



Reg. No. :

Name :

**Eighth Semester B.Tech. Degree Examination, April 2015
(2008 Scheme)**

08.805.3 : FACILITIES PLANNING (MPU)

Time : 3 Hours

Max. Marks : 100

- Instructions :**
- 1) Answer **all** questions in Part A.
 - 2) **Each** question in Part A carries 4 marks.
 - 3) Answer **any one full** question from **each** Module in Part B.
 - 4) **Each** question in Part B carries 20 marks.

PART – A

1. Explain various terms associated with line balancing.
2. What is CORELAP ? Explain.
3. Discuss the importance of proper lighting.
4. What is the need of safety training in industries ?
5. How the plant layouts are related to type of production ?
6. How do you ensure cost effective material handling in industries ?
7. Write notes on bucket elevators.
8. What is Group Technology Layout ? Explain.
9. Explain present worth method in replacement studies.
10. Explain any two fire fighting equipments.





PART – B

Module – I

11. a) Explain briefly the basic principles involved in preparing the layout of an industrial plant, indicating the important techniques used for the purpose. **12**
- b) Explain briefly various types of computer packages available for plant layout analysis. **8**

12. a) What are the different types of layouts used? Compare its advantages and disadvantages. **8**

- b) Following table indicates the level of interaction among different sections in an organisation. Prepare two different layouts and evaluate them quantitatively.

| Section | → | 1 | 2 | 3 | 4 | 5 | |
|---------|---|---|---|----|----|----|-----------|
| ↓ | | | | | | | |
| 1 | | X | 8 | 15 | 25 | 4 | |
| 2 | | | X | 12 | 2 | 16 | |
| 3 | | | | X | 15 | 40 | |
| 4 | | | | | X | 20 | |
| 5 | | | | | | X | 12 |

Module – II

13. a) Explain environmental factors at work place. **8**
- b) Explain the different methods of estimating capacity of plant services like steam and compressed air. **12**
14. a) Explain how good ventilation system can be provided in a plant. **8**
- b) What is air pollution? Discuss various sources of air pollution. **12**

Module – III

15. a) Discuss about material handling devices commonly used in manufacturing industries. **12**
- b) Explain the relationship between plant layout and material handling. **8**
16. a) A replacement policy is to be developed for machines in a production centre. What are the costs that should be considered for developing the replacement policy. **10**
- b) Discuss about various methods adopted for replacement studies. **10**