

IV B.Tech I Semester Supplementary Examinations, April/May 2005
MECHANICAL HANDLING EQUIPMENT

(Common to Mechanical Engineering and Production Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Discuss about the Driverless trains and wire-guided pallet trucks.
2. (a) Explain the working principle of conveying equipment.
(b) How do you classify conveyors?
3. (a) Describe the construction of a screw conveyors.
(b) Write about inclined (screw) conveyor and the capacity of screw conveyors.
4. (a) Explain the salient features of one, two and three wheeled hand trucks.
(b) Distinguish between hand operated and power operated hand trucks
5. What is meant by a hopper? Explain its uses in feeding equipments.
6. (a) Explain various types of feeders as auxiliary equipments and their application in material handling.
(b) Distinguish between slides and chutes. Enumerate their application
7. (a) What are the components incorporated in load hoisting mechanism?
(b) Estimate the speed at which the load is lifted in hand power hoisting.
8. (a) Why most of the cranes and hoists use hydraulic system?
(b) Sketch and explain a hydraulic crane.
