



# CBCS SCHEME

18MN36

## Third Semester B.E. Degree Examination, Jan./Feb. 2021 Mineralogy, Petrology and Stratigraphy

Time: 3 hrs.

Max. Marks: 100

*Note: Answer any FIVE full questions, choosing ONE full question from each module.*

### Module-1

- 1 a. What is geology? Explain the role of geology in the field of mining. (10 Marks)
- b. What are earthquake? Explain their causes and effects. Add a note on engineering protection. (10 Marks)

OR

- 2 a. With a neat sketch explain the structure and composition of the earth. (10 Marks)
- b. Briefly explain the geological work of ground water with special reference to their influence on mining engineering sectors. (10 Marks)

### Module-2

- 3 a. Explain the physical and chemical properties of minerals. (10 Marks)
- b. Explain the Origin, occurrence and distribution of Iron deposit in India. (10 Marks)

OR

- 4 a. Describe the feldspar group of minerals. (10 Marks)
- b. Write note on Indian distribution of Lead and Zinc deposit. (10 Marks)

### Module-3

- 5 a. Explain the texture, structure and mineralogical characters of the following rocks  
i) Granite and Basalt ii) Gabbro and Dolerite. (10 Marks)
- b. What are igneous rocks? Explain the classification of Igneous rock with suitable example. (10 Marks)

OR

- 6 a. Write a note on  
i) Texture in Igneous rock. ii) Forms of Igneous rock. (10 Marks)
- b. Explain the texture, structure and mineralogical characters of the following rock  
i) Granite and Rhyolite. ii) Pegmatite and Basalt (10 Marks)

### Module-4

- 7 a. What is Metamorphism? Explain the texture and structures of metamorphic rocks. (10 Marks)
- b. Explain:  
i) Sandstone ii) Limestone iii) Shale iv) conglomerate. (10 Marks)

OR

- 8 a. What is sedimentary rock? Explain the classification of sedimentary rock based on grain size. (10 Marks)
- b. Explain:  
i) Gneiss ii) Marble iii) Slake iv) Quartzite. (10 Marks)

Module-5

- 9 a. What are fossils? Explain their mode of preservation. (10 Marks)  
b. Explain the Dharwar Craton. Add a note on economic importance. (10 Marks)

OR

- 10 a. Write a note on  
i) Methods of correlation (10 Marks)  
ii) Geological time scale. (10 Marks)  
b. Explain the Cuddapah group of rocks. Add a note on economic importance. (10 Marks)

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