

**General Instructions :**

- (1) In Section A, question numbers 1 to 15 are Objective type multiple choice questions carrying 1 mark each. Attempt any 14.
- (2) In Section B, Question numbers 16 and 17 are Short Source Based and Graph Based questions respectively carrying 3 marks each.
- (3) In Section C, Questions numbers 18 and 22 are short answer questions carrying 3 marks each. Answers to these questions should not exceed 60-80 words.
- (4) In Section C, Question numbers 23-27 are long answer questions carrying 5 marks each. Answer to these questions should not exceed 120-150 words.
- (5) Question number 28 and 29 is related to location and labeling and Identification of geographical features on maps respectively, carrying 1 mark each. Outline map of India and World provided to you must be attached with your answer book.

**Section – A**

Choose the correct answer.

1 × 14 = 14

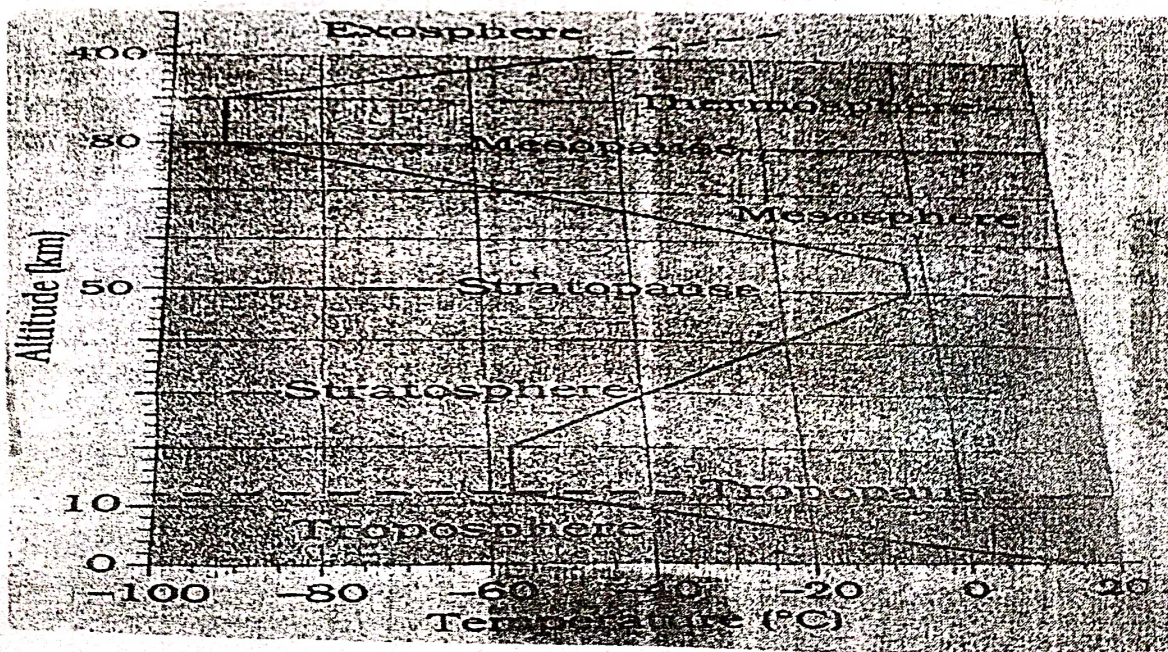
- 1 With increase in height the temperature decreases at a normal rate. It is called :
  - (a) Air drainage
  - (b) Earth radiation
  - (c) Normal lapse rate
  - (d) Inversion of temperature
- 2 Which one of the following scholars coined the term "Geography" :
  - (a) Herodotus
  - (b) Erathostenese
  - (c) Galileo
  - (d) Aristotle

- 3 Core is made up of which metal ?  
(a) Iron and Magnesium (b) Iron and Silicon  
(c) Nickel and Iron (d) Nickel and Magnesium
- 4 All earth materials having a sloping surface and tend to produce movement of matter in downslope direction. It is called :  
(a) Soil Erosion (b) Volcanism  
(c) Landslide (d) Slump
- 5 To what height is ozone found ?  
(a) 10 to 50 kilometer (b) 5 to 60 kilometer  
(c) 30 to 80 kilometer (d) 42 to 90 kilometer
- 6 Which one of the following are the highest cloud in the sky ?  
(a) Cirrus (b) Stratus  
(c) Nimbus (d) Cumulus
- 7 The distance between the earth and moon is minimum when the moon is in :  
(a) Aphelion (b) Perigee  
(c) Perihelion (d) Apogee
- 8 During photosynthesis, carbon dioxide combines with water in presence of sunlight to form :  
(a) Proteins (b) Amino Acids  
(c) Carbohydrates (d) Vitamins
- 9 When was convention of biodiversity at the Earth summit held ?  
(a) At Vianna in 1994 (b) At Rio de janerio, Brazil in 1992  
(c) At Atlanta in 1996 (d) At Rome in 1998
- 10 Which of the following is the largest river of peninsular India ?  
(a) Mahanadi (b) Godavari  
(c) Krishna (d) Sabarmati

