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# 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 Define Management. Explain the levels of Management
b Explain principles of management as formulated by Fayol.

## OR

2 a Explain the importance of planning.
b List \& Explain the steps involved in planning

## MODULE - II

3 a Briefly Explain Maslow's Hierarchy of needs.
(08 Marks)
b What is span of control? Explain the factors governing it.
(08 Marks)

## OR

4 a Explain the steps involved in selection process.
(08 Marks)
b Define controlling. Explain the steps involved in controlling
(08 Marks)

## MODULE - III

5 a Differentiate between: i) Intuition and Analysis, ii) Tactics \& Strategy (06 Marks)
b A person is planning for his retired life. He has 10 more years of service. He would like to deposit $20 \%$ of his salary, which is Rs. $4000 /$ - in the first year and thereafter he wishes to deposit with an annual increase of Rs.500/- for the next 9 years with interest rate of $15 \%$. Find the total amount at the end of $10^{\text {th }}$ year of the above series.

## OR

6 a Explain the law of diminishing returns and its limitations
(06 Marks)
b An amount of Rs. 1200 per year is to be paid into an account each for the next five ( 10 Marks) years. Using a nominal interest of $12 \%$ determine the total amount the account will have at the end of $5^{\text {th }}$ year under the following conditions.
(i)Deposit made at the end of each year with interest compounded monthly.
(ii)Deposit made at the end of each year with interest compounded continuously.

## MODULE - IV

7 a State and explain the conditions for PW comparison (06 Marks)
b Two types of trucks are available for transportation use. The details are as follows

| Particulars | Truck A | Truck B |
| :--- | :--- | :--- |
| First Cost | $8,00,000$ | $12,00,000$ |
| Maintenance Cost | 16,000 | 12,000 |
| Estimated salvage value | $2,00,000$ | $4,00,000$ |
| Estimated Life | 4 years | 8 years |

Both the truck deliver the same amount of work. Assume interest rate of 7\%. Which truck is to be preferred on PW case.

8 a Explain the two prominent methods used for comparison of assets that have (08 Marks) unequal lives.
b Investment proposals A and B have the net cash flow given below:
(08 Marks)

| Proposal | End of Years |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |
| $\mathbf{A ( R s )}$ | -10000 | 3000 | 3000 | 7000 | 6000 |
| $\mathbf{B ( R s )}$ | -10000 | 6000 | 6000 | 3000 | 3000 |

Compare the present worth of A and B at $\mathrm{i}=18 \%$ and which proposal should be selected.

## MODULE - V

9 a What is depreciation? List different methods of determining depreciation. Explain (08 Marks) any two of them.
b Explain why estimation and costing is required.

## OR

10 a A CNC machine costs Rs. 40,00,000 is estimated to serve 8 years after which its ( 08 Marks) salvage value is estimated to be Rs. $3,50,000$. Find,
(i)Depreciation fund at the end of the $5^{\text {th }}$ year by fixed percentage method and declining balance method.
(ii)Book value of the machine after $4^{\text {th }}$ year and $6^{\text {th }}$ year by declining balance method.
b A company purchases a lathe machine for Rs. $5,00,000$ for operating it for 5 years at ( 08 Marks) an interest rate of $5 \%$. If the salvage value is Rs. 60,000 after 5years determine,
(i)Sinking fund amount
(ii)Annual depreciation cost.

