CBCS SCHEME

USN | | | | | | | | | | |

18ME51

Fifth Semester B.E. Degree Examination, June/July 2024
Management and Economics

Time: 3 hrs. Max. Marks: 100

Note: *1. Answer any FIVE full questions, choosing ONE full question from each module.*
2. Use of Discrete compound interest factors handbook tables is permitted.

Module-1

1 a. Define Management. Discuss the functions of Management. **(10 Marks)**
b. Define planning and discuss the steps involved in planning. **(10 Marks)**

OR

2 a. Discuss management as a Science, Art profession. **(10 Marks)**
b. Briefly discuss types of plans. **(10 Marks)**

Module-2

3 a. What do you mean by span of control? List the factors influencing span of management. **(10 Marks)**
b. Explain Maslow need hierarchy theory in brief. **(10 Marks)**

OR

4 a. Explain : i) MBO ii) MBE. **(10 Marks)**
b. Briefly explain steps in controlling. **(10 Marks)**

Module-3

5 a. Explain problem solving and decision making process. **(08 Marks)**
b. An engineer has his last 10 years of service. Determine the amount to be deposited at the end of every year if he wishes to withdrawn Rs 15000 every year for 8 years after his retirement. The amount deposited earns an interest rate of 10% compounded annually. **(12 Marks)**

OR

6 a. Explain :
i) Law of demand
ii) Law diminishing returns
iii) Income elasticity of demand. **(06 Marks)**
b. A Man planning to build his house. He plans to invest Rs. 40,000 per year for the next 10 years. The Bank offers 12%. Interest rate compounded annually. Fine the maturity value of his account after 10 years. **(14 Marks)**

Module-4

7 a. Explain IRR and MARR. **(08 Marks)**
b.

	Particulars	Machine A	Machine B
1	Initial investment	30,000	42,000
2	Annual receipts	20,000	26,000
3	Annual expenditures	5,500	7,000
4	Economics life	4 years	4 years

Using above details Determine the payback period and comment on it. **(12 Marks)**

OR

8 a. Explain briefly conductions for present worth comparison. **(06 Marks)**

b. Rs 10 crores was generated by the management of an engineering college for new mechanical block. Annual maintenance of block estimated to be Rs. 10 lakh in addition 12 lakh will be needed every year for 10 years for painting and repairs. If budget granted has to take care of perpetual maintenance. How much of the amount can be used for initial construction costs? Deposited funds can earn 6% rate of interest compounded annually. Assume taxes and inflation does not come into picture. **(14 Marks)**

Module-5

9 a. Discuss various causes of deprivation. **(05 Marks)**

b. Explain briefly need for estimation and costing. **(05 Marks)**

c. An investment of Rs. 8000/- is made by person for purchase of machine. Its salvage value after 5 years is 1000. Using straight line find the book value at the end of each year. **(10 Marks)**

OR

10 a. Differentiate between estimation and testing. **(05 Marks)**

b. Explain briefly the objectives of costing. **(05 Marks)**

c. A cost iron component, as shown in figure below is to be manufactured. Estimate the selling price per piece from the following data :

Density of material = 7.2gm/cc
Cost of molten metal = Rs. 20/kg
Process scrap = 20% of net weight
Scrap return value = Rs.6/kg
Administrative overheads = Rs.30/hour
Sales overheads = 20% of factory cost
Profit = 20% of factory cost

Other expenditures are as follow :

Operation	Time/piece minutes	Labour cost per hour is Rs.	Shot overheads Rs./hour
Moulding and paring	15	20	60
Shot blasting	5	10	40
Fettling and inspections	6	10	40

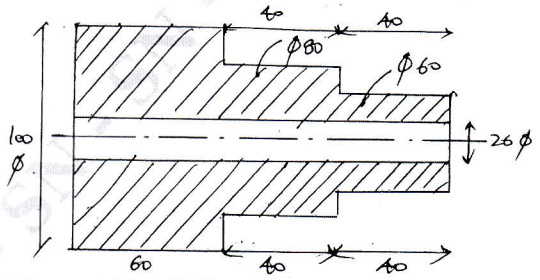

Fig.Q10(c) All dimensions are in 'mm' **(10 Marks)**

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