

CSM—37/22

GEOLOGY

PAPER—II

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Time : 3 Hours

Full Marks : 250

*The figures in the right-hand margin indicate marks.
Candidates should attempt **any 10 (ten)** questions of
GROUP—A with word limit of 250 words and should
attempt **any 5 (five)** questions from **GROUP—B**
with word limit of 300 words.*

GROUP—A

1. Define twinning. Discuss different types of twinning with suitable examples. 15
2. Discuss different types of silicate structures with neat diagrams. 15
3. Discuss the optical properties of minerals. 15
4. Explain in detail various factors of metamorphism. 15
5. Discuss magmatic differentiation and assimilation. 15
6. Discuss the major sedimentary basins of India. 15
7. Write a note on uranium and thorium deposits in India. 15
8. Define conservation. Discuss various conservation and utilization techniques of mineral resources. 15
9. Discuss various sampling techniques adopted in geological exploration. 15
10. Explain geochemical cycle in detail with a neat diagram. 15
11. Explain in detail isomorphism and polymorphism with suitable examples. 15
12. Discuss environmental impact due to coastal erosion and mitigative measures. 15

GROUP—B

13. Discuss the classification and paragenesis of mica group of minerals. 20
14. Discuss the granulite terrains in India. 20
15. Discuss the fluvial and lacustrine environment with suitable examples. 20
16. Discuss the tertiary coal deposits in India. 20
17. Discuss in detail various methods of geophysical exploration. 20
18. Discuss the environmental impacts due to open cast mining and its prevention. 20

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