

[English Version]

[All questions of Group 'A' are compulsory.

Candidates should follow the alternatives in other groups.

Sightless Candidates will answer the alternative questions as per directive in Group 'F'.

Others will attempt map pointing.]



GROUP —A

1. Write the correct answers from the given alternatives :— $1 \times 14 = 14$

1.1 The main source of energy for exogenic processes is :
(a) Nuclear energy (b) Solar energy
(c) Radio-active energy (d) Static energy

1.2 The deep cracks formed on the surface of mountain glacier are called :
(a) Crevasse (b) Cirque
(c) Bergschrund (d) Nunatak

1.3 The first sub-layer of the Heterosphere is :
(a) Atomic hydrogen layer (b) Atomic helium layer
(c) Molecular nitrogen layer (d) Atomic oxygen layer

1.4 The snow on the northern slope of Alps mountain melts due to the local wind known as :
(a) Bora (b) Chinook
(c) Khamsin (d) Fohn

1.5 "Sargasso Sea" is observed in :

- (a) Atlantic Ocean 
- (b) Indian Ocean 
- (c) Arctic Ocean 
- (d) Antarctic Ocean 

1.6 The regular rise and fall in the level of the ocean water on the earth surface, due to the gravitational attraction of moon and sun is called :

- (a) Tsunami 
- (b) Ocean waves 
- (c) Ocean currents 
- (d) High tide and ebb 

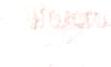
1.7 Among the following, one is not considered as a part of 3Rs in-waste management.

- (a) Reduce 
- (b) Rearrange 
- (c) Re-use 
- (d) Re-cycle 

1.8 The name of the present capital of Andhra Pradesh is :

- (a) Hyderabad 
- (b) Secunderabad 
- (c) Amaravati 
- (d) Vijayawada 

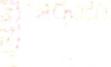
1.9 The Himalayan range, located in Kashmir is :

- (a) Zanskar 
- (b) Dhauladhar 
- (c) Nag Tibba 
- (d) Singalila 

1.10 The first multi purpose river valley project of independent India is :

- (a) Bhakra-Nangal Project 
- (b) Hirakud Project 
- (c) Damodar Valley Project 
- (d) Tungabhadra Project 

1.11 In India, the crops that are cultivated during dry summer season are called :

- (a) Kharif Crops 
- (b) Rabi Crops 
- (c) Plantation Crops 
- (d) Zaid Crops 

1.12 An example of heavy engineering industry in India is : 

- (a) Electronic industry
- (b) Locomotive industry
- (c) Cotton textile industry
- (d) Information Technology industry

1.13 Chhatrapati Sivaji International Airport is located at : 

- (a) Mumbai
- (b) Chennai
- (c) Kolkata
- (d) Delhi

1.14 In satellite imagery, dense forest is shown by the colour : 

- (a) Black
- (b) Green
- (c) Light blue
- (d) Dark red

GROUP—B

2. 2.1 If the statement is True, write 'T' and if False, write 'F' against the following (any six) :— 1×6=6

- 2.1.1 Scientist Bagnold named the transverse sand dunes as "Barkhan".
- 2.1.2 In Mesosphere, temperature increases with the increase of altitude.
- 2.1.3 Jet stream, is an example of geostrophic wind.
- 2.1.4 The right angle position of the sun and moon in respect of the earth is called syzygy.
- 2.1.5 The least populous State of India is Goa.
- 2.1.6 Mangrove forest grows on saline soil of coastal region. 
- 2.1.7 Satellite imageries are not prepared according to scale.

2.2 Fill in the blanks with suitable words (any six) :—



1×6=6

2.2.1 Elevation of the land _____ due to degradation.

2.2.2 The plain formed in the desert by the depositional work of water and wind together is called _____.

2.2.3 In a temperature-rainfall graph, if the temperature curve of a place slopes downward in the middle of the year, the place will be located in _____ hemisphere.

