

**INSTITUTE OF AERONAUTICAL ENGINEERING**

(Autonomous)

Dundigal-500043, Hyderabad

B.Tech VI SEMESTER END EXAMINATIONS (REGULAR) - JULY 2023

Regulation: UG-20

**BUSINESS ECONOMICS AND FINANCIAL ANALYSIS****Time: 3 Hours**

(Common to IT | ECE)

**Max Marks: 70****Answer ALL questions in Module I and II****Answer ONE out of two questions in Modules III, IV and V****All Questions Carry Equal Marks****All parts of the question must be answered in one place only****MODULE – I**

1. (a) Mention the significance of historical data in demand forecasting. What are the challenges businesses may face when relying solely on historical data for demand estimation.  
[BL: Understand| CO: 1|Marks: 7]
- (b) Discuss the importance of price elasticity and illustrate different methods of price elasticity with suitable formulas and graphs.  
[BL: Apply| CO: 1|Marks: 7]

**MODULE – II**

2. (a) Summarize the law of returns to scale and explain the three possible scenarios that can arise: increasing returns to scale, constant returns to scale, and decreasing returns to scale. Provide an example for each scenario.  
[BL: Understand| CO: 2|Marks: 7]
- (b) A manufacturer sells his product at Rs. 5 each. Variable costs are Rs.2 per unit and the fixed costs amount to Rs. 60,000.
  - i) Calculate the break-even point (BEP)
  - ii) Calculate the profit if the firm sells 30,000 units?
  - iii) What would be the BEP if the firm spends Rs.3,000 on advertising?
  - iv) How much should be the manufacturer sell to make a profit of Rs.30,000 after spending Rs.3,000 for advertisement?  
[BL: Apply| CO: 2|Marks: 7]

**MODULE – III**

3. (a) Compare and contrast the characteristics of perfect competition, monopoly, monopolistic competition, and oligopoly.  
[BL: Understand| CO: 3|Marks: 7]
- (b) Elucidate the features, merits and demerits of sole trader form of organization.  
[BL: Understand| CO: 3|Marks: 7]
4. (a) Outline the different types of public enterprises based on their ownership and control. Provide examples for each type.  
[BL: Understand| CO: 4|Marks: 7]
- (b) Categorize various types of partners in partnership. Explain different sources of capital needed for a joint stock company  
[BL: Understand| CO: 4|Marks: 7]

## MODULE – IV

5. (a) State the process of investment decisions and explain the factors that affect the capital budgeting decisions [BL: Understand| CO: 5|Marks: 7]
- (b) Determine internal rate of return (IRR) for the project given in Table 1. [BL: Apply| CO: 5|Marks: 7]

Table 1

Year	Rs. in Lakhs					
	Initial cost	2011	2012	2013	2014	2015
Project-Y	30.00	7.00	8.00	6.50	9.00	4.50
PV @14%	1.000	0.877	0.769	0.675	0.592	0.5197

6. (a) Differentiate traditional and discounted cash flow techniques of capital budgeting techniques [BL: Understand| CO: 5|Marks: 7]
- (b) A company has two proposals for consideration (Y&Z) as shown in Table 2. The cost of proposals in both the cases are Rs 5,00,000 each. A discount factor of 10% may be used to evaluate the proposals. The cash flows after taxes are as under. Which proposal can be undertaken under net present value (NPV)? [BL: Apply| CO: 5|Marks: 7]

Table 2

Year	Proposal Y	Proposal Z	PV @10%
1	1,50,000	60,000	0.909
2	2,20,000	1,50,000	0.826
3	2,40,000	2,00,000	0.751
4	1,80,000	2,50,000	0.683
5	1,50,000	3,00,000	0.651

## MODULE – V

7. (a) Enumerate various accounting concepts and conventions with suitable examples. [BL: Understand| CO: 6|Marks: 7]
- (b) Identify the recording process of journal entry in a systematic manner for the data given in Table 3 [BL: Apply| CO: 6|Marks: 7]

Table 3

Date	Description	Amount: Rs
01-07-2016	Business Commenced with a cash	5,00,000
05-07-2016	Deposited in Bhuvanewari Bank Ltd	3,00,000
09-07-2016	Goods Purchased from Hindu Heritage Ltd.	25,00,000
14-07-2016	Sold Goods to Amar Infra Ltd.	50,00,000
19-07-2016	Salaries & Rent Paid through bank	6,00,000
23-07-2016	Received a Cheque from Amar Infra Ltd	40,00,000
29-07-2016	Paid to Hindu Heritage Ltd.	20,00,000
30-07-2016	Draw Cash for Office Expenses	5,00,000

8. (a) Summarize about final accounts and discuss the purpose of each of them.

[BL: Understand| CO: 6|Marks: 7]

(b) On the basis of the information given in Table 4 calculate:

i) Gross profit ratio

ii) Debt equity ratio

iii) Working capital turnover ratio.

[BL: Apply| CO: 6|Marks: 7]

Table 4

Rs.		Rs.	
Net sales	30,00,000	Paid up share capital	5,00,000
Cost of goods sold	20,00,000	Debentures	2,50,000
Current Assets	6,00,000	loans	1,25,000
Current Liabilities	2,00,000	-	-

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