given to the remarkable change seen recently in the Atlantic Ocean's salinity.
  - It is the name given to the marked difference seen in overall temperature in the South Atlantic Ocean's surface and depths due to climate change.
  - It is an unusually weak spot in Earth's Gravitational Field near the South Atlantic that has caused various oceanic species to float on the water surface.
- Arrange the following islands/regions from North to South.
  - Paracel Island
  - Scarborough Shoal
  - Spratly IslandsSelect the correct answer using code given below:
  - 1-3-2
  - 1-2-3
  - 2-1-3
  - 2-3-1
- With reference to gas hydrates, consider the following statements:
  - Gas hydrates consist of molecules of natural gas.
  - Gas Hydrates are formed under high pressure and low temperature conditions.
  - Gas hydrates are found in deep water continental margins.Which of the statements given above is/are correct?
  - 1 and 2 only
  - 2 and 3 only
  - 1 and 3 only
  - 1, 2 and 3
- In drought prone and water deficit regions there is a need to promote "Dry land farming". In case of dry land farming which type of crop is usually preferred?
  - Crop with short period of harvest and long root.
  - Crop with long period of harvest and long root.
  - Crops with short period of harvest and short root.
  - Crop with long period of harvest and short root.
- With reference to the cyclones, consider the following statements:
  - The tropical cyclones affect a much larger area compared to extra tropical cyclones.
  - The wind velocity in tropical cyclones is much higher than that in extra tropical cyclones.
  - The tropical cyclones generally move from east to west but extra tropical cyclone moves from west to east.Which of the statements given above is/are correct?
  - 1 and 2 only
  - 2 and 3 only
  - 3 only

(d) 1, 2 and 3

6. With reference to the phenomenon of Inversion of Temperature, consider the following statements:

1. Ground Surface inversion requires cloudless and clear sky with long winter nights.
2. Frontal inversion is more prominent in the tropical regions of the world.
3. Temperature Inversion causes disappearance of prevailing fog and frost conditions.

Which of the statements given above is/are correct?

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

7. With reference to the fisheries of the world, consider the following statements:

1. The littoral countries with broader continental shelf have rich fishing zones.
2. The convergence zone of warm and cold currents is good for fishing activities.
3. Bottom trawling has been recommended as the most environment friendly process in the marine fish capture.

Which of the statements given above is/are correct?

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

8. With reference to the Peninsular rivers of India, consider the following:

1. Absence of meanders
2. Seasonal flow of the river
3. Relatively larger basin

Which of the above is/are general characteristics of these rivers?

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

(c) 1 and 3 only

(d) 1, 2 and 3

9. With reference to the Andaman and Nicobar Islands, consider the following statements:

1. Little Andaman in the south is separated from the Nicobar Islands by the Eight Degree Channel.
2. They are formed by above-sea extensions of submarine ridges of the Rakhine Mountains and the Patkai Range.
3. The highest elevation is at Saddle Peak on North Andaman.

Which of the statements given above are correct?

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

10. With reference to Indian Ocean Dipole, consider the following statements:

1. Its positive events are often associated with El Niño and negative events with La Niña.
2. If it is extreme positive it causes floods in the East African countries, stronger- than-normal Indian summer monsoon rainfall (ISMR), and droughts in Indonesia.

Which of the statement/s given above is/are correct?

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

11. Consider the following factors:

1. Increase in infiltration rate
2. Presence of eroded material in water
3. Melting of ice and snow
4. Storm Surge

Which of the above can contribute to floods in India?

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

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

12. Consider the following crops:

- 1. Musk Melon
- 2. Cow Pea
- 3. Cucumber

Which of the above is/are categorised as Zaid crops?

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

13. With reference to Duar regions, consider the following statements:

- 1. These are a region of north-eastern India at the foot of the east-central Himalayas.
- 2. The Sankosh River divided it into the Western and Eastern Duars.
- 3. The Eastern Duars are an important center of the tea industry.

Which of the statements given above is/are correct?

