

**B. TECH. (CBCS - 2014 COURSE) SEM - VIII (CHEMICAL
ENGG.) : SUMMER - 2018**

SUBJECT: PLANT DESIGN, PROJECT ENGINEERING & COSTING

Date: **Tuesday**
Day: **05/06/2018**

S-2018-4651

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. Explain the importance of market survey. (10)
OR
- Q.1. Explain plant location and site selection. (10)
- Q.2. Explain Indian Boiler regulations and factories act 1948. (10)
OR
- Q.2. Explain optimization and feasibility of plant design. (10)
- Q.3. a) Explain Cost Indexes (05)
b) Explain the types of estimates. (05)
OR
- Q.3. What is fixed and working capital investment? How they are estimated? (10)
- Q.4. The initial cost of an evaporator is Rs. 27 Lakh. It has useful life of 12 years. The estimated salvage value of an evaporator at the end of useful life is Rs. 1.25 Lakh. Calculate the annual depreciation and book value of an evaporator using sum of year digits method and sinking fund method. The interest rate is 8% per year. (10)
OR
- Q.4. a) Write a note on (05)
i) Salvage value ii) Book Value
b) Explain straight line method of estimating depreciation. (05)
- Q.5. a) Write a note on (05)
i) Rate of Return ii) Alternative Investment
b) Explain the significance of Break Even Chart. (05)
OR
- Q.5. Explain in detail methods used for estimation of profitability. (10)
- Q.6. Explain the scheduling of project using CPM and PERT. (10)
OR
- Q.6. a) Explain importance of project scheduling. (05)
b) Explain Gantt Chart. (05)

* * * * *