FACULTY OF ENGINEERING

B.E. 4 / 4 (Prod.) II – Semester (Main) Examination, May / June 2011

Subject: Material Handling (Elective – III)

Time: 3 Hours **Max. Marks: 75**

Note: Answer all questions from Part-A and any five questions from Part-B.

PART – A (25 Marks)

1. List various conveying systems.
2. What are the factors to be considered in selection of buckets?
3. What are various components of pneumatic conveying system?
4. What are the applications of slurry transport?
5. What are the problems of solids flow?
6. Draw the dynamic pressure distribution curve for hopper.
7. What are the advantages of ASRS?
8. How RFID system works?
9. How to estimate cost of material handling.
10. List various automatic identification methods.

PART – B (50 Marks)

11. Write the steps involved in belt conveyor design.
12. Write the principle of operation of screw conveyors and give its applications.
13. Explain flow / no flow criterion for mass flow silos.
14. What are the objectives of implementing ASRS in an industry?
15. Describe 2-dimensional bar code systems.
16. Give brief description maintenance of MH equipment.
17. Write short note on any two of the following:
    a) Hoists
    b) Bins & Silos
    c) Vacuum pumps

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