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

14. Consider the following states:

- 1. Madhya Pradesh
- 2. Jharkhand
- 3. Rajasthan

Arrange the following in the increasing order of the reserves of Copper ore found in the states?

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

15. With reference to India's neighbours, consider the following statements:

- 1. India shares shortest boundary with Afghanistan.

- 2. India shares maritime boundary with five countries.
- 3. Myanmar and Bhutan shares border with same number of Indian states.

Which of the statements given above are correct?

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

16. The Bnei Menashe community resides in which states of the India?

- 1. Sikkim
- 2. Mizoram
- 3. Manipur
- 4. Arunachal Pradesh
- 5. Nagaland

Select the correct option using the codes given below:

- (a) 3 and 4 only
- (b) 2 and 3 only
- (c) 4 and 5 only
- (d) 1 and 5 only

17. Consider the following statements.

- 1. Most of the east and north-east margins of the continents are covered by temperate evergreen and deciduous trees.
- 2. Mediterranean vegetation is most likely to be found in the west and south-west margins of the continents.

Which of the above is/are correct?

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

18. The adaptations that help guard a desert animal from the harsh and hot surroundings include storage of fat in

- 1. humps or tails
- 2. big ears
- 3. light-coloured coats
- 4. absence of sweat glands

Select the correct answer using the codes below.

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

19. Consider the following statements.

- 1. At the equator, the sun is directly overhead at noon on the two equinoxes.
- 2. The summer solstice occurs at the moment the earth's tilt toward/from the sun is at a maximum.

Which of the above is/are correct?

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

20. Landforms on earth evolve owing to which of these factors?

- 1. Movement of magma
- 2. Weathering
- 3. Erosion and deposition
- 4. Frost action

Select the correct answer using the codes below.

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

21. Which of the following cities lies in the Deccan traps?

- 1. Gulbarga
- 2. Kolhapur
- 3. Krishnagiri
- 4. Jhansi
- 5. Loni

Which of the above is/are correct?

- (a) 1 and 5 only
- (b) 2, 3, 4 and 5 only
- (c) 1, 2 and 3 only
- (d) 1, 2, 3 and 5 only

22. Which of the following factors lead to the creation of urban heat islands?

- 1. Deforestation
- 2. Concrete and asphalt structures
- 3. Vehicular emissions
- 4. Density of population

Select the correct answer using the codes below.

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

23. Consider the following statements.

- 1. Temperate grass is longer but much less nutritious than those of Tropical Savannas.
- 2. Temperate grasslands receive higher rainfall than the Savannas.
- 3. Temperate Grasslands are found in the mid-latitudinal zones and in the interior part of the continents, whereas Savannas can be found around the equator and extend till the tropics.

Select the correct answer using the codes below.

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

24. Consider the following about atmospheric layers.

- 1. Rainfall and hailstorm largely occur in the troposphere.
- 2. Stratosphere is the most ideal atmospheric layer for flying aeroplanes.
- 3. Light gases like helium and hydrogen float into the space from the exosphere.
- 4. Ionosphere helps in radio transmission as radio waves transmitted from the earth are reflected back to the earth by this layer.

Select the correct answer using the codes below.

- (a) 1 and 4 only

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

25. Consider the following about Glaciers.
1. Most of the world's glaciers exist in the polar regions.
  2. The Andes Mountain range in South America contains some of the world's largest tropical glaciers.
  3. About two percent of all the water on Earth is frozen in glaciers.
  4. Materials deposited by a retreating glacier results in glacial moraines and can result in a variety of landforms such as lakes.

Which of the above is/are correct?

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

26. Consider the following statements.
1. The Gakkel Ridge is a divergent tectonic plate boundary between the Arctic Plate and the Eurasian Plate.
  2. The Isthmus of Panama connects North America with South America.

Select the correct answer using the codes below.

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

27. Consider the following statements.
1. Generally, the warm ocean currents originate near the equator and move towards the poles.
  2. The Labrador Ocean current is a cold current while the Gulf Stream is a warm current.
  3. Ocean currents influence the temperature conditions of the area where they flow to.
  4. The areas where the warm and cold currents meet are usually poor in oxygen

content and thus4 in marine resources such as fisheries.

