

B. Tech. Sem - VIII (Chemical Engg.) (2014 COURSE) (CBCS) :
SUMMER - 2019

SUBJECT: PLANT DESIGN, PROJECT ENGINEERING & COSTING

Date: Saturday
Day: 25/05/2019

S-2019-2871

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to right indicate **FULL** marks.
- 3) Assume suitable data if necessary.

-
- Q.1.** Elaborate in detail preliminary techno economic feasibility report. (10)
OR
- Q.1.** What are the different factors that involved in plant site selection? (10)
- Q.2.** Write short note on (10)
i) Indian Boiler Act ii) Factories Act 1948
OR
- Q.2.** Explain the optimization and feasibility of plant design (10)
- Q.3.** a) Elaborate the factors influencing the production cost. (05)
b) Explain the method of estimating capital investment. (05)
OR
- Q.3.** What is fixed and working capital investment? How they are estimated? (10)
- Q.4.** What is depreciation? Explain the various methods of estimating depreciation. (10)
OR
- Q.4.** A laboratory piece of equipment was purchased for Rs. 22.75 Lakh and it is (10)
estimated to be used for 5 years with a salvage value of Rs. 3.25 Lakh.
Tabulate annual depreciation allowance and year end book value for the 5
years by using i) Straight line depreciation method ii) Sum of the digit
depreciation method.
- Q.5.** a) Explain break even chart for chemical processing plant. (05)
b) Explain alternative investment. (05)
OR
- Q.5.** Explain the methods for profitability evaluation. (10)
- Q.6.** Explain CPM and PERT. (10)
OR
- Q.6.** a) Explain the scheduling of project by bar chart. (05)
b) Explain the advantages of CPM. (05)

* * * * *