2.2.4 The _____ tide forms at the antipodal side of the primary tide at the same time.

2.2.5 The air conditioning machine releases _____ gas in the atmosphere.

2.2.6 Grassland, lying to the west of Aravalli is called _____.

2.2.7 The process of decomposition of organic waste by microbes is called _____.

2.3 Answer in one or two words (any six) :—

1×6=6

2.3.1 Name the unit used to measure the discharge of river water.

2.3.2 What is the percentage of relative humidity of saturated air ?

2.3.3 Which type of ocean currents flow from polar regions ?

2.3.4 Presence of which toxic waste in human body causes Minamata disease ?

2.3.5 Name the method of irrigation mostly practiced in India.

2.3.6 Where in India, north-east monsoon wind causes rainfall ?

2.3.7 What is the position of India in the world in usage of internet system ?

2.3.8 By which type of line, the altitude of the land is shown in topographical map ?

2.4 Match the *Left Column* with the *Right Column* :—

1×4=4

Left Column

Right Column

2.4.1 Chotanagpur

2.4.2 Assam

2.4.3 Himalaya

2.4.4 Chikmagalur

1. Pine

2. Coffee

3. Parasnath hills

4. Bordoisila



GROUP—C

3. Answer the following questions in brief (alternatives should be noted) :— $2 \times 6 = 12$

3.1 What do you mean by continental glacier ?



OR

Define desertification.

3.2 What is 'Katabatic' Wind ?

OR

What do you mean by "Inter Tropical Convergence Zone" (ITCZ) ?

3.3 Define bio-medical wastes.

OR

What do you mean by Landfill in the processes of waste disposal ?



3.4 What is Khadar ?

OR

What do you mean by Karewas ?



3.5 Define soil erosion.

OR

What is meant by density of population ?

3.6 State the metric scale and representative fraction used in "Million Sheet".

OR

Where are the headquarters of the Survey of India and Indian Space Research Organisation (ISRO) located ?



GROUP—D

4. Give brief explanatory answer of the following (alternatives should be noted) :—

3×4=12

4.1 How do you differentiate between Zeugen and Yardang ?



OR

State any three differences between sea breeze and land breeze.

4.2 Discuss about the sources and effects of industrial wastes.

OR

Mention the role of students in waste management (any three).

4.3 Write the differences between the Eastern Ghats and Western Ghats of India.

OR

Mention the main reasons for the development of automobile industry in India.

4.4 State any three differences between topographical map and satellite imagery.

OR

Mention the advantages of remote sensing.



GROUP—E

[Sketches are not essential for Sightless Candidates]

5.1 Answer any *two* questions from the following :—

5×2=10

5.1.1 Describe along with diagram three major landforms developed by depositional work of river.

5.1.2 Discuss the processes of heating of the atmosphere.

5.1.3 Explain along with diagram the origin and characteristic features of convectional rainfall.

5.1.4 Discuss the effects of ocean currents on the climatic conditions.



5.2 Answer any *two* questions from the following :—



5×2=10

5.2.1 Discuss the role of five major controlling factors influencing the climate of India.

5.2.2 State the favourable physical conditions required for cultivation of tea in India.

5.2.3 Discuss the reasons for the development of 'iron & steel industry' in eastern & central India.

5.2.4 Explain the natural factors responsible for uneven distribution of population in India.



GROUP—F

6. Locate the following with appropriate symbols and names on the given outline map of India. Attach the map with your answer scripts :—

1×10=10

6.1 Kanyakumari

6.2 Ladakh plateau

6.3 River Godavari

6.4 Lake Chilka

6.5 Rain shadow region of north-east India

6.6 Region of desert soil

6.7 A region of Tropical Evergreen Forest of South India

6.8 A wheat producing region of North India

6.9 The largest petro-chemical industrial center

6.10 The first metro-rail city of India.



OR

[For Sightless Candidates Only]

$1 \times 10 = 10$

6. Answer any **ten** questions from the following :—

6.1 Write the name of the largest delta of India.

6.2 Which is the oldest mountain range of India ?

6.3 Name a lake, located in Manipur State.

6.4 Which group of islands of India are formed by corals ?

6.5 Name the largest glacier of India.

6.6 Which soil of India is known as "Regur" ?

6.7 Which State of India ranks first in per hectare rice production ?

6.8 Which industrial city of India is known as "Manchester of South India" ?

6.9 Write the name of an agro based industry of India.

6.10 Name the capital of Punjab & Haryana States.

6.11 Which State of India has the highest literacy rate ?

6.12 By which means of modern transport system refined petroleum is easily transported ?

6.13 What is the name of the capital of Andaman and Nicobar islands ?

6.14 Name the "tax free" port of India.