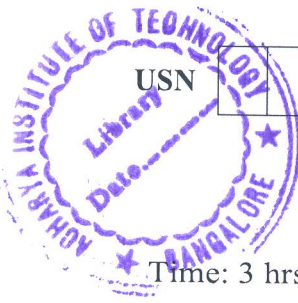


CBCS SCHEME



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15MN63

Sixth Semester B.E. Degree Examination, June/July 2019

Underground Metal Mining

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. Explain present status of Indian metal mining industry. (08 Marks)
- b. Explain scope and limitation of underground metal mining (08 Marks)

OR

- 2 a. Explain arrangements for dumping into main air pass with a well labelled neat sketch. (08 marks)
- b. What are the factors to be considered for choice of level interval? (08 Marks)

Module-2

- 3 a. Explain physio mechanical characteristics of ore and wall rock. (08 marks)
- b. Explain room and pillar method of stoping with a well labeled neat sketch. (08 Marks)

OR

- 4 a. Explain sub-level method of stoping with their applicability, and neat sketch. (12 marks)
- b. Mention merits and demerits of sub-level stoping. (04 Marks)

Module-3

- 5 Explain cut and fill method of stoping with their preparation, application, merits, demerits and well labeled neat sketch. (16 Marks)

OR

- 6 a. Explain post and pillar stoping method with a neat sketch. (08 marks)
- b. Explain square set method with their merits, demerits and well labeled neat sketch. (08 Marks)

Module-4

- 7 Explain top slicing method of caving with their stope preparation and well labeled neat sketch. (16 Marks)

OR

- 8 a. Explain sub-level caving method with their case studies and neat sketch. (08 marks)
- b. Explain block caving method with their applicability, advantages and disadvantages. (08 Marks)

Module-5

- 9 Explain applicability, preparation, operation, advantages and disadvantages of bore hole mining. (16 marks)

OR

- 10 a. What are the problems of deep underground mining and their remedial measures? (08 Marks)
- b. Explain In-situ leaching with well labeled neat sketch. (08 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.