Select the correct answer using the codes below.

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

28. Consider the following about the geography of India.

1. The Ganges is the longest river originating in India.
2. The Palk Strait and Gulf of Mannar separate India from Sri Lanka to its immediate southeast.
3. The northernmost point of India, which is under Indian administration, is Indira Col, Siachen Glacier.

Select the correct answer using the codes below.

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

29. Why does only one side of the moon appears to us from the earth?

1. The rotation speed of the Moon on its axis roughly matches with that of the Earth.
2. The moon has a geoid shape and the earth has an axial tilt.
3. There is atmospheric refraction on earth whereas atmosphere is absent on Moon.

Select the correct answer using the codes below.

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

30. Consider the following statements.

1. Both oceanic crust and continental crust are less dense than the mantle, but oceanic crust is denser than continental crust.
2. Continental crust floats higher on the mantle compared to oceanic crust as it is less dense than the oceanic crust.

Which of the above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) None of the above

31. Consider the following about Durram Wheat, recently seen in news.

1. It is a non-commercial variety of wheat.
2. It can grow in the hot and dry conditions surrounding the Mediterranean Sea.
3. It is the second most cultivated species of wheat after bread wheat or the common wheat.

Select the correct answer using the codes below.

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

32. Afghanistan shares border with which of the following countries?

1. Turkmenistan
2. Iran
3. Tajikistan
4. China

Select the correct answer using the code given below

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

33. Consider the following statements.

1. Major rivers shared between India and Bangladesh are the Brahmaputra, Ganges, and Teesta.
2. The Kosi, Gandaki, and Mahakali rivers join Nepal with India.
3. Pakistan and Afghanistan do not share any common river basin.

Select the correct answer using the codes below.

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

34. Consider the following about the Aravalli ranges

1. The highest peak is Guru Shikharat.
2. Pipli Ghat, Dewair and Desuri passes are situated in these ranges.
3. They begin at Delhi and end in Ajmer.

Select the correct answer using the codes below.

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

35. The effectiveness of contour ploughing in containing soil decreases with

1. increase in slope gradient and length
2. rainfall intensity
3. the erodibility of the soil

Select the correct answer using the codes below.

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

36. Consider the following statements.

1. India is the largest commercial producer of silk.
2. India is the only country which produces all the five known commercial varieties of

silks -mulberry, tropical tasar, oak tasar, eri and muga.

Which of the above is/are correct?

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

37. Intercropping is used to produce a greater yield on a given piece of land by making use of resources or ecological processes that would otherwise not be utilized by a single crop. However, intercropping is uneconomical and undesirable for Rabi crops

- 1. because the weather gets too cold for sustaining multiple crops
- 2. such crops are cultivated on receding soil moisture

Which of the above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) None of the above

38. Consider the following statements.

- 1. Black soils are derivatives of trap lava.
- 2. Black soil can be found in the interior regions of Gujarat, Maharashtra, Karnataka, and Madhya Pradesh that are on the Deccan plateau and the Malwa Plateau.
- 3. Black soils develop wide cracks during dry season because of their high clay content.
- 4. The iron-rich granular structure of Black Soil makes them highly prone to wind and water erosion.

Select the correct answer using the codes below.

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

39. Consider the following statements.

- 1. At divergent boundaries, where crust is neither produced nor destroyed as the plates slide horizontally past each other.
- 2. The driving force behind plate tectonics is convection in the mantle.
- 3. The Mid-Atlantic ridge is an example of a divergent boundary.

Select the correct answer using the codes below.

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

40. With reference to Jet streams, consider the following statements.

- 1. Jet streams are bands of strong wind that generally blow from west to east all across the globe.
- 2. Jet streams form when warm air masses meet cold air masses in the atmosphere.
- 3. On an average, jet streams move above 500 miles an hour.

Select the correct answer using the codes below.

