

# CBCS SCHEME

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17NT833

## Eighth Semester B.E. Degree Examination, July/August 2021 Mechanical Operation

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions.

- 1 a. Define Screen. Explain ideal and actual screens. (10 Marks)  
b. Differentiate between differential and cumulative size analysis. (10 Marks)
- 2 a. With a neat sketch, explain gyrotary screen. (10 Marks)  
b. With a neat sketch, explain sedimentation and elutriation methods. (10 Marks)
- 3 a. Explain about flow meter with neat sketch and mention applications. (10 Marks)  
b. Discuss about orifice meter and mention applications. (10 Marks)
- 4 a. Discuss about turbine type flow meter with a neat sketch and mention application. (10 Marks)  
b. Explain about vortex flow meter with the neat sketch and mention applications. (10 Marks)
- 5 a. With a neat sketch, explain about classification of filtration. (10 Marks)  
b. Explain any two industrial filters in detail. (10 Marks)
- 6 a. Explain rotary drum filter with the neat sketch. (10 Marks)  
b. Discuss about horizontal drum filter in detail with a neat sketch. (10 Marks)
- 7 a. Give a detailed note on applications of agitation. (10 Marks)  
b. With a neat sketch, explain Agitation equipments. (10 Marks)
- 8 Describe various types of mixers with a neat sketch. (20 Marks)
- 9 a. Write a note on belt conveyor and Bucket conveyor. (10 Marks)  
b. Explain Apron conveyor and chain conveyor. (10 Marks)
- 10 a. Discuss about sampling of solids and storage of solids with examples. (10 Marks)  
b. Differentiate between open and closed storage. (10 Marks)

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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.