



Reg. No. :

Name :

**Eighth Semester B.Tech. Degree Examination, May 2018
(2013 Scheme)**

13.805.3 : FACILITIES PLANNING (MPU) (Elective – IV)

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** the questions. **Each** question carries **2** marks.

(10×2=20 Marks)

1. What are the objectives of line balancing ?
2. Name the different types of plant layout.
3. What are the advantages of computer packages in plant layout ?
4. Name any three industrial equipments/machineries which causes pollution to environment.
5. Name any three safety devices used in industries.
6. Name any four material handling equipments.
7. State for what applications the following material handling equipments are used
 - i) Fork lift trucks
 - ii) Belt conveyer.
8. What are the elements of material handling system ?
9. What is the significance of Break Even Analysis ?
10. Differentiate between depreciation and obsolescence.



PART – B

Answer **four full** questions. **Each full** question carries **20** marks. **(4×20=80 Marks)**

Module – I

11. a) Explain the principles of material handling. **10**
b) Explain the principles of process layout and product layout with suitable examples. Also mention their advantages and disadvantages. **10**

OR

12. a) What is systematic layout planning ? Explain this with a help of a block diagram. **10**
b) Explain the following computer packages for layout analysis **10**
i) CORELAP
ii) CRAFT.

Module – II

13. a) Explain the following terms with suitable examples. **10**
i) Environmental pollution
ii) Industrial pollution.
b) Describe the importance of the following in preventing accidents **10**
i) Lighting
ii) Ventillation.

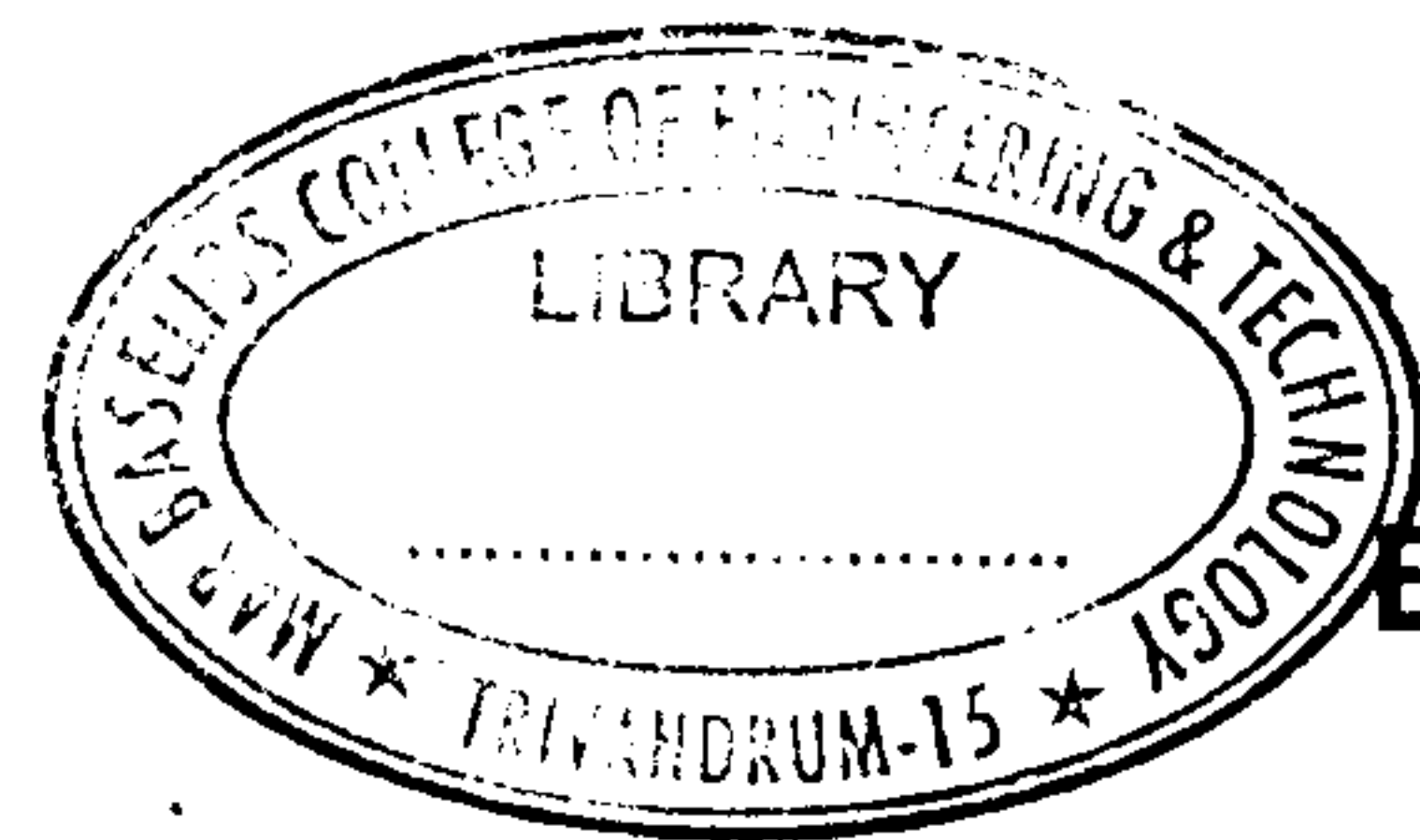
OR

14. a) Describe the procedures involved in “Industrial Accident Report”. **10**
b) Explain causes and prevention of accidents in a chemical industry. **10**

Module – III

15. a) Enumerate the factors affecting the selection of material handling equipment in an automobile industry. **12**
b) How will you classify material handling equipments ? Give one example for each type. **8**

OR



16. a) Discuss centralized storing and decentralized storing with its advantages and disadvantages. 12
- b) Explain material handling in product layout with a suitable example. 8

Module - IV

17. a) Describe the effects of increase or decrease in sales price on Break Even Point (B.E.P.) with the help of neat sketches. 10
- b) A manufacturer sells the product at Rs. 6 each and variable costs are Rs. 4 each and the fixed costs are Rs. 30,000/- 10
- i) Calculate B.E.P.
- ii) What would be the profit, if the firm sells 20,000 units.

OR

18. a) State any three methods of calculating depreciation. 10
- b) The cost of a machine is Rs. 6,000/- and its scrap value after 4 years is Rs. 3,000. Assuming an interest rate of 6 percent per year, find the depreciation rate per year. 10
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