# INSTITUTE OF AERONAUTICAL ENGINEERING (Autonomous) 

B.Tech IV Semester End Examinations (Regular / Supplementary) - May, 2019

Regulation: IARE - R16
BUSINESS ECONOMICS AND FINANCIAL ANALYSIS
Time: 3 Hours
(Common to CSE \| IT \| ECE \| EEE \|CE) Max Marks: 70
Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the question must be answered in one place only

## UNIT - I

1. (a) Define business economics. Explain its nature and scope.
(b) Define demand. Explain law of demand and its exceptions.
2. (a) Define elasticity of demand. List out and explain any seven determinants of demand elasticity.
[7M]
(b) How to measure elasticity of demand. Explain different types of elasticity of demand with formula.
[7M]

## UNIT - II

3. (a) Define and explain production function with one variable input. Write any features of production function.
(b) Write the formula for Break-Even Point(BEP) in units. Explain the concept of BEP with the help of a graph.
[7M]
4. (a) Describe economies of scale and explain different types of external economies and internal economies of scale.
(b) Pepsi company produces a single article.

Following cost data is given about its product:
Selling price per unit Rs. 40
Marginal cost per unit Rs. 24
Fixed cost per annum Rs. 16000
Calculate:
(i) $\mathrm{P} / \mathrm{V}$ ratio
(ii) break even sales
(iii) sales to earn a profit of Rs. 2,000
(iv) Profit at sales of Rs. 60,000
(v) New break even sales, if price is reduced by $10 \%$.

## UNIT - III

5. (a) Define market? Write few lines on market structure. Write the conditions to entry and exit in to market.
[7M]
(b) Explain the role of time factor in the determination of price. Also explain price - output determination in case of perfect competition.
6. (a) Define monopolistic competition and monopoly competition. Explain its features.
(b) Define public enterprise. Write any two problems of public enterprise. Explain various types of public enterprises.
[7M]

## UNIT - IV

7. (a) Write about pay-back period. Describe the advantages and disadvantages of pay-back period.
[7M]
(b) Evaluate the projects by using pay back method and NPV if the cost of capital is $10 \%$. Cost of the project is Rs. $1,00,000$. The cash inflows for the next six years are Rs.25,000; 30,000; 40,000; 25,$000 ; 35,000$; and 55,000 respectively.
8. (a) Define Capital and explain different types of sources of capital.
(b) A project requires an investment of Rs. $1,44,000$ and is expected to generate cash inflows of Rs. 54,000 , Rs. 63,000 , Rs. 72,000 , Rs. 63,000 and Rs. 54,000 per annum for the next 5 years as shown in Table 1. Compute IRR with the help of $31 \%$ and $32 \%$ Discount factor.
[7M]
Table 1

| Years | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PV D.F $31 \%$ | 0.763 | 0.583 | 0.445 | 0.340 | 0.259 |
| PV D.F $32 \%$ | 0.758 | 0.574 | 0.435 | 0.329 | 0.250 |

## UNIT - V

9. (a) Define Ratio. Explain its classification.
[7M]
(b) Write journal entries in the books of Mr. Sukumar from the following transactions in the year 2008
Jan.1st Goods purchased from Raju on credit Rs.10,000
Jan 2nd Goods purchased from Ramu Rs.20,000
Jan 3rd Goods returned to Raju Rs.1,000
Jan 4th Goods returned to Ramu Rs.2,000
Jan 5th Goods sold to Suresh on credit Rs.30,000
Jan 6th Goods sold to Mahesh Rs.40,000
Jan 7th Goods returned from Mahesh Rs.4,000
Jan 8th Goods returned by Suresh Rs.3,000
Jan 9th Building sold to Venkat Rs.50,000
Jan 31st Furniture purchased from Kishore Rs.5,000
10. (a) Define financial accounting. Explain the importance and limitations of financial accounting.
[7M]
(b) From the following trial balance of Chakradhar shown in Table 2 as on 31-12-2007 prepare trading and profit and loss account and a balance sheet as on that date.
[7M]
Table 2

| Particulars | Debit Rs | Credit Rs |
| :---: | :---: | :---: |
| Purchases and Sales | $1,25,000$ | $2,30,000$ |
| Sundry Debtors and Creditors | 50,000 | 40,000 |
| Stock (Opening) | 35,000 |  |
| Plant and Machenary | 80,000 |  |
| Salaries | 16,000 |  |
| Capital | 50,000 |  |
| Bills receivable and payable | 20,000 | 10,000 |
| Rent and taxes | 5,500 |  |
| Furniture and fixtures | 2,500 |  |
| Bank loan | 20,000 |  |
| Interest on loan | 600 |  |
| Discounts | 650 | 1,200 |
| Wages | 14,850 |  |
| Cash in hand | 1,100 |  |
| Total | $3,51,200$ | $3,51,200$ |

Adjustments:
i. Closing stock Rs.45,000
ii. Outstanding Rent Rs.500, Interest Rs.1,400, and Wages Rs. 150 .
iii. Depreciation of Plant and Machinery @ $5 \%$ and furniture and fixtures @ $10 \%$.

$$
-\circ \circ \bigcirc \circ \circ-
$$

