

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V • EXAMINATION – WINTER 2013

Subject Code: 151503

Date: 02-12-2013

Subject Name: Facility Layout and Material Handling Systems

Time: 10.30 am - 01.00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1 (a) Explain why material handling and plant layout activity must be combined? **07**

(b) Define Plant layout. Discuss product layout with suitable example. **07**

Q.2 (a) List out various principles of plant layout. Explain any three in detail. **07**

(b) “Most of ceramic industries are located near MORBI in India” Discuss with the point of view of plant location and site selection factor in plant layout. **07**

OR

(b) How man, machine, material and movement factors affect the fix position layout? Explain. **07**

Q.3 (a) What do you meant by flow pattern? Explain flow pattern for assembly and production line with suitable sketch. **07**

(b) During your any industrial visit, how can you say that any industry have an excellent plant layout? **07**

OR

Q.3 (a) What are the common pit-falls in selection of sites and what care will you take to avoid them? **07**

(b) Explain work station layout with example. **07**

Q.4 (a) Define material handling. Explain it importance in any industry. **07**

(b) Write note: Layout and productivity. **07**

OR

Q.4 (a) Suggest suitable site for cement manufacturing industry in India with justifications. **07**

Q.4 (b) ” zero handling is the best handling” Criticize statement. **07**

Q.5 (a) Explain various principles of MH system. **07**

(b) Write note: Belt conveyors. **07**

OR

Q.5 (a) Give (in chart) material handling equipments used in various industries. Explain any one in short. **07**

(b) Explain, how will you start material handling equipment selection process in M/S PNG(p) Ltd., MORBI (manufacturer of vitrified tiles) ? **07**
