

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

Term-End Examination

00862

December, 2017

BIMEE-020 : MATERIAL HANDLING

Time : 3 hours

Maximum Marks : 70

Note : Attempt any **five** questions. All questions carry equal marks.

1. (a) What are the factors that are considered for the effective selection of material handling equipment ? Explain in detail. 7
- (b) Discuss in detail, the importance of material handling in an industry. 7

2. (a) What is an Integrated Transport ? How can it be applied in the material handling industry ? 7
- (b) What are the roles of plant layouts in material handling ? Explain in detail. 7

3. (a) Explain the working of order pickers with a neat sketch. 7
- (b) Explain the unit load concept. How does this concept help in designing a specific material handling system ? 7
4. (a) Explain the working of hand pallet trucks and stokers with neat sketches. 7
- (b) Enumerate the guiding principles of material handling. 7
5. (a) What are the different types of conveyors ? Explain any one of them with a neat sketch. 7
- (b) "Mechanical handling of material improves the quality and quantity of manufacturing." Discuss. 7
6. (a) Explain the working of a rail mounted trolley with a neat sketch. 7
- (b) What is the need of a good warehouse layout ? Explain how it helps in the material flow in an industry. 7

7. Write short notes on any **four** the following : $4 \times 3 \frac{1}{2} = 14$

- (a) Jib Cranes
 - (b) Load Carrier
 - (c) Lift
 - (d) Automatically Guided Vehicles (AGV)
 - (e) Carts and Trolleys
 - (f) Batched Goods
-