

CBCS SCHEME

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18ME51

Fifth Semester B.E. Degree Examination, Dec.2024/Jan.2025

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 interest factor table is permitted.

Module-1

- 1 a. Define management and explain the characteristics of management. (08 Marks)
- b. Define planning and briefly discuss the steps involved in planning. (08 Marks)
- c. Briefly explain different levels of management. (04 Marks)

OR

- 2 a. Explain the various steps in decision making process with a block diagram. (12 Marks)
- b. Explain briefly the contribution of F.W Taylor for the scientific management. (08 Marks)

Module-2

- 3 a. List the different types of organization, explain briefly line and staff organization with a chart. (10 Marks)
- b. Define motivation and explain briefly different leadership styles. (10 Marks)

OR

- 4 a. Explain Maslow's hierarchy of need theory in brief. (10 Marks)
- b. What is controlling and explain the steps in controlling process (10 Marks)

Module-3

- 5 a. Explain briefly the following :
 - i) Law of demand
 - ii) Law of supply
 - iii) Equilibrium point
 - iv) Elasticity of demandWith demand/supply graph v/s price. (10 Marks)
- b. Find the effective rate of interest for an actual rate of interest of 8% when compounded :
 - i) Yearly ii) Biannually iii) Quarterly iv) Daily. (06 Marks)
- c. Differentiate between micro and macro economics. (04 Marks)

OR

- 6 a. Define law of returns and explain the three phases of law of returns. (06 Marks)
- b. A 45 years old person is planning for his retired life. He plans to invest Rs. 2500/- every month in a private Chitfund which assures him a rate of interest 11% compounded monthly. Find the maturity value of his account when he is 60 years old. (06 Marks)
- c. A person wants to gift a car to his daughter when she would turn 18 years six years from now. He decides to put away money in her name during her next six birth days. He wants to deposit Rs. 25,000/- in the first year and go on increasing it by Rs. 5000/- every year for the next 6 years. If he estimates that a car would cost Rs. 5 lakhs when he wants to buy, how much more money should be added to the maturity amount that he receives from the bank. If it is assumed to grow at compounded 11.5% annually. Draw the cash flow diagram. (08 Marks)

Module-4

- 7 a. Define present worth and explain the conditions for present worth comparison. (10 Marks)
 b. The following alternatives are available to accomplish an objective of 12 years duration.

	Plan 'A'	Plan 'B'	Plan 'C'
Life cycles (Y)	6	3	4
First cost (Rs.)	2000	8000	10,000
Annual cost (Rs.)	3200	700	500

Compare the present worth of the alternatives using interest rate of 7 percent (7%).

(10 Marks)

OR

- 8 a. Explain briefly rate of returns :
 i) MARR
 ii) IRR
 iii) ERR. (10 Marks)
 b. A company has developed a unique prototype and spent Rs. 5 lakhs. A return of Rs. 7 lakhs is expected at the year end and it is expected to fetch Rs. 3 lakhs for the next three years calculate the rate of returns for his prototype. (10 Marks)

Module-5

- 9 a. Discuss the various causes of depreciation. (05 Marks)
 b. List and explain five methods of depreciation. (08 Marks)
 c. A company has purchased an equipment whose first cost is Rs.1,00,000 with an estimate life of 8 years. The estimated salvage value of the equipment at the end of its life time is Rs. 20,000. Find the depreciation and book value for the 5 years using the sum of the years digit method of depreciation. (07 Marks)

OR

- 10 a. Explain how selling price is determined for a product with a neat diagram. (08 Marks)
 b. Explain briefly the standard cost and marginal cost. (04 Marks)
 c. A factory produces CFL tubes in batches of 1000. The direct material cost for a batch is Rs. 1600 and direct labour cost is Rs. 2000. The factory overheads is 32 percent of material and labour costs. Selling and distribution cost are 20 percent of factory cost. If the management wants to make a profit of 20 percent of gross cost. Determine the selling price of each tube. (08 Marks)

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