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

41. Consider the following statements.

- 1. The western cyclonic disturbances are weather phenomena of the winter months brought in India by the westerly flow from the Mediterranean region.
- 2. Western disturbances are important for the development of the Rabi crop, which includes the staple wheat in the northern regions of India.

Select the correct answer using the codes below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) None of the above



42. Why deserts are common in the western margins of continents in the subtropics?

1. Cold currents flow by the western margins of the continents making them largely devoid of rainfall.
2. The tropical easterly winds become dry by the time they reach the western margins of the continents

Which of the above is/are correct?

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

43. Which of the following rivers is/are the tributaries of Godavari?

1. Purna
2. Wardha
3. Musi
4. Penganga

Select the correct answer using the codes below.

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

44. Consider the following statements.

1. Hematite and magnetite are the most prominent of the iron ores found in India.
2. High grade iron ore deposits can be found in southwestern and western India, such as in the state of Goa or Karnataka.
3. Central Indian plateau does not host any iron reserves.

Select the correct answer using the codes below.

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

45. Consider the following statements about certain passes in the Western Ghats.

1. Senkota pass links Thiruvananthapuram and Madurai.
2. Pal Ghat links Kochi to Chennai.
3. Thal Ghat links Nasik to Mumbai.

Select the correct answer using the codes below.

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

46. Consider the following statements.

1. Most volcanoes and earthquakes in the world are located at plate margins.
2. Ring of Fire lies mainly along plate margins and is a result of plate tectonics.

Select the correct answer using the codes below.

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

47. The time taken by a flight to navigate around the earth is affected by the

1. latitude and longitude through which the plane is crossing
2. headwinds and tailwinds in the way of the flight

Which of the above is/are correct?

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

48. The adverse effects of mining and mineral processing industries include the

1. dissolution and transport of metals and heavy metals by run-off and ground water
2. acid rock drainage
3. retardation of the process of water filtration in the soil

Which of the above is/are correct?

- (a) 1 and 3
- (b) 2 and 3

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

- (b) 2 only
- (c) Both 1 and 2
- (d) None

49. Consider the following statements.

1. Petroleum can be found in fault traps between porous and non-porous rocks.
2. Petroleum can be trapped in the crest of the upfold in regions of folding.

Which of the above is/are correct?

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

50. Consider the following statements.

1. The Arctic and Antarctic Circles mark the maximum reach of the sun's rays at the solstices.
2. The Tropics of Cancer and Capricorn mark the locations where the rays of the noon sun are perpendicular to the ground at the solstices.
3. The Sun is visible to us slightly before the actual sunrise, and remains visible slightly after the actual sunset because of atmospheric refraction.

Select the correct answer using the codes below.

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

51. Consider the following about the joint conservation of mangroves and coral reefs.

1. Mangroves filter and trap excess sediment that could harm coral, and coral reefs protect shorelines where mangroves grow from excessive wave energy.
2. While coral reefs are affected by oil spills and oil related toxicity, mangroves are immune to both thus helping conserve coral reefs.

Which of the above is/are correct?

- (a) 1 only

52. Tides are largely affected by

1. Latitude of a region
2. Landmass distribution around the ocean
3. Thunderstorms

Select the correct answer using the codes below.

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

53. Consider the following features of a river course.

1. Streams meander freely forming natural levees and ox-bow lakes
2. Divides are broad and flat with lakes
3. Small tributaries flowing with gentle gradients

The above refer to which stage of a river?

- (a) Youth stage
- (b) Old stage
- (c) Mature Stage
- (d) Either (a) or (c)

54. Which of the following is/are accepted as evidence(s) for Sea floor spreading?

1. The sediments on the ocean floor are unexpectedly very thin.
2. The age of the rocks increases as one moves away from the ocean crest.
3. The ocean crust rocks are much younger than the continental rocks.

Which of the above is/are correct?

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

55. Which of the following illustrate the difference between India's west coast and east coast?

1. The western coast is rocky, unlike the eastern coast which is a low lying sedimentary coast.
2. Wave-cut platforms in front of sea cliffs are more prevalent in the western coast than the eastern coast.
3. The east coast is wider, with several large deltas, unlike the west coast.

