

IAS Mains Geology 1997

Paper I

Section A

1. Explain any three of the following in about 200 words each:
 - a. Causes and products of volcanism
 - b. Causes and effect of sea level changes
 - c. Linear and Plannar structures, their genetic significance
 - d. Mid Oceanic ridges and deep sea trenches
2. Describe different fault geometrics and their relationship with the principal stresses.
3. Write brief notes on the following:
 - a. Stress and strain ellipsoid, and rock deformation
 - b. Superimposed drainage
 - c. Geomorphic processes and cycles
 - d. Causes of earthquakes and their seismic response
4. Describe the landforms of the glacial region.

Section B

5. Answer any three of the following in about 200 words each:
 - a. Dharwar Super Group
 - b. K-T boundary
 - c. Deccan traps
 - d. Krol-Tal Sequence
6. Draw a neat full page labelled sketch of a Trilobite and describe its morphology. Give their geological distribution.
7. Write detailed notes on:
 - a. Evolution of life on the Earth
 - b. Evolution of the crust of the Earth
 - c. Palaeogeography of India during Palaeogene period
8. Describe the mesozoic formation of Kachchha (Kutch) with special reference to its sedimentation and fauna.