

(No additional sheet will be supplied)

PART A — ($5 \times 3 = 15$ marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Mineralogy of meteorites.
2. Composition of atmosphere.
3. Electro negativity.
4. Lattice energy of crystals.
5. Stable isotopes.
6. Decay scheme of U-Pb.
7. Pathfinders elements.
8. Threshold values.

PART B — ($4 \times 15 = 60$ marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Describe the geochemical classification of elements.

Or

10. What is hydrosphere? Give a detailed account on the structure and physiochemical properties of water.
11. Write an essay on historical development of thermodynamics.

Or

12. Briefly explain a thorough understanding of the periodic table is basic to all aspects of Geochemistry.

13. What are stable Isotopes? Describe the carbon and sulphur isotopes add a note on its importance in the Geological studies.

Or

14. What is radioactivity? Write a detailed note on Rb-Sr and K-Ar Systematics.
15. Briefly explain the geochemical method for prospecting of petroleum and natural gas.

Or

16. Describe the primary and secondary dispersion of Halos sampling.