Which of the above is/are correct?

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

56. Consider the following statements.

1. Despite being abundant at ground levels, oxygen is almost in negligible quantity at heights over hundred km from the earth.
2. Carbon dioxide and water vapour are found only up to twenty km from the surface of the earth.
3. Nearly all the mass of the atmosphere is confined to the height of thirty-two km from the earth's surface.

Select the correct answer using the codes below.

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

57. Consider the following statements about general rainfall patterns.

1. Rainfall usually goes on decreasing steadily from the equator towards the poles.
2. The coastal areas of the world receive greater amounts of rainfall than the interior of the continents.
3. The rainfall is greater over the landmasses of the world than on the ocean due to the prevalent wind circulations.
4. Between the latitudes 35-40 degrees north and south of the equator, the rain is

heavier on the western coasts and goes on decreasing towards the east.

5. Between 45-65 degrees north and south of equator, the rainfall is first received on the eastern margins of the continents and goes on decreasing towards the west.

Select the correct answer using the codes below.

- (a) 1 and 2
- (b) 1, 2, 4 and 5
- (c) 3, 4 and 5
- (d) 1, 2, 3, 4 and 5

58. Consider the following statements.

1. The tornado over the sea is called water sprouts.
2. cumulonimbus cloud producing thunder and lightning.
3. If there is insufficient moisture, a thunderstorm can generate dust storms.

Select the correct answer using the codes below.

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

59. Consider the following statements.

1. The Coriolis force acts perpendicular to the pressure gradient force, whereas the pressure gradient force is perpendicular to an isobar.
2. The higher the pressure gradient force, the more is the velocity of the wind and the larger is the deflection in the direction of wind due to the Coriolis force.

Select the correct answer using the codes below.

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

60. Consider the following statements.
1. Conduction, among other methods of heat transfer, is the most prominent in heating the lower layers of the atmosphere
  2. In middle latitudes, most diurnal (day and night) variation in daily weather are caused largely by conduction, rather than by advection or convection.
  3. In tropical regions, local summer winds, such as 'loo', result from widespread advection.

Select the correct answer using the codes below.

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

61. The amount and the intensity of insolation vary during a day, in a season and in a year. Which of these factors cause these variations in solar insolation?

1. Rotation of earth on its axis
2. Angle of inclination of the sun's rays
3. Transparency of the atmosphere
4. Configuration of land in terms of its aspect

Select the correct answer using the codes below.

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

62. Consider the following statements.

1. Although dust particles are generally concentrated in the lower layers of the atmosphere, convective air currents can transport them high up in the atmosphere.
2. Subtropical and temperate regions have higher concentration of dust particles compared to equatorial and polar regions due to the dry wind prevalent in the former.

Select the correct answer using the codes below.

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

63. "Cloud is a mass of minute water droplets or tiny crystals of ice formed by the condensation of the water vapour in free air at considerable elevations". In this context, consider the following statements:

1. Cirrus clouds are always white in colour.
2. Cumulus clouds look like cotton wool and they have a circular base.
3. Nimbus clouds are black or dark gray in colour.

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

64. Which of the following statements is/are correct regarding Igneous Rocks?

1. The process of cooling and solidification of magma happens either in the earth's crust or on the surface of the earth.
2. Large grains are produced as a result of the abrupt cooling of magma at the earth's surface.
3. Gabbro, breccia, and tuff are some of the examples of the igneous rocks.

Select the correct answer using the code given below:

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

65. Consider the following oceanic features and their characteristics:

1. Continental Shelf: Active volcanoes and strong earthquake
2. Continental Slope: Canyons and trenches
3. Deep-Sea Plain: flatter and smoothest regions

Which of the above pairs is/are correctly matched?