11. What separates India from Srilanka ?  
 (a) Gulf of manner and Palk Strait (b) Bay of Hundson  
 (c) Arabian Sea (d) Indian Ocean
12. Which one of the following was the first biosphere reserve of India ?  
 (a) Nilgiri Biosphere (b) Nanda Devi Biosphere  
 (c) Sunderbans Biosphere (d) Gulf of Mannar Biosphere
13. Which soil is formed by the occurrence of volcanoes ?  
 (a) Alluvial soil (b) Black soil  
 (c) Red soil (d) Peaty soil
14. How do we measure the magnitude of earthquake ?  
 (a) Mercalli Scale (b) Richter Scale  
 (c) Seismograph (d) Measuring Scale
15. Upward and downward movement of ocean water is known as ?  
 (a) Waves (b) Ocean currents  
 (c) Tides (d) None of above

## Section -- B

16. Study the graph give below and answer the following : 1×3=3



- (1) Which is the lowest layer of atmosphere ? 1
- (a) Exosphere (b) Thermosphere  
(c) Mesosphere (d) Toposphere
- (2) What is the average height of atmosphere ? 1
- (a) 400 km (b) 50 km  
(c) 80 km (d) None of above
- (3) What separates mesosphere from thermosphere ? 1
- (a) Stratopause (b) Tropopause  
(c) Mesopause (d) Ionosphere

17 Source based question : 1×3 = 3

### Characteristics of Waves

**Wave crest and trough :** The highest and lowest points of a wave are called the crest and trough respectively.

**Wave height :** It is the vertical distance from the bottom of a trough to the top of a crest of a wave.

**Wave amplitude :** It is one-half of the wave height.

**Wave period :** It is merely the time interval between two successive wave crests or troughs as they pass a fixed point.

**Wavelength :** It is the horizontal distance between two successive crests.

**Wave speed :** It is the rate at which the wave moves through the water, and is measured in knots.

**Wave frequency :** It is the number of waves passing a given point during a one-second time interval.

- (1) The horizontal distance between two successive crests is called ..... : 1
- (a) Wavelength (b) Wave speed  
(c) Wave crest (d) Wave frequency

- (2) The highest point of a wave is called ..... : 1
- (a) Wave height (b) crest
- (c) Trough (d) None of above
- (3) The lowest point of wave is called ..... : 1
- (a) Wave height (b) crest
- (c) Trough (d) None of above

### Section – C

- 18 Differentiate between systematic approach and regional approach. 3
- Or**
- Differentiate between crust and core.
- 19 Explain the heating and the cooling mechanism of atmosphere. 3
- 20 What is IST ? What are its implications ? 3
- 21 Give features of Ganga river system. 3
- Or**
- Differentiate between Khadar and Bhangar.
- 22 Differentiate between precipitation and condensation. 3
- Or**
- What do you mean by soil degradation ? What are the negative impacts of soil degradation ?
- 23 Explain different types of volcanic landforms. 5
- 24 Explain the structure of atmosphere with the help of a diagram. 5
- 25 Explain in detail about nitrogen cycle. 5

**Or**

Differentiate between tropical evergreen forests and tropical deciduous forests.

- 26 Write the differences between Himalayan rivers and Peninsular rivers. 5
- 27 What is gully erosion ? How can it be prevented ? 5

Or

Explain about the heat budget of the earth.

- 28 MAP Based Questions : 5

On the given map of India, locate and label any five of the following :

- (1) River Ganga
- (2) Areas covered by black soil
- (3) River Brahmaputra
- (4) A biosphere reserve in Uttrakhand
- (5) Forest survey of India Head Quarter.
- (6) Area under mangrove forests.
- (7) Gulf of Mannar

- 29 With the help of the following key, identify the areas marked as A, B, C, D and E. 5

On the given outline map of World. Write the correct name of the place in the blank space given on the map :

- (i) Nilgiri Biosphere Reserve
- (ii) Area under mangrove forests
- (iii) Area under Alluvial Soil
- (iv) River Narmada
- (v) River Tapi