

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER-V • EXAMINATION – WINTER • 2014**

**Subject Code: 151503****Date: 01-12-2014****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) How productivity can be improved through designing the excellent plat layout? **07**  
 (b) Define Plant layout. Discuss process layout with suitable example. **07**
- Q.2** (a) List out various principles of plant layout. Explain any TWO in detail. **07**  
 (b) Write note: selection of location and territory. **07**  
 OR
- (b) Why most of the ceramic industries in India are located in Morbi, India. Discuss. **07**
- Q.3** (a) What do you meant by flow pattern? Explain flow pattern for assembly and production line with suitable sketch. **07**  
 (b) Write note: Symptoms an excellent 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) Discuss how productivity can be improved with the help of excellent material handling system design. **07**  
 (b) Write note: Fix position layout. **07**  
 OR
- Q.4** (a) Suggest suitable site for any CEMENT manufacturing industry in India with justifications. **07**
- Q.4** (b) “Zero handling is the best handling” Criticize the statement. **07**
- Q.5** (a) Define material handling. Explain various principles of MH system. **07**  
 (b) Write note: Belt conveyer. **07**  
 OR
- Q.5** (a) Give (in chart) material handling equipments used in various industries. Explain fork lift tuck with its applications. **07**  
 (b) Explain, how will you start material handling equipment selection process in any industry? **07**

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