



10MN64

Sixth Semester B.E. Degree Examination, June/July 2019
Mine Environmental Engineering - II

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART - A

- 1 a. Explain the classification of surface and underground fires in the underground mines. (10 Marks)
 b. Explain the study of atmosphere behind sealed off area in underground mine. (10 Marks)
- 2 a. Explain the factors governing spontaneous heating. (10 Marks)
 b. Explain the stages of spontaneous heating. (10 Marks)
- 3 a. Explain the causes of coal dust in coal mine. (10 Marks)
 b. Explain the water barrier in coal mine. (10 Marks)
- 4 a. Explain the causes and measures against Inundations in underground mines. (10 Marks)
 b. Explain with neat sketches of the methods of approaching old water logged workings. (10 Marks)

PART - B

- 5 a. Explain with neat sketches of portable hand held cap lamp used in underground mine. (10 Marks)
 b. Explain the general lighting in underground mines. (10 Marks)
- 6 a. Explain the standards of lighting of open cast mines. (10 Marks)
 b. Explain the luminance calculations of the lighting. (10 Marks)
- 7 a. Explain with neat sketches of self contained breathing apparatus used in underground mines. (10 Marks)
 b. Explain the mine rescue and equipments are provided at rescue station. (10 Marks)
- 8 a. Explain the methods of recovery work in case of underground fire. (10 Marks)
 b. Explain the methods of working in case of Inundation. (10 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.