

PRACTICE SET
End Semester Examination, December, 2025

Program: DIPLOMA (MINING)
Semester: III
Subject: MINING GEOLOGY I
Subject Code: 8DPCCMiE201

UNIT I

Section A (5 marks)

1. State the Mohs' scale of hardness for minerals.
2. What are the major characteristics of internal structure of the earth?
3. What is a mineral? discuss its physical and chemical properties.
4. Briefly explain the branches of geology and scope of geology.

Section B (10 marks)

5. Define geology. Explain its scope and importance in mining engineering.
6. What are the main branches and sub-branches of geology? give one example of each.
7. Describe the internal structure of the earth with a neat labeled diagram.
8. Discuss the physical & chemical properties of minerals. Also brief the properties of Pyrite. Galena & Magnetite
9. Write short notes on the following:-
 - (a) Rock-forming minerals
 - (b) Economic importance of minerals in India.

Section C (20 marks)

10. Evaluate a brief account of the Chemical properties of the minerals? Also elaborate Quartz Feldspar, Hematite and Mica group of minerals.

UNIT II

Section A (5 marks)

11. Define petrology and explain its importance in mining geology.
12. State the Ore & Minerals with example.
13. Define Sills & dyke.
14. What is sedimentation? Explain briefly

Section B (10 marks)

15. Difference between extrusive and intrusive igneous rocks with suitable example.
16. Describe the texture and composition of common sedimentary rocks such as sandstone and shale.
17. Explain briefly any three of the common igneous rocks of minerals with example

18. Briefly describe the formation of Sedimentary rocks and metamorphic rock with neat sketch diagram.

Section C (20 marks)

19. Briefly discuss the classification and characteristics of common sedimentary rocks such as conglomerate, sandstone, shale, and limestone.

20. Describe the Process of Sedimentation? Also classify the common sedimentary rocks Slate, conglomerate, Sandstone & limestone in brief.

UNIT III

Section A (5 marks)

21. State the terms paleontology.

22. Write the about importance of paleontology.

23. Briefly explain fossilization.

24. Describe Condition of preservation of fossils and its uses.

25. Define palaeontology and explain its significance in understanding Earth's geological history.

Section B (10 marks)

26. Discuss about the principle of stratigraphy and criteria for correlations.

27. Explain the concept of index fossils. What characteristics make a fossil suitable as an index fossil?

28. Discuss the principles used in stratigraphic subdivision and how they help in geological mapping.

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Section C (20 marks)

30. What are fossils? Explain the conditions necessary for their preservation and briefly describe the different types of fossil forms, supported by neat illustrative diagrams.

UNIT IV

Section A (5 marks)

31. Briefly define physical geology.

33. What is an earthquake? Mention its primary causes and effects.

34. Explain the significance of contour maps in geological studies.

35. Define erosion and weathering. How do they differ in geological processes?

Section B (10 Marks)

35. Describe the geological actions of wind and rivers, focusing on erosion, transportation, and deposition.
36. Discuss the significance of the Drift Theory and the In-situ Theory in geology.
37. Define a volcano. Explain any three types of volcanic eruption processes.
38. Briefly describe the key characteristics and types of geological maps.
39. Describe the formation and types of volcanoes. Explain any three volcanic eruption styles.

Section C (20 Marks)

39. Differentiate between weathering and erosion. Additionally, describe river erosion as a type of weathering, accompanied by a neat sketch.
40. Explain any three types of geological maps in detail, and support your explanation with clear sketch diagrams.

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Disclaimer: - This is a Practice set. The Question in End term examination will differ from the Practice set. This Practice set is meant for practice only.