

CSM – 35/16
Geology
Paper – II

Time : 3 hours

Full Marks : 300

The figures in the right-hand margin indicate marks.

*Candidates should attempt Q. No. 1 from Section – A and Q. No. 5 from Section – B which are compulsory and any **three** of the remaining questions, selecting at least **one** from each Section.*

SECTION – A

1. Answer any **three** of the following in about **200** words each : 20×3 = 60
- (a) Classification of crystals into systems and classes.
 - (b) Textures and structures of Igneous rocks.
 - (c) Types and agents of Metamorphism.
 - (d) Textures and structures of sedimentary rocks.

2. Describe the physical and optical characters of the Feldspar group of minerals. 60
3. Write descriptive notes on the following :
- (a) Petrography and petrogenesis of charnockites. 30
- (b) Textures and structures of metamorphic rocks. 30
4. Explain the various process of formation of sedimentary rocks. 60

SECTION – B

5. Answer any **three** of the following in about **200** words each : $20 \times 3 = 60$
- (a) Process of formation of mineral deposits.
- (b) Geological methods of prospecting.
- (c) Structure and composition of the Earth and distribution of elements.
- (d) Pollution of ground and surface water.

6. Write descriptive notes on the following :
- (a) Geology of the Lead and Zinc deposits of India. 30
 - (b) Deposits of Coal and Petroleum in India. 30
7. Write explanatory notes on the following :
- (a) Geochemical and Geobotanical techniques of sampling. 30
 - (b) Methods of exploration and mining of metallic ores. 30
8. Write detailed notes on the following :
- (a) Geochemical classification of elements 30
 - (b) Natural hazards due to earthquakes, volcanic activity, landslides and their mitigation 30



