|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

# Fifth Semester B.E. Degree (CBCS) Examination Management and Economics 

Time: 3 hrs.
Max. Marks: 80
Note: Answer any FIVE full questions, choosing one full question from each module.
MODULE - I
1 a Briefly Explain the roles of a Manager.
b Explain the contributions made by F.W.Taylor under Scientific Management.

## OR

2 a What are single use and standing plans? Explain them with examples.
b List \& Explain the steps involved in Decision making.

## MODULE - II

3 a Define Motivation. Explain McGregor's Theory X \& Theory Y (08 Marks)
b Explain in Brief various types of Organization.
(08 Marks)

## OR

4 a Define Leadership. Explain the Types of Leadership.
(08 Marks)
b What is communication \& explain the types of communication.
(08 Marks)

## MODULE - III

5 a Explain the Scientific approach of problem solving and decision making.
(10 Marks)
b Find the effective interest rate if the rate of interest is $8 \%$ when compounded (i) Yearly (ii) ( 06 Marks) Biannually (iii) Quarterly (iv) Monthly (v) Daily. Compare the results.

## OR

6 a An inventor has been offered Rs. 12,000 per year for next 5 years and Rs. 6,000 (10 Marks)
annually for the following 7 years for the exclusive rights to an invention. At what price could the inventor afford to sell the rights to earn $10 \%$ disregarding taxes.
b Explain the law of Demand and Supply with suitable example
(06 Marks)

## MODULE - IV

7 a Define the following terms:
(06 Marks)
(i) Service Life (ii) Accounting Life (iii) Economic Life
b Compare the alternatives below using present worth analysis at $\mathrm{i}=10 \%$ per year and a 3 ( 10 Marks) year study period

| Particulars | Machine A | Machine B |
| :--- | :---: | :---: |
| First cost | Rs. 20,000 | Rs.30,000 |
| Annual cost | Rs. 9,000 | Rs. 7,000 |
| Salvage / Market value | Rs. 4,000 |  |
| Life | 3 Years | 6 Years |

a Explain future worth comparison method. How is it different from present worth comparison method
b First cost of an asset is Rs 5,00,000/-. The annual maintenance in the first year is Rs $2,000 /$ - and increase by Rs $1,000 /$ - every year up to $10^{\text {th }}$ year. The annual income is expected to be Rs $50,000 /$ - in the first year with increase of Rs 25,000 every year up to $10^{\text {th }}$ year. The operating cost is Rs $6,000 /-$ per year. The salvage value is Rs $30,000 /-$ at the end of $10^{\text {th }}$ year. Find the equivalent annual cost of the machine at $12 \%$ interest rate.

## MODULE - V

9 a Explain the following terms
(08 Marks)
(i)Prime cost (ii) Factory Cost (iii) Office cost (iv) Total Cost
b A small firm is producing 1000 pens per day. The cost of direct material is Rs. 1600 ( 08 Marks) and that of direct labour is Rs.2000. Factory overheads chargeable to it are Rs. 2500 . If the selling on cost is $40 \%$ of the factory cost, what must be the selling price of each pen to realize a profit of $20 \%$ of the selling price.

OR
10 a Explain the causes of depreciation (08 Marks)
b Determine the weight and the cost of following component shown in fig. Take ( 08 Marks) density of material $8.5 \mathrm{~g} / \mathrm{cc}$. cost of each Kg of material is Rs. 100 .


