

SIXTH SEMESTER B.TECH DEGREE EXAMINATION

(Model Question)

(2013 Scheme)

13.606.8 Elective II - PROJECT ENGINEERING (H)

Time: 3 Hrs

Max. Marks: 100

Part A

Answer all questions. Each question carries 2 marks.

1. Differentiate between a commercial and a semicommercial plant.
2. List the types of flow diagrams that are in common use.
3. Explain how plant terrain influences the site selection?
4. Briefly discuss on the venting and draining in process plant design
5. Explain the different stages in site development.
6. Write a note on cost-plus contract.
7. Differentiate between scope estimate and contractor's estimate.
8. List the items that are included in the fixed capital investment, for chemical process industry.
9. Explain the method of determining profitability using net present value method.
10. Write a note on the two major financial reporting documents.

Part B

Answer one full question from each module. Each question carries 20 marks

MODULE - I

II Discuss the following with reference to a project

- i. Process Design
- ii. Engineering Design and Drafting
- iii. Construction
- iv. Operation
- v. Specifications

(20 Marks)

12. Discuss the main factors to be considered in the feasibility study of a project.

(20 Marks)

MODULE - II

13. A plant layout is to be prepared for a batch process which involves process equipments such as plug flow reactor, an overhead condenser, steam heating jacket for reactor, a centrifuge and two

centrifugal pumps. Discuss the factors to be considered in preparing this layout.

(20 Marks)

14. Discuss the role of project engineer in the design and erection of a process plant.

(20 Marks)

MODULE - III

15. Explain the following terms in network analysis:

- i. Event
- ii. Critical Path
- iii. Dummy Activity
- iv. Float

(20 Marks)

16. Discuss the major steps in company formation.

(20 Marks)

MODULE – IV

17. Explain economic production chart, mentioning the assumptions used for its generation .

(20 Marks)

18. Write a note on institutions in India, supporting the industry for long term financing.

(20 Marks)