

CBCS SCHEME

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18ME51

Fifth Semester B.E./B.Tech. Degree Examination, Jan./Feb. 2023 Management and Economics

Time: 3 hrs.

Max. Marks: 100

Note : 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. Interest Factor table is permitted.

Module-1

- 1 a. Define Management and discuss its nature and characteristics. (06 Marks)
b. Discuss Fayol's principles of Administrative Management. (14 Marks)

OR

- 2 a. What is Planning? Explain different steps in Planning. (10 Marks)
b. What do you understand by term Planning Premises? Explain different types of Planning premises. (10 Marks)

Module-2

- 3 a. Briefly explain principles of Organisation. (10 Marks)
b. What is Recruitment? Explain sources of Recruitment. (10 Marks)

OR

- 4 a. List various Motivation theories. Explain Maslow need Hierarchy theory in brief. (10 Marks)
b. Explain requirements of a good control system. (10 Marks)

Module-3

- 5 a. Explain Laws of Supply and Demand using suitable sketch. (08 Marks)
b. With a neat sketch, explain Cash flow diagram. (04 Marks)
c. Determine the effective interest rate for nominal annual rate of 8% compounded.
i) Daily (Assume 365 days/yr) ii) Monthly iii) Quarterly iv) Semi – annually. (08 Marks)

OR

- 6 a. What is Law of Diminishing return? Write its limitations. (03 Marks)
b. Discuss terms : i) Price elasticity of demand ii) Income elasticity of demand. (08 Marks)
c. 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 first year and thereafter he wishes to deposit amount with annual increase of Rs 500 for next nine years with an interest rate of 15%. What will be the maturity amount? (09 Marks)

Module-4

- 7 a. Following table gives initial outlay and annual revenue of a production firm using three various alternatives. Find the best alternative based on present worth if the rate of interest is 20% compounded annually. (09 Marks)

	Initial Outlay	Annual Revenue	Life (Years)
Alternative 1	13,00,000	4,00,000	10
Alternative 2	21,00,000	6,50,000	10
Alternative 3	23,00,000	8,60,000	10

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

- b. Find the most economical alternatives from following on the basis of equivalent future worth at interest rate of 9.5% per year.

Alternative I : Initial purchase cost = Rs 15,00,000 , Annual operating cost = Rs 35,000 starting from end of second year till end of life , Annual revenue generated = Rs 340000 for first 4 yrs then Rs 320000 afterwards till end of useful life. Expected salvage value is Rs 430000 and useful life = 8 yrs.

Alternative II : Initial purchase cost = Rs 1800000 , Annual operating cost = Rs 2500 , Annual revenue generated = Rs 365000 , Salvage value = Rs 550000 , Useful life = 8 yrs.

(11 Marks)

OR

- 8 a. Explain IRR , ERR and MARR. Enlist the misconcepts of IRR. (08 Marks)
- b. A firm has identified three mutually exclusive investment proposals whose details are given below. The life of three investments is estimated to be five years with negligible salvage value. The minimum rate of return for the firm is 12%. Find the best alternative based on rate of return method of comparison. (12 Marks)

	Alternative		
	A ₁	A ₂	A ₃
Investment	1,50,000	2,10,000	2,55,000
Annual net income	45,570	58,260	69,000

Module-5

- 9 a. With a block diagram, explain how a selling price of a product is determined? (08 Marks)
- b. The expenditure incurred in manufacturing machine is as follows :
- 1) Material consumed = Rs 55,00,000
 - 2) Indirect factory wages = Rs 8,00,000
 - 3) Directors fees = Rs 3,00,000
 - 4) Cost of advertisement = Rs 1,00,000
 - 5) Net profit = Rs 1,20,000
 - 6) Depreciation on sales dept car = Rs 11,000
 - 7) Printing and stationery cost = Rs 2500
 - 8) Depreciation of plant = Rs 45,000
 - 9) Direct wages = Rs 6,50,000
 - 10) Factory rent = Rs 60,000
 - 11) Telephone and postage charges = Rs 15,000
 - 12) Gas and electricity = Rs 50,000
 - 13) Office salaries = Rs 2,10,000
 - 14) Office rent = Rs 50,000
 - 15) Show room rent = Rs 1,50,000
 - 16) Sales man commission = Rs 26,500
 - 17) Sales dept car expensed = Rs 15,000
- Determine i) Direct cost ii) Factory cost iii) Total cost of production
iv) Cost of sales v) Selling price. (12 Marks)

OR

- 10 a. What do you mean by Depreciation? Discuss various causes of depreciation. (10 Marks)
- b. A Company has purchased on equipment whose first cost is Rs 2,00,000 with an estimated life of eight years. Estimated salvage value is 40,000 at the end of its life. Determine the depreciation charges and book value at the end of second year by sum of year's digit method of depreciation. (10 Marks)