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

66. What are the results of El-Nino condition?

1. Westward-blowing trade winds weaken along the Equator
2. Decrease in the temperature of the water on the Peruvian coast
3. Reduction in the number of planktons and hence fishing in the Eastern Pacific

Select the correct answer using the codes given below:

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

67. Which of the following factors are responsible for the variations in insolation at the surface of the Earth?

1. Revolution of the earth around the sun
2. Rotation of earth on its axis
3. The angle of inclination of the sun's rays
4. Length of the day
5. Transparency of the atmosphere

Select the correct answer using the code given below:

- (a) 4 and 5 only
- (b) 2, 3, 4 and 5 only
- (c) 1, 2 and 3 only
- (d) 1, 2, 3, 4 and 5

68. The temperature in an atmospheric layer from which the Radio waves are reflected back to the Earth:

1. Increases with height
2. Decreases with height
3. Remains constant
4. First increases then decreases

Select the correct answer using codes given below:

- (a) 1 only
- (b) 1 and 2 only
- (c) 3 only
- (d) None of them

69. Which of the following does not come under Rapid Movements?

1. Solifluction
2. Earthflow
3. Mudflow
4. Debris Avalanche

Select the correct answer using codes given below:

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

70. Which of the following is/are the features of the Mass Movement?

1. It is a form of erosion made possible by gravity.
2. Mass movements are favoured by torrential rainfall, scarcity of vegetation, etc.
3. Weathering is not a pre-requisite for mass movement.

Select the correct answer using the codes given below:

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

71. Which of the following statements regarding the Ophiolites is incorrect?

- (a) Ophiolites are the pieces of oceanic plate that have been subducted under the continental plates.
- (b) Ophiolites in the geologic record provide evidence primarily of subduction zone tectonics.
- (c) Ophiolites may also contain fragments of mid-ocean ridge lithosphere.

(d) Several ophiolite belts may occur within a broad suture zone between continental blocks.

72. Geodynamo is a process by which a celestial body generates a magnetic field. What are the characteristics of the Earth so that it has a geodynamo?

1. Coriolis forces of the Earth cause convection currents to be spiral.
2. The liquid iron in the outer core is an excellent electrical conductor.
3. It has a solid (plasma) inner core.
4. It rotate steadily and the rotational speed of all the layers of the Earth is uniform.

Select the correct answer using the code given below:

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

73. Consider the following statements:

1. No lithosphere is destroyed or created, and nor mountain chains are built at transform boundaries.
2. Transform boundaries do not occur on the continental lithosphere.
3. A Strike-Slip Fault is an example of Transform Fault.

Which of the above statements is/are correct?

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

74. Which of the following statements correctly differentiates between the Terrestrial and the Jovian planets?

1. The Jovian planets are more spherical than the Terrestrial planets due to stronger gravity and faster rotation.
2. Mercury and Venus are referred to as inferior planets, because of their much less mass than others.

3. None of the terrestrial planets have rings, although can have the belts of trapped radiation.

Select the correct answer using the codes given below:

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

75. Consider the following statements:

1. Auroras are formed when electrically charged particles of solar wind ionize gases like oxygen and nitrogen from the Earth's atmosphere and thereby release of energy.
2. Hydrogen and helium atoms can produce blue and purple auroras when struck down by the solar wind.
3. Unlike Solar magnetic storms, auroras do not interfere with radio communications.

Which of the above statements is/are correct?

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

76. Which of the following best describes the term 'Moon Wobble'?

- (a) It is a new spacecraft sent into moon's orbit by Russia to explore its atmospheric conditions in detail.
- (b) It refers to fluctuations in moon's orbit which influences moon's gravitational pull and indirectly affects the flow and ebb of tides on the earth.
- (c) It refers to the changes witnessed on moon due to fluctuations in earth's orbit.
- (d) It is a theory which explains origin and evolution of the earth's only natural satellite.

77. Consider the following statements regarding difference between geysers and hot springs.

1. In hot springs, jet of water is usually emitted with an explosion while in geysers, the water rises to the surface without any explosion.
2. Geysers contain dissolved minerals which may be of some medicinal value while they are not found in hot springs.

Which of the above statements is/are correct?

