(3 Hours)   **Marks : 80**

N. B.   (i)   Question number **one is compulsory.**
        (ii) Answer any **Three** questions from the rest.
        (ii) Assume suitable data wherever necessary.

1. **Solve any four of the following:**   **20**
 a) Define: i) Depreciation
                ii) Service life
                iii) Salvage value
                iv) Scrap value
                v) Book value

 b) Explain price discrimination.

 c) What is law of demand? Explain with demand curve.

 d) Discuss various types of Taxes.

 e) Explain Growth v/s Development.

2. **a)** A glass lined reactor of 150 gal. capacity purchased in 2001 has cost of Rs. 50000. Cost
       index in 2001 is 237.3. Calculate the cost of the reactor of 450 gal. capacity in 2008 if cost
       index in 2008 is 248.5.   **10**
 b) Explain Break-even analysis with graph. Derive relation for Break Even Point (BEP).   **10**

3. **a)** A reactor which will contain corrosive liquids has been designed. The two alternatives are:

	Reactor A	Reactor B
M.O.C.	MS	SS
Installation cost	Rs. 10000	Rs. 25000
Service life	3 Years	-
Scrap value	0	0

On the basis of equal capitalized costs for both types of reactors, what should be the useful-
life period for the SS reactor if money is worth 5% compounded annually?   **10**

 b) Write a short note on Balance sheet.   **10**

4. **a)** A Factory producing 100 electric bulbs a day involves direct material cost of Rs. 250,
       direct labour cost of Rs. 200 & factory on cost of Rs. 325. Assuming a profit of 12% of the
       total sales & selling on cost is 30% of the factory cost. Calculate selling price of one electric
       bulb.   **10**

b) A distillation tower was set up before 10 years at the cost of Rs. 2100000 & life was estimated to be 20 years. Now, at present tower is not working with same efficiency. So company management has taken decision to setup new tower & cost estimated to be Rs. 4500000. The company utilizing its own depreciation fund. Then find out how much amount company will expect by selling initially established tower & what additional amount required to purchase new tower if salvage value of old tower is Rs. 100000 by using Straight Line depreciation method. **10**

5. a) For the case of a nominal annual interest rate of 20% for capital of Rs. 2000, determine:

i) Total amount accumulated after one year (365 days) with daily compounding.

ii) Total amount accumulated after 6 years with continuous compounding.

iii) The effective annual interest rate if compounding is continues. **10**

b) A company has 3 alternative investments, which are being considered. All three investments are for the same type of unit & yields same service only one of the investment can be related. If a company incharge expects 15% rate of return on original investment, which one will be
suitable? **10**

Item	Investment 1	Investment 2	Investment 3
Initial fixed capital (Rs.)	100000	170000	210000
Working capital investment (Rs.)	10000	10000	15000
Annual cashflow (Rs.)	30000	52000	59000
Annual expenditure (Rs.)	15000	28000	21000

6. A material testing machine was purchased for Rs. 200000 & was to be used for 5 years with an expected residual salvage value of Rs. 5000. Calculate the depreciation & year-end book values by using: **20**

i) Straight Line Method

ii) Declining Balance Method

iii) Sum Of The Year Digit Method

iv) Sinking Fund Method