

TIME: 2 Hours

TOTAL MARKS: 80

GENERAL INSTRUCTIONS

1. Answers to this Paper must be written on the paper provided separately.
2. You will not be allowed to write during the first 15 minutes.
3. The time given at the head of this Paper is the time allowed for writing the answers.
4. Attempt all questions from Part I (Compulsory).
5. Attempt five questions Part II,
6. The intended marks for questions or parts of questions are given in brackets [].

PART - I (30 Marks)**Question 1**

- a) Although Venus is the second planet from the Sun, it is hotter than Mercury. Give reason. [2]
- b) What are the lines of latitudes and longitudes? [2]
- c) Why are igneous rocks also known as primary rocks? [2]
- d) Name three seasons of the tropical monsoon regions. [2]
- e) What is weathering? [2]
- f) Global warming will increase the possibility of droughts. Do you agree? Give reason in support of your answer. [2]
- g) Why does only 51% of insolation reach the Earth's surface? [2]
- h) What is the lithosphere? [2]
- i) What are urban commercial wastes? [2]
- j) State in percentages, the distribution of land and water surface on the Earth. [2]

Question 2

On the outline map of the World provided, mark out the following:

- a) Coniferous Forest Region [1]
- b) Type of local wind - Chinooks [1]
- c) Sea of Okhotsk [1]
- d) Baltic Sea [1]
- e) Caledonian Folds [1]
- f) West Margin Type of Climate [1]
- g) The areas receiving rainfall of more than 1000 mm during the months of November to April [1]
- h) Plateau – Drakensberg [1]
- i) Aravalli Range [1]
- j) Mediterranean region in Europe [1]

PART II (50 Marks)

Attempt any 5 Questions.

Question 3

- a) i. Name three types of rocks.
ii. Mention the formation of any one type of rock. [3]
- b) i. What are plutonic rocks?
ii. Give one example of plutonic rocks. [2]
- c) What is lithification? [2]
- d) Name two processes that lead to the formation of sedimentary rocks. [3]

Question 4

- a) i. What is Richter scale? [2]
ii. State its use.
- b) Differentiate between the Richter scale and the Mercalli scale. [2]
- c) i. What is a tsunami?
ii. How is it caused? [3]
- d) i. In which earthquake zone of the world is India located?
ii. Which regions in India are prone to earthquakes? Give reasons. [3]

Question 5

- a) i. What is rotation?
ii. Mention two characteristics of the rotation of the Earth. [2]
- b) What is the Coriolis Effect? [2]
- c) i. What is meant by equinox?
ii. When does it happen? [3]
- d) Give reasons for the following: [3]
 - i. The month of February has 29 days in a leap year.
 - ii. Norway is called the 'Land of the midnight Sun'.
 - iii. 25th December in New Zealand may be one of the hottest days of the year.

Question 6

- a) i. What is denudation? [2]
ii. Name the processes involved in it?
- b) Explain the process of frost action with the help of a diagram. [3]
- c) i. What is chemical weathering? [2]
ii. How does it affect the rocks?
- d) Discuss three main chief characteristics of weathering. [3]

Question 7

- a) Which water body has the maximum salinity? Why? [2]
- b) What are tides? [2]
Name one factor that causes tides.
- c) Discuss any three factors that influence ocean currents. [3]
- d) State the importance of: [3]
 - i. The Labrador Current
 - ii. The Kuro Current

Question 8

- a) i. What is absolute humidity? [2]
ii. How is it expressed?
- b) Explain two conditions when the air can become saturated? [2]
- c) Discuss factors that determine the amount of rainfall. [3]
- d) Discuss the seasonal distribution of rainfall. [3]

Question 9

- a) How can we reduce pollution by changing the raw materials? [3]
- b) What are alternative fuels? [2]
- c) How do filters work? [2]
- d) Is open dumping a suitable option for managing wastes? Why? [3]

Question 10

- a) What are secondary pollutants? Explain with the help of an example. [2]
- b) What are biomedical wastes? [2]
- c) Why is it harmful to dispose off household wastes into water bodies? [3]
- d) i. What is thermal pollution? [3]
ii. In what ways humans are responsible for thermal pollution?