



TED (15) – 5025

Reg. No.....

(REVISION — 2015)

Signature

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2019

MATERIAL HANDLING

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. Define material handling.
2. What are the types of loads handled by material handling system ?
3. What is the purpose of arresting gear and brakes ?
4. What is a staker ?
5. State the purpose of bucket elevator.

(5×2 = 10)

PART — B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. What are the principles of material handling ?
2. Explain any two loading and unloading system.
3. Explain the working principle of electromagnetic shoe brake.
4. State the features and benefits of vertical skip hoist elevator.
5. State the purpose and types of cranes.
6. What do you understand by automated guided vehicle ?
7. State the difference between traction type and tractionless type conveyor.

(5×6 = 30)

PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

UNIT — I

- III (a) What are the factors that are effecting the selection of material handling equipment ? 8
- (b) What are the methods of stacking ? Explain briefly. 7

OR

- IV (a) Explain the types of movement of materials in material handling system. 7
- (b) What is the principle of working in hoisting mechanism ? 8

UNIT — II

- V (a) What are the various load handling attachment ? 7
- (b) Explain working of mechanical vacuum lifter. 8

OR

- VI (a) What are the attachment that can be utilized for loose materials and molten metals ? Explain briefly. 7
- (b) Explain working of electric lifting magnet. 8

UNIT — III

- VII (a) Explain working of lever operated hoist. 7
- (b) What are the types of industrial lift ? 8

OR

- VIII (a) What are the advantages and applications of hoisting equipment ? 7
- (b) Explain the working of bridge crane. 8

UNIT — IV

- IX (a) State the advantages & disadvantages of conveying machineries. 7
- (b) Write short notes on (i) Transfer tables and (ii) Monorail conveyor. 8

OR

- X (a) List different types of conveyors. 7
- (b) Explain about screw conveyor. 8