

--	--	--	--	--	--	--	--	--	--

Seventh Semester B.E. Degree Examination, Feb./Mar. 2022 Mineral Processing and Fuel Technology

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Discuss about the peat and its uses. (10 Marks)
b. Discuss about the characteristics and uses of coal. (10 Marks)

OR

- 2 a. Explain in detail about the mechanism of coal combustion. (10 Marks)
b. Explain in detail about the high temperature carbonization of coal. (10 Marks)

Module-2

- 3 a. Discuss about the objectives of mineral processing. (10 Marks)
b. Discuss about the liberation of minerals. (10 Marks)

OR

- 4 a. Explain about the principles of communication with neat sketches. (10 Marks)
b. Discuss about the various theories of communication. (10 Marks)

Module-3

- 5 a. With neat sketch, explain the working principle of Roll crusher. (10 Marks)
b. Discuss about the various factors that affect the operation of grinding mill. (10 Marks)

OR

- 6 a. With neat sketch, explain the concept of movement of solids in fluids. (10 Marks)
b. With neat sketch, explain the working principle of hydro-cyclone classifier. (10 Marks)

Module-4

- 7 a. With a neat sketch, explain the working principle of jigging. (10 Marks)
b. With a neat sketch, explain the working of flowing film concentration. (10 Marks)

OR

- 8 a. Discuss in detail about the flotation reagents and its types. (10 Marks)
b. Discuss in detail about the magnetic methods of concentration. (10 Marks)

Module-5

- 9 a. Explain the washability curve with neat sketch. (10 Marks)
b. With neat sketch, explain the working principle of thickening. (10 Marks)

OR

- 10 a. With neat sketch, explain the working principle of filtration. (10 Marks)
b. Explain the process of iron ore with neat flowsheet. (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.