

14. A person deposits a sum of Rs.20, 000 at the interest rate of 18% compounded annually for 10 years. Find the maturity value after 10 years. 2 K2 CO2
15. Explain the equal- payment series compound amount for evaluating ROI. 2 K2 CO2
16. List the advantages of Value Engineering. 2 K1 CO2
17. What is present worth method of comparison? 2 K1 CO3
18. Define the basics of rate of return in a business environment. 2 K1 CO3
19. What is Breakdown maintenance? 2 K1 CO4
20. Distinguish between Challengers and Defenders. 2 K2 CO4
21. Write the various methods of Depreciation. 2 K1 CO5
22. Define Inflation. 2 K1 CO5

PART - C (6 × 11 = 66 Marks)

Answer ALL Questions

23. a) Illustrate the concept of law of supply and demand with suitable example. 11 K2 CO1
- OR**
- b) Explain the concepts of break-even analysis with clear diagram. 11 K2 CO1
24. a) Summarize in detail about the criteria for make or buy Decision and its approaches. 11 K2 CO2
- OR**
- b) Demonstrate the steps adopted to compute the following: 11 K2 CO2
- (i) Equal-Payment Series Compound Amount factor
- (ii) Equal-Payment Series Sinking Fund factor
25. a) A company must decide whether to buy machine A or machine B: 11 K2 CO3

	Machine A	Machine B
Initial Cost	Rs. 4,00,000	Rs.8,00,000
Useful life in years	4	4
Salvage value at the end of machine life	Rs. 2,00,000	Rs.5,50,000
Annual maintenance cost	Rs. 40,000	0

At 12% interest rate, which machine should be selected? (Use future worth method of comparison).

OR

- b) Illustrate the steps involved in the annual equivalent method for cost dominated cash flow diagram with suitable example. 11 K2 CO3
26. a) Develop in detail (i) the mode of recovery of capital and return (ii) the simple probabilistic model for items which fail completely with suitable applications. 11 K3 CO4
- OR**
- b) Two years ago, a machine was purchased at a cost of Rs. 2,00,000 to be useful for eight years. Its salvage value at the end of its life is Rs. 25,000. The annual maintenance cost is Rs. 25,000. The market value of the present machine is Rs. 1,20,000. Now, a new machine to cater to the need of the present machine is available at Rs. 1,50,000 to be useful for six years. Its annual maintenance cost is Rs. 14,000. The salvage value of the new machine is Rs. 20,000. Using an interest rate of 12%, find whether it is worth replacing the present machine with the new machine. 11 K3 CO4
27. a) The Alpha Drug Company has just purchased a capsulation machine for Rs. 20,00,000. The plant engineer estimates that the machine has a useful life of five years and a salvage value of Rs. 25,000 at the end of its useful life. Compute the depreciation schedule for the machine by each of the following depreciation methods: (a) Straight line method of depreciation (b) Sum-of-the-years digits method of depreciation (c) Double declining balance method of depreciation. 11 K3 CO5

OR

- b) Explain with suitable industrial applications the (a) causes of inflation and (b) effect of inflation 11 K3 CO5
28. a) (i) Enumerate the various causes for replacement of assets. 6 K2 CO4
- (ii) A company has purchased an equipment whose first cost is Rs. 1,00,000 with an estimated life of eight years. The estimated salvage value of the equipment at the end of its lifetime is Rs. 20,000. Determine the depreciation charge and book value at the end of various years using the straight line method of depreciation. 5 K2 CO5
- OR**
- b) (i) Differentiate between individual and group replacements. 6 K2 CO4
- (ii) Discuss the various methods of depreciation. 5 K2 CO5