



Part I

All Questions are Compulsory.

Question 1 (30)

- a) Write two major components of the atmosphere apart from gases? Which is the heaviest gas? (2)
- b) What do you understand by diastrophism? Name **Two** diastrophic forces? (2)
- c) Why are most of the deserts seen in the western margin of the continent? (2)
- d) How are deltas formed? Give one condition required for its formation. (2)
- e) What is the composition of the core of the earth? Which part of the earth's interior is in the liquid state? (2)
- f) Describe exfoliation as a process weathering. (2)
- g) What is isotherm? Where are the low values of isotherms detected? (2)
- h) List down the major components of soil. (2)
- i) Describe any **Two** importance of atmosphere. (2)
- j) Why are the plateaus regarded as the storehouse of minerals? (2)
- k) Illustrate and explain the concept of heat budget. (3)
- l) How are igneous rocks formed? Give two examples of igneous rocks. (2)
- m) "Erosion is the main activity in the upper course of the river". Explain the statement. (2)
- n) Give **Two** characteristics of sedimentary rocks. (2)
- o) Define insolation? (1)

Question 2 Map work (10)

On an outline map of the world, mark and locate the following:

- 1) Antarctica
- 2) Tropic of Cancer
- 3) Brazilian Plateau
- 4) Desert soils
- 5) Thar Desert
- 6) Greenland
- 7) Prime meridian
- 8) International dateline
- 9) Mountain Andes
- 10) Arabian Plateau

Question 3 Practical (10)

- 1) Give **Two** differences between latitude and longitude. (2)
- 2) Define Map projection? (1)
- 3) State **Two** properties of Cylindrical map projection. (2)
- 4) Construct a Cylindrical Equal Area Map projection on a scale of 1:200,000,000 placing the parallel and meridian at 15° and 30° with the extension of 0-90°N and 90°S and 150°E and 150°W. (5)

Part II
Answer Any Five

Question 4

- a) Discuss any three factors controlling isolation. (3)
- b) What is shadow zone? How are they formed? (2)
- c) Why are fossils preserved in sedimentary rocks and not in igneous rocks? (2)
- d) Explain two important factors of soil formation. (2)
- e) Define Ozone hole? (1)

Question 5

- a) “Degradation, Aggradation and Gradation are inter-related”. Explain the statement. (2)
- b) The river system produces several types of drainage patterns. Illustrate any two of them. (3)
- c) Draw a neat labeled diagram of the soil profile? (2)
- d) Write a short note on the density and pressure of the interior of the earth? (2)
- e) What is Karst topography? (1)

Question 6

- a) Interpret the latitudinal heat balance with the help of an appropriate diagram. (4)
- b) What is Physical weathering? Name any of its two agents. (2)
- c) “Out of geosynclines have come the mountains”. Justify the statement. (2)
- d) Discuss any **Two** impacts of ultraviolet radiation. (2)

Question 7

- a) What is the main work of river in the middle course? Explain one feature formed in the middle course. (2)
- b) Elucidate the concept of rock cycle. (3)
- c) Discuss on any two important measure of soil conservation. (2)
- d) Why are Aeolian processes more active in the arid and semi-arid areas. (1)
- e) Write down the significance of closely and widely spaced isotherms on the map. (2)

Question 8

Distinguish between the following: (10)

- a) Weathering and Erosion.
- b) Crust and Mantle
- c) Zonal and Azonal soil
- e) Rock and mineral
- f) Abrasion and Attrition
- g) Isolation and Temperature
- h) Folding and Faulting
- i) Hydration and Solution
- j) Primary waves and Secondary waves
- k) Intrusive and Extrusive igneous rocks

Question 9

- a) Illustrate the development of the river valley in the different courses of Fluvial. (3)
- b) Explain any two important layers of the atmosphere. (2)
- c) Deliberate on any two factors controlling insolation. (2)
- d) Describe intermontane plateau with the help of a diagram (2)
- e) How are the volcanic mountains formed? (1)

Question 10

Give a single term for each of the following:

- a) Thinnest layer of the earth
- b) Primary rock
- c) Plains formed by the depositional work of glacier
- d) The process of removing the unevenness of the land surface
- e) The layer of the atmosphere containing electrically charged particles.
- f) Direct heating of a body through heat waves.
- g) Aggregate of minerals in one state
- h) Network of parallels and meridians
- i) Solidification of molten matters below the surface of the earth
- j) The continental crust.