

CBCS SCHEME

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15MN62

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

Mineral Processing and Fuel Technology

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. Briefly explain about the characteristics of Indian coal. (08 Marks)
b. With neat sketch, explain the manufacture, reactions and uses of water gas. (08 Marks)

OR

- 2 a. Explain in detail about the combustion stoichiometry. (08 Marks)
b. Explain low and high temperature carbonization. (08 Marks)

Module-2

- 3 a. Explain the objectives and scopes of mineral processing. (08 Marks)
b. Explain Comminution and its stages. (08 Marks)

OR

- 4 a. With sketches, explain the principles of Comminution. (10 Marks)
b. With equations, explain the theories of Comminution. (06 Marks)

Module-3

- 5 a. With neat sketch, explain the working principle of Blake Jaw Crusher. (08 Marks)
b. With neat sketch, explain the working principle of Tumbling mill. (08 Marks)

OR

- 6 a. With neat sketch, explain the working of Trommel (or) Revolving screen. (08 Marks)
b. With a neat sketch, explain the working of Cyclone separator (or) hydrocyclone. (08 Marks)

Module-4

- 7 a. With a neat sketch, explain the working principle of Jigging. (08 Marks)
b. With a neat sketch, explain the working of shaking table. (08 Marks)

OR

- 8 a. Classify flotation reagents. Explain them in detail. (08 Marks)
b. With a neat sketch, explain the low intensity wet magnetic separator. (08 Marks)

Module-5

- 9 a. With graphs, explain the construction of washability curve. (08 Marks)
b. With a neat sketch, explain the working of thickner. (08 Marks)

OR

- 10 a. With a neat sketch, explain the working of drying. (08 Marks)
b. Draw the general beneficiation flow chart of lime stone and explain the same. (08 Marks)

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