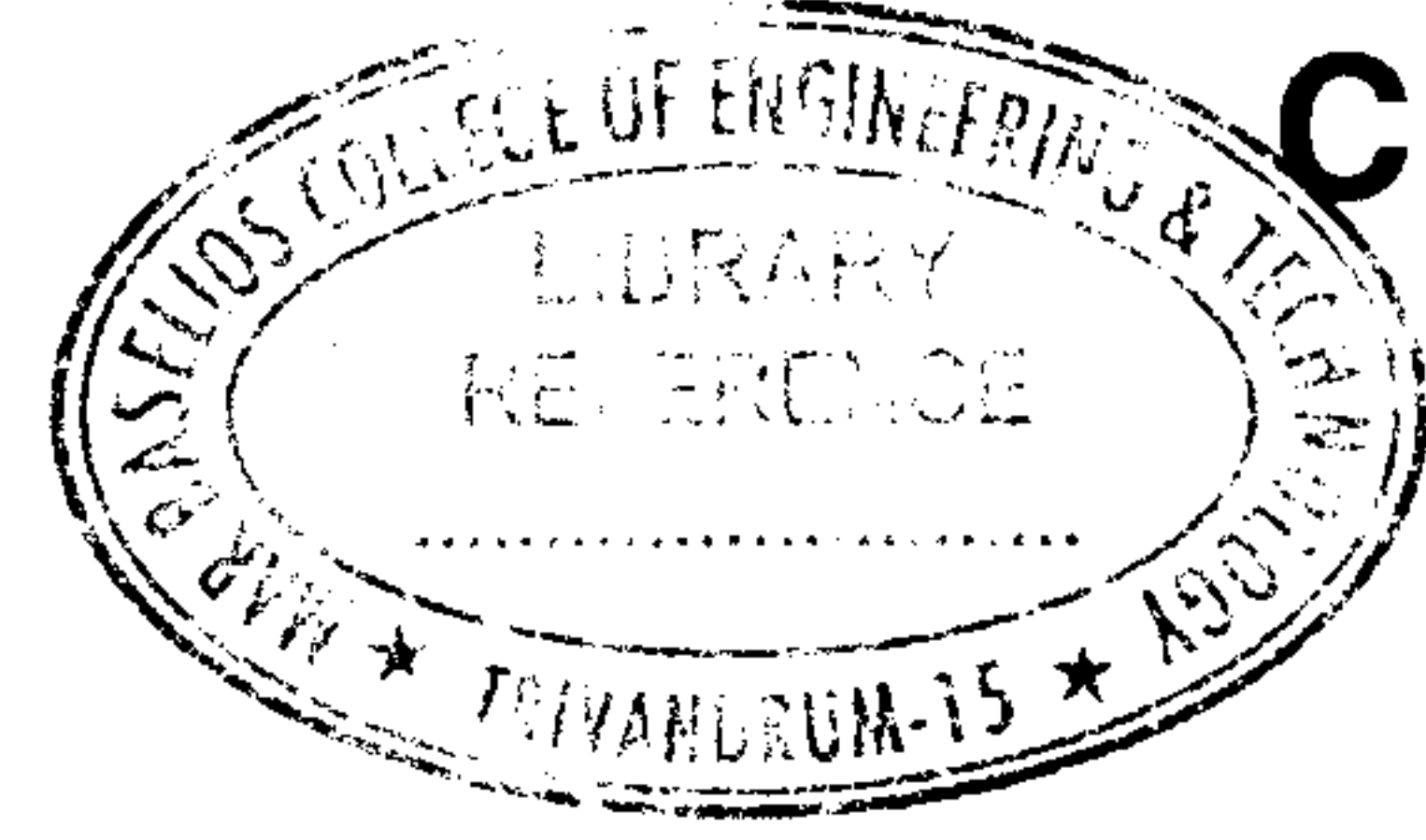




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C – 2364

Reg. No. :

Name :

**Eighth Semester B.Tech. Degree Examination, May 2017
(2013 Scheme)
13.805.3 : FACILITIES PLANNING (MPU)**

Time : 3 Hours

Max. Marks : 100

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

PART – A

1. What are the principles of layout ?
2. Briefly explain Facilities Planning Hierarchy.
3. Explain From To Chart used in layout planning.
4. Briefly explain the effects of noise pollution in industries.
5. Enumerate various dust control systems used in industries.
6. What are the major criteria for the selection of material handling equipments ?
7. What are the functions of material Handling system ?
8. What are the functions of dispatching area in an industry ?
9. Define Obsolescence and Deterioration of equipments.
10. What is the significance of margin of safety in break even analysis ?

(10×2=20 Marks)

P.T.O.



PART – B

Module – 1

11. a) Considering the following data, develop and optimum layout.

Product	% volume	Product sequence	
1	8	S-A-B-C-D-E-F-WH	
2	12	S-C-B-D-E-WH	
3	29	S-A-B-D-C-F-WH	
4	24	S-B-C-D-C-E-F-WH	
5	9	S-B-C-D-E-WH	10

b) Explain the factors are to be considered while planning the stores layout. 10

OR

12. a) Explain different types of layouts used in plants. 10

b) Explain the major considerations while designing a plant layout. 10

Module – 2

13. a) Explain various plant services. 10

b) What are the causes of industrial accidents, how they can be prevented? 10

OR

14. Explain various sources and control methods of industrial pollution. 20

Module – 3

15. Explain the different types of cranes with the help of neat sketches. 20

OR

16. Explain the factors are to be considered for the selection of material handling systems. 20



Module – 4

17. a) Explain the following :

- 1) Physical Depreciation.
- 2) Functional Depreciation
- 3) Accidental Depreciation.

10

b) An Engine lathe was purchased for Rs. 20,000/-. Its useful life was estimated as ten years and salvage value as Rs. 5,000/-. Using diminishing balance method, calculate the depreciation rate (%). Also estimate the depreciation fund at the end of two years.

10

OR

18. a) What are the reasons of equipment replacement ? Explain any two methods of replacement.

10

b) Machine a operated manually costs Rs. 2,000 has a life of 2 years while an automatic machine B costs Rs. 5,000 has a life of 4 years. Operating cost for the machine A is Rs. 4,000 per year while that of machine B is Rs. 3,000 only. Which machine should be purchased ? Consider 10% interest.

10

(4x20=80 Marks)

