

IAS Mains Geology 2007

Paper I

Section A

1. Write on any three of the following in about 200 words each: ($20 \times 3 = 60$)
 - a. Solar System
 - b. Weathering and mass wasting
 - c. Merits and limitations of Aerial Photography
 - d. Principles of geologic mapping and map reading
2. Write an essay on 'Seismicity in India' Discuss your answer with suitable illustrations ($50 + 10 = 60$).
3. Write about the following: ($30 \times 2 = 60$)
 - a. Relationship between Geomorphology and Hydrogeology.
 - b. Electromagnetic Spectrum
4. Discuss in detail the behaviour of minerals and rocks under deformation conditions. Illustrate your answer with neat sketches ($50 + 10 = 60$).

Section B

5. Write on any three of the following in about 200 words each: ($20 \times 3 = 60$)
 - a. Megafossils and Microfossils
 - b. Biostratigraphic Classification
 - c. Hydrologic cycle
 - d. Rain water harvesting
6. Discuss the evolutionary trends of Echinoidea. Illustrate your answer with sketches ($50 + 10 = 60$).
7. Write about the following: ($30 \times 2 = 60$)
 - a. Cretaceous-Tertiary Boundary
 - b. Evolution of Himalayas
8. Discuss the following: ($30 \times 2 = 60$)
 - a. Ground water chemistry
 - b. Geological investigation for bridges