

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

WINTER - 2018

SUBJECT: PLANT DESIGN, PROJECT ENGINEERING & COSTING

Date: Wednesday

W-2018-2606

Time: 02.30 PM TO 05.30 PM

Day: 14/11/2018

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.** Explain the factors considered in plant design. (10)
OR
- Q.1.** Explain the site selection. (10)
- Q.2.** a) Explain the selection of process equipment. (05)
b) Explain the significance of pilot plant. (05)
OR
- Q.2.** Explain factories Act 1948 in detail. (10)
- Q.3.** a) Explain cash flow and cumulative cash position. (05)
b) Explain significance of insurance. (05)
OR
- Q.3.** Explain the factors affecting estimation of investment and production cost. (10)
- Q.4.** What is depreciation? How it is estimated? (10)
OR
- Q.4.** The initial cost of a reactor is Rs. 35 Lakh. It has useful life of 10 years. The estimated salvage value of reactor at the end of useful life is Rs. 3.25 Lakh. Calculate the annual depreciation and book value of reactor using straight line method and decline balance method. (10)
- Q.5.** a) Explain Break even chart for chemical processing plant with its significance. (05)
b) Explain the alternative investment. (05)
OR
- Q.5.** Explain in detail methods used for estimation of profitability. (10)
- Q.6.** Explain the importance of scheduling of project. (10)
OR
- Q.6.** a) Explain advantages of CPM. (05)
b) Explain PERT. (05)

* * * * *