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

78. Which of the following were the parts of Gondwanaland?

1. South America
2. North America
3. Madagascar
4. India
5. Arabia

Select the correct answer using the code given below:

- (a) 1, 3 and 4 only
- (b) 2 and 5 only
- (c) 1, 3, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

79. Consider the following methods:

1. Rocks extracted from mining areas
2. Meteors
3. Gravitation
4. Volcanic Eruption
5. Deep Ocean Drilling

Which of the above given methods are the direct sources to be used in the study of the interior of earth?

- (a) 2, 4 and 5 only
- (b) 3 and 5 only
- (c) 1, 2 and 4 only
- (d) 1, 4 and 5 only

80. Which of the following statements is/are correct regarding Monadnock?

1. It is an isolated hill of bedrock which stands above the general level of the surrounding area.
2. It is formed in humid, tropical regions.
3. It is made up of sedimentary rocks.

Select the correct answer using the code given below:

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

81. An orbital zone around every star where the conditions are just right for the life to possible is called 'circumstellar habitable zone'. Which of the following is not correct about this zone?

- (a) Temperature is optimum for the water to exist in all three states (solid, liquid and gas).
- (b) 'Hot winds of particles' from the star is absent in this zone.
- (c) These are the potential regions for exploration of liquid water.
- (d) All of the above.

82. With reference to the Fold Mountains, consider the following statements:

1. Fold mountains are the most common type of mountains in the world
2. They are mostly found on the margins of a continent and ocean.
3. They are mainly associated with igneous rocks.
4. Recurrent seismicity is a common feature of Fold Mountains.

Which of the above statements are correct?

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

83. Consider the following statements regarding the difference between high rocky coast and low sedimentary coast:

1. In the high rocky coasts, the coastline appears highly indented with extension of water into the land whereas in the low sedimentary coasts, coastline appears smooth with occasional incursions of water in the form of lagoons and tidal creeks.
2. Sea Cliffs are formed along the high rocky coast whereas marshes and swamps may abound along the low sedimentary coast.
3. The Indian West Coast is a high rocky retreating coast because the depositional forms dominate the west coast while the Indian East Coast is a low sedimentary coast because the erosional forms dominate the east coast.

Which of the statements given above is/are correct?

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

84. Consider the following statements regarding types of Mass Wasting:

1. Soliflucation is a highly fluid, high velocity mixture of sediment and water that has a consistency ranging between soup-like and wet concrete.
2. Slump occurs during the summer thaw when the water in the soil is trapped there by frozen permafrost beneath it.
3. Mudflows are a type of slide wherein downward rotation of rock or regolith occurs along a concave-upward curved surface (rotational slides).

Which of the statements given above is/are incorrect?

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

85. Consider the following:

1. Radioactivity
2. Rotational and Tidal Friction
3. Primordial Heat
4. Gravitational Force

Which of above given forces are responsible for generating energy to carry out endogenic geomorphic processes?

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

86. Consider the following statements regarding Oblique-slip faults

1. Oblique-slip faults includes component of both dip-slip and strike-slip faults.
2. These are caused by a combination of shearing and tension or compressional forces.
3. Many disastrous earthquakes are caused along the oblique slip.

Which of the above statements is/are correct?

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

87. Aeolian landforms are shaped by the wind. In this context, which of the following features take place in the erosion and deposition of sediment?

1. Sand dunes
2. Loess Deposits
3. Ventifact
4. Yardangs
5. Desert Pavement

Select the correct answer using the code given below:

- (a) 1, 2 and 5 only
- (b) 1, 3, 4 and 5 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3, 4 and 5



88. The Savannah Climate is a transitional type of climate found between the equatorial forest and the trade wind hot deserts. Consider the following statements regarding the same:

1. The Savannah climate is characterized by distinct wet and dry seasons.
2. The savannah landscape is typified by tall grass and short trees.
3. The prevailing winds of the region are the Trade Winds

Which of the above statements is/are correct?

