

00051

**B.Tech. MECHANICAL ENGINEERING  
(BTMEVI)**

**Term-End Examination**

**December, 2013**

**BIMEE-020 : MATERIALS HANDLING**

*Time : 3 hours*

*Maximum Marks : 70*

---

**Note :** *Attempt any five questions. Each question carries equal marks.*

---

1. (a) What are the general principles of cargo handling ? 7  
(b) Explain the types of equipments and their maintenance in material handling. 7
2. (a) What is straddle carrier ? Explain different types of trucks used in material handling. 7  
(b) Explain the working of hand pallet trucks and stokers. 7
3. (a) Elaborate different types of casts and trolleys used in material handling. 7  
(b) Sketch and explain the working of air cushion handling frames. 7
4. (a) How different types of conveyers help in material handling industry ? Explain in detail. 7  
(b) Discuss on line restricted material handling equipments. 7

5. (a) What is a trolley ? Explain different types of trolleys in detail. 7
- (b) How the elevators and lifts are used in construction sites for material handling ? Explain. 7
6. (a) What is the need of a good ware house layout ? Explain how it helps in the materials flow in industrial processing. 7
- (b) What is a Crane ? Explain the working of Jib cranes for transferring the materials. 7
7. Write short notes on the following : **3.5x4=14**
- (a) Batched goods
- (b) Automatically Guided Vehicles
- (c) Mobile lifting frame
- (d) Reception and dispatch equipment
-