

# IAS Mains Geology 1998

## Paper I

### Section A

1. Explain any three of the following in about 200 words each:
  - a. Geomagnetic reversals
  - b. American and European views on geosynclines
  - c. Boudinage and its significance
  - d. Lagoons as coral gardens-Justify.
2. What are folds? Explain the mechanism of folding and distinguish between Recumbent and Reclined folds.
3. Write brief notes on the following:
  - a. Moraines
  - b. Axial plane cleavages
  - c. Canyons and Gorges
  - d. Pacific volcanic belt
  - e. Slump
4. Are volcanoes and earthquakes related to each other? Explain the various causes and effects of earthquakes.

### Section B

5. Answer any three of the following in about 200 words each:
  - a. Products Limestone Series of Salt Range
  - b. Stratigraphic importance of Umia Series of Kutch
  - c. A brief review of rise of Himalayas
  - d. Semri Series of Lower Vindhya
6. What is marine transgression? Discuss the Cretaceous rocks of Trichinapalli with special reference to their fossil contents.
7. Describe the morphology of Echinoids. Mention their classification and add a note on their distribution.
8. Write explanatory notes on the following:
  - a. Palaeogeographic reconstructions
  - b. Banded Gneissic Complex
  - c. Modes of fossil preservation