

# CBCS SCHEME

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15MN54

Fifth Semester B.E. Degree Examination, Dec.2018/Jan.2019

## Underground Coal 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 the growth of Coal Mining Industry in India. (08 Marks)  
b. Explain the different methods of opening up of a coal seams. (08 Marks)

OR

- 2 a. Explain the different methods of coal analysis. (08 Marks)  
b. List out the factors influencing choice of Mining methods. (08 Marks)

### Module-2

- 3 a. Discuss the mining processes in Board and Pillar mining system. (08 Marks)  
b. Describe Board and Pillar system of mining. (08 Marks)

OR

- 4 a. Explain the applicability of Room and Pillar mining method and list out the advantages and disadvantages of Room and Pillar mining method. (08 Marks)  
b. Explain the variants of Room and Pillar mining method. (08 Marks)

### Module-3

- 5 a. Explain the factors influencing the layout of Long wall faces. (08 Marks)  
b. Discuss the classification of Modern Long wall faces. (08 Marks)

OR

- 6 a. Explain Face Support system in Long wall mining method of mining. (08 Marks)  
b. Discuss the Face organisation in Long wall panel. (08 Marks)

### Module-4

- 7 a. Explain Long wall method of mining thin seam with an example. (08 Marks)  
b. Discuss the problems of mining thick coal seams. (08 Marks)

OR

- 8 a. Explain the different slicing method of Mining Thick Coal seam. (08 Marks)  
b. With a neat sketch, explain Sublevel caving. (08 Marks)

### Module-5

- 9 a. With a neat sketch, explain Blasting Gallery Method of Mining. (08 Marks)  
b. Discuss the difference between Inseam Mining and Horizon Mining. (08 Marks)

OR

- 10 a. Explain Hydraulic Stowing for goaf control. (08 Marks)  
b. Discuss caving as a method of Goaf control. (08 Marks)

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