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## Fifth Semester B.E. Degree Examination, Dec.2018/Jan.2019 Underground Coal Mining

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 Grading and Analysis of coal. (10 Marks)

b. Explain the opening up of coal seams by Adits and vertical shafts, with a neat sketch.

(10 Marks)

2 a. Explain the factors influencing choice of mining methods.

(12 Marks)

b. Explain the Basic Mining Methods.

(08 Marks)

3 a. Explain the Application, Limitation and Working principles of Bord and Pillar Mining.

(12 Marks)

b. Explain the Diagonal Method of Interaction of coal.

(08 Marks)

4 Explain the Application, Limitation and working principle of Room and Pillar mining. (20 Marks)

## PART - B

5 Explain the Applications, Limitation and Working principles of longwall mining system.

(20 Marks)

6 Explain the Application, Limitation and Working principles of coal plough for thin seam mining.
(20 Marks)

7 a. Explain the problems of Mining Thick coal seam.

(08 Marks)

b. Explain the Inclined slicing in Descending order with stowing, with a neat sketch.

(12 Marks)

8 Explain the Application, Limitation, Working principle of Blasting Gallery Method, with a neat sketch, Advantages and Disadvantages. (20 Marks)

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