## **Model question Paper**

# Sixth semester B.Tech Degree Examination

(2013 scheme)

### 13.606.4 MATERIALS HANDLING (MPU)

Time: 3 Hrs. Max. Marks: 100

#### PART – A

(Answer all questions, each question carries 2 marks)

- 1. Enumerate the principles of material handling
- 2. Recall the applications of material handling equipments with example
- 3. Identify the difficulties in Manual handling
- 4. Define Arresting gear. Mention its applications
- 5. Draw the schematic sketch of a wall mounted jib crane and show the motions.
- 6. Enumerate the principle components of a belt conveyor
- 7. Recall two special type of belt conveyor and its application
- 8. Compare a passenger conveyor and load conveyor
- 9. Sketch a bucket elevator
- 10. List the features of chute and its application

(10x2=20)

#### PART - B

(Answer any one full question from each module, each question carries 20 marks)

#### **MODULE - 1**

- 11. a) Explain the modern trends in Material handling
  - b) Illustrate the features of load handling attachments
- 12. a) Describe the factors considered for selecting a material handling system
  - b) Explain working of an Electric Hoist

## MODULE - 2

- 13. a) Explain the luffing mechanism of a tower crane
  - b) Illustrate the gain of force in lifting tackle pulley
- 14. a) Explain the travelling mechanism of EOT cranes.
  - b) Explain the working of any two types of braking systems used in cranes

## **MODULE - 3**

- 15. a) Illustrate Flight conveyor and its application
  - b) Discuss the tractive elements in a belt conveyor
- 16. a) Discuss the safety issues and measures of a passenger lift
  - b) Compare Hydraulic and pneumatic conveyors

## **MODULE - 4**

- 17. a) Illustrate the working of an overhead conveyor. What are its features
  - b) Explain the working of a screw feeder with neat sketch
- 18. a) Explain the working of a bucket elevators. What are its features?
  - b) Explain load carrying car conveyor with neat sketch.

4x20 = 80