



# CBCS SCHEME

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

17MN73

## Seventh Semester B.E. Degree Examination, Jan./Feb. 2021 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 in detail about Peat. (10 Marks)  
b. Discuss in detail about ultimate Analysis. (10 Marks)

OR

- 2 a. Discuss in detail about liquid fuels. (10 Marks)  
b. Discuss in detail about high temperature Carbonization. (10 Marks)

### Module-2

- 3 a. Explain the objectives of mineral processing. (10 Marks)  
b. Explain the different methods of sampling materials in a laboratory. (10 Marks)

OR

- 4 a. Explain about the different theories of comminution. (10 Marks)  
b. Explain the different stages of comminution. (10 Marks)

### Module-3

- 5 a. Discuss about the working principle of gyratory crushing. (10 Marks)  
b. Discuss about the working principle of Ball mill. (10 Marks)

OR

- 6 a. Discuss about the working principle of vibrating screen with neat sketches. (10 Marks)  
b. Discuss about the working principle of hydrocyclone with neat sketches. (10 Marks)

### Module-4

- 7 a. Explain the working principle of Jigging with neat sketch. (10 Marks)  
b. Explain about the concept of flowing film concentration. (10 Marks)

OR

- 8 a. List out the physio-chemical principles of flotation and explain them in detail. (10 Marks)  
b. Explain about high tension electrostatic separator with neat sketch. (10 Marks)

### Module-5

- 9 a. Discuss about the concept of thickening with neat sketch. (10 Marks)  
b. Discuss about the concept of filtration with neat sketch. (10 Marks)

OR

- 10 a. Draw the flowsheet of lead and explain them. (10 Marks)  
b. Discuss about the concept of washing of coal with its advantages. (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.