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

89. Consider the following statements.

1. Seamounts are the submerged volcanoes with blunt tops.
2. Guyots are the eroded version of the seamounts.
3. Submarine canyons are found in the deep sea.

Which of the following statements is/are correct?

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

90. Which of the following statements about the Oceanic currents is/are correct?

1. There is a clear reversal of Indian Ocean currents in the winter and summer season.
2. Ocean currents follow the main direction of the planetary wind system.
3. They are influenced by the earth's rotation and density difference.

Select the correct answer from the codes given below:

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

91. Which of the following are the differences between Tropical and Extra-Tropical Cyclones?

1. A clear frontal system is present in extra-tropical cyclones but not in tropical cyclones.
2. Tropical cyclones can originate over both land and sea but extra-tropical cyclones originate only over the seas.
3. Tropical cyclones affect a much larger area as compared to the extra-tropical cyclone.
4. The extra tropical cyclones move from west to east but tropical cyclones move from east to west.

Select the correct answer using the code given below:

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

92. Consider the following statements regarding types of humidity:

1. Relative humidity is the measure of water vapor (moisture) in the air, regardless of temperature.
2. Specific Humidity is expressed as the amount of water vapor in the air as a percentage of the total amount that could be held at its current temperature.
3. Absolute humidity is the ratio of the amount of water vapor in the air to the amount of dry air in the area.

Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 2 only
- (c) 1 and 2 only
- (d) None of the above.

93. Consider the following statements:

1. A dry, warm summer with offshore trade winds.
2. Rainfall in winter with on-shore westerlies.
3. The climate is best suitable for wine production.

Which of the following climate type best suits the above characteristics?

- (a) Laurentian
- (b) British
- (c) China
- (d) Mediterranean

94. Consider the following statements with respect to the coastal plains in India:

- 1. The eastern coast is characterised by offshore bars, sea beaches and lagoons.
- 2. Coromandel Coast contains lakes, lagoons and backwaters locally called Kayals.
- 3. The sea coast of Tamil Nadu is known as the Coromandal coast.

Which of the above statements is/are correct?

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

95. Consider the following statements regarding the Godavari River system:

- 1. Its source is situated on Trimbak Hills in Maharashtra.
- 2. Navegaon National Park is located in its river basin.
- 3. Its tributaries are Wardha and Pranhita rivers.

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

96. Which of the following geological events have shaped the present drainage systems of Peninsular India?

- 1. Subsidence of the western flank of the Indian Peninsula.
- 2. Upheaval of the Himalayas when the northern flank of the Peninsular block was subjected to subsidence.

3. Slight tilting of the Peninsular block from south-east to the north-western direction.

Select the correct answer using the code given below:

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

97. Consider the following islands of Andaman & Nicobar Island group:

- 1. Netaji Subhash Chandra Bose Island
- 2. Swaraj Dweep
- 3. Shaheed Dweep
- 4. North Sentinel Island

Arrange the above given islands from north to south direction:

- (a) 1-4-3-2
- (b) 2-4-3-1
- (c) 2-3-1-4
- (d) 3-2-1-4

98. Which of the following statements are incorrect regarding Western Coastal Plains of India?

- 1. As compared to eastern coastal plain, the western coastal plain is broader and is an example of an emergent coast.
- 2. It has less number of ports and harbours as compared to eastern coastal plain.
- 3. It is broader in the middle and get narrower towards North and South.
- 4. The rivers flowing through this coastal plain do not form any delta.

Select the correct answer using the code given below:

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

99. Consider the following rivers:

1. Chip Chap Rive
2. Shyok River
3. Karakash River
4. Galwan River

The Depsang Plains are bounded by which of the rivers mentioned above?

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

100. Consider the following statements with respect to the geological structure of India:

1. North-eastern parts of the peninsular bocks are separated by the Malda fault in West Bengal from the Chotanagpur plateau.
2. Buldelkhand plateau is between Vindhyan ranges and Malwa plateau and south of Yamuna.
3. The Aravallis are the oldest fault mountains of India.

Which of the above statements is/are correct?

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