

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 During photosynthesis, carbon dioxide combines with water in presence of sunlight to form :
(a) Proteins (b) Amino Acids
(c) Carbohydrates (d) Vitamins
- 2 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

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- 3 Which of the following is the largest river of peninsular India ?
(a) Mahanadi (b) Godavari
(c) Krishna (d) Sabarmati
- 4 What separates India from Srilanka ?
(a) Gulf of manner and Palk Strait
(b) Bay of Hundson
(c) Arabian Sea
(d) Indian Ocean
- 5 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
- 6 Which soil is formed by the occurrence of volcanoes ?
(a) Alluvial soil (b) Black soil
(c) Red soil (d) Peaty soil
- 7 How do we measure the magnitude of earthquake ?
(a) Mercalli Scale (b) Richter Scale
(c) Seismograph (d) Measuring Scale
- 8 Upward and downward movement of ocean water is known as ?
(a) Waves (b) Ocean currents
(c) Tides (d) None of above
- 9 With increase in height the temperature decreases at a normal at rate. It is called :
(a) Air drainage (b) Earth radiation
(c) Normal lapse rate (d) Inversion of temperature
- 10 Which one of the following scholars coined the term "Geography" :
(a) Herodotus (b) Erathostenese
(c) Galileo (d) Aristotle

- 11 Core is made up of which metal ?
(a) Iron and Magnesium (b) Iron and Silicon
(c) Nickel and Iron (d) Nickel and Magnesium
- 12 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
- 13 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
- 14 The process of heating up of land through horizontal movement of heat is called :
(a) Conduction (b) Convection
(c) Advection (d) Air drainage
- 15 Which one of the following are the highest cloud in the sky ?
(a) Cirrus (b) Stratus
(c) Nimbus (d) Cumulus

Section – B

- 16 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.

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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

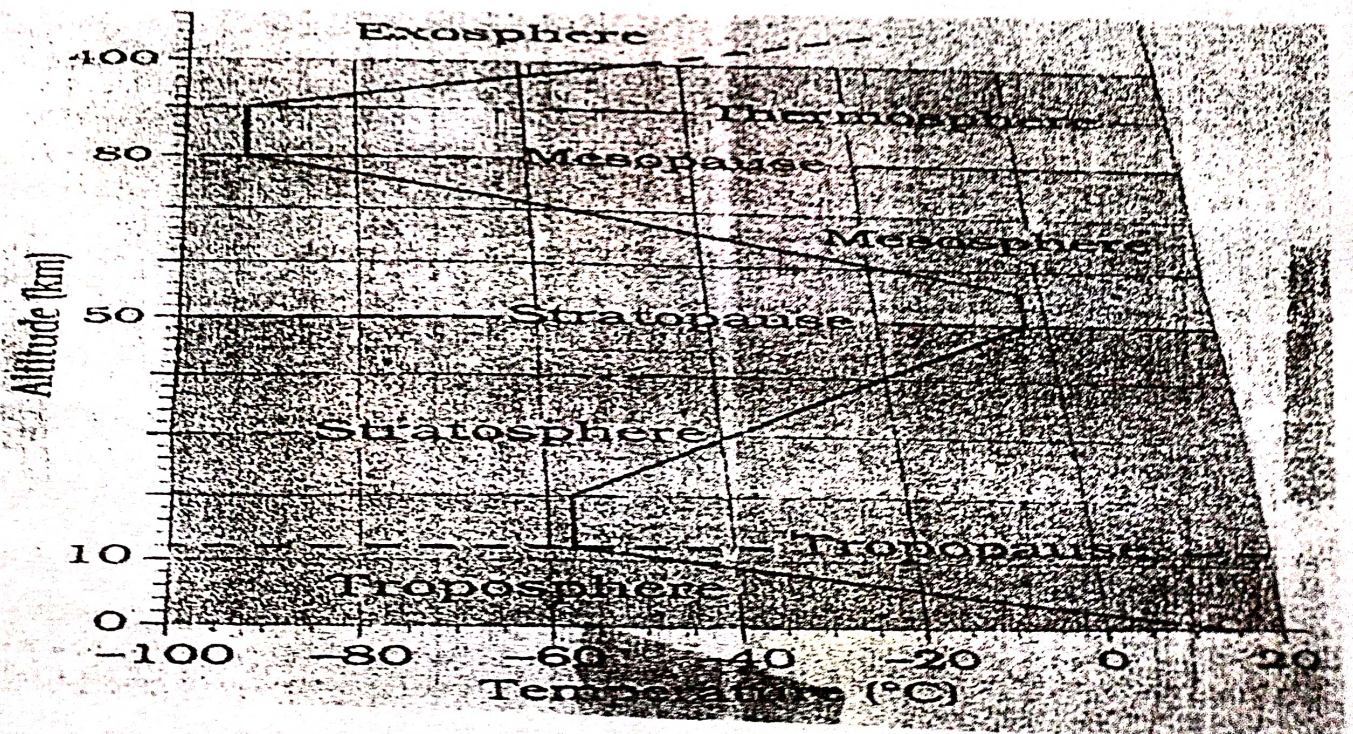
(2) The highest point of a wave is called : 1

- (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

17 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) Troposphere
- (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

Section – C

18 Differentiate between Khadar and Bhangar.

Or

Differentiate between Himalayan and peninsular river system.

19 Explain the heating and the cooling mechanism of atmosphere. 3

20 Name and explain three important types of rainfall. 3

21 Give features of Indus river system. 3

Or

Differentiate between systematic approach and regional approach.

22 Explain different types of soils that are found in India. (any three) 3

Or

What do you mean by soil degradation ? What are the negative impacts of soil degradation?

23 Are physical and chemical weathering processes independent of each other ? If not, why ? Explain with examples. 5

24 Explain the composition of atmosphere with the help of a diagram. 5

25 Explain in detail about nitrogen cycle. 5

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Or

Differentiate between tropical evergreen forests and tropical deciduous forests.

- 26 Explain the factors which affect the temperature distribution of air at any given place. 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