

CBCS SCHEME

15AU752

USN

Library

Date.....

Seventh Semester B.E. Degree Examination, July/August 2021 Engineering Economy

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions.

- 1 a. Explain briefly the Law of demand and supply. (08 Marks)
b. Discuss the interest rate from borrowers and lenders point of view with cash flow diagram. (08 Marks)
- 2 a. Explain different types of Law of Returns. (08 Marks)
b. A person takes a loan of Rs 10,000 from a ICICI Bank at interest of 10% Pa. Find the amount if: i) Interest is compounded annually.
ii) Interest is compounded half yearly.
iii) Interest is compounded monthly (assume Y = 1 years).
iv) Interest is compounded quarterly. (08 Marks)
- 3 a. An investors can make three end of year of Rs 15000/- which are expected to generate receipts of Rs 10,000/- at the end of year 4 that will increase annually by Rs 2500/- for the following 4 years. If the investor can earn a rate of return of 10% another 8 year investments, is this alternative attractive? (10 Marks)
b. Discuss the conditions for present worth comparisons. (06 Marks)
- 4 a. Explain the comparison of assets that have unequal lives. (06 Marks)
b. A Company has three proposals for expanding its business operations. The details are as follows :

Alternative	Initial cost	Annual Revenue	Life years
A ₁	25,00,000	8,00,000	10
A ₂	20,00,000	6,00,000	10
A ₃	30,00,000	10,00,000	10

Each alternative has insignificant salvage value at the end of its life. Assuming an interest rate of 15% compounded annually. Find the best alternative for expanding the business operations of the company using the Annual Equivalent method. (10 Marks)

- 5 a. What are the different methods of Depreciation charges? Explain any three of them. (08 Marks)
b. A CNC machine costs Rs 30,00,000 is estimated to serve for 8 years after which its salvage value is estimated to be Rs 2,50,000. Find :
i) Depreciation fund at the end of the 5th year by Fixed percentage method.
ii) Book value of the machine after 4th year and 6th year by Declining balance method. (08 Marks)
- 6 a. Describe briefly the components of costs. (08 Marks)
b. What is Standard Costing? What are the steps or procedure for standard costing? Explain briefly. (08 Marks)

- 7 a. A MICO factory produces 500 spark plugs a day involving direct material costs of Rs 40,000, direct labour cost of Rs 35,000 and factory overheads of Rs 10,000. Assuming a profit of 15% of the selling price and selling overheads to be 30% of the factory cost. Determine the selling price of one spark plug. (12 Marks)
- b. List the three types of Return. Explain any one of them. (04 Marks)

- 8 a. Discuss in brief the various methods of allocation of overheads. (08 Marks)
- b. The cost of the machine is Rs 6100 and its scrap value is Rs 100. The maintenance cost found from experience are as follows :

Years	1	2	3	4	5	6	7	8
Maintenance cost	100	250	400	600	900	1200	1600	2000

Where should the machine be replaced?

(08 Marks)

- 9 a. Following is the Financial status of a Company as on 31st March 2016.

Sundry debtors -	Rs 10,000
Cash in hand -	Rs 22,000
Bank loans -	Rs 40,000
Bills payable -	Rs 20,000
Equity charges -	Rs 1,13,000
Land & Buildings -	Rs 50,000
Plant & Machinery -	Rs 90,000
Inventories -	Rs 15,000
Creditors -	Rs 30,000
Bank balance -	Rs 1,60,000

Prepare a Balance sheet as on 31st March 2016.

(08 Marks)

- b. Discuss the types of source of Finance. (08 Marks)

- 10 a. What are the types of Budgets? Explain with examples. (08 Marks)
- b. What is Profit Planning? What are the objectives of Profit Planning? (08 Marks)
