GIET UNIVERSITY, GUNUPUR – 765022

B. Tech (Third Semester) Examinations, December – 2023

21BHSHS20002 – Engineering Economics and Costing

(CSE,CSE(DS))

Time: 3 hrs   Maximum: 70 Marks

(The figures in the right hand margin indicate marks)

PART – A   **(2 x 5 = 10 Marks)**

Q.1. Answer *ALL* questions

		CO #	Blooms Level
a.	Name the three basic problems of economy.	CO1	K2
b.	What is elasticity of demand? State the factors determinants of elasticity of demand.	CO1	K2
c.	Define P/V ratio.	CO2	K3
d.	Differentiate between Revenue dominant cash flow and cost dominant cash flow diagram.	CO3	K3
e.	Which institution is regarded as the lender of last resort? Why? Explain.	CO4	K3

PART – B   **(15 x 4 = 60 Marks)**

Answer *ALL* questions

		Marks	CO #	Blooms Level
2. a.	Yesterday, the price of envelopes was Rs.3 a box, and Mr.J was willing to buy 10 boxes. Today, the price has gone up to Rs.3.75 a box, and he is now willing to buy 8 boxes. Is demand for envelopes elastic or inelastic? What is Mr. J elasticity of demand?	7	CO1	K6
b.	What is engineering economics? Describe the nature of engineering economics.	8	CO1	K1

(OR)

		Marks	CO #	Blooms Level
c.	If the price of pen decreases from Rs 2 to Rs 1and the quantity demand for pens increases from 40 to 50 units, calculate the price elasticity of demand.	7	CO1	K6
d.	What is production function? differentiate between short run and long run production function.	8	CO1	K1
3.a.	From the following information calculate: (i) P/V ratio, (ii) Fixed cost and (iii) Breakeven point (sales value):	7	CO2	K6

Year Sales Profit

2021 Rs.1,00,000 Rs. 8,000

2022 Rs.1,40,000 Rs.1,6000

		Marks	CO #	Blooms Level
b.	What is cost sheet? Construct an imaginary cost sheet.	8	CO2	K3

(OR)

c.	Calculate P/V ratio, BEP (sales value), Profit for a Sales of Rs. 80,000	7	CO2	K6

Year: 2019 2020

Sales: Rs.1,00,000 Rs.1,25,000

Profit: Rs. 12,000 Rs. 17,000

d.	"Industry is the price maker but firm is the price taker". Justify your answer.	8	CO2	K3
4.a.	What is nominal rate of interest and effective rate of interest? Explain with examples?	7	CO3	K3
b.	Mr kiran Kumar taken a study loan of Rs 4,00,000 from a bank at an interest of Rs14% compounded annually on 1st January 2011. He wants to repay the same in 10 equal annual instalments payable at the end of each year from the 1st year onwards. What amount of money should he pay for each instalment?	8	CO3	K5

(OR)

c.	Explain the application of uniform payment series capital recover amount factor with an example.	7	CO3	K3
d.	A working woman is planning for her retired life. She has 20 more years of service. She would like to have an annual equivalent amount of Rs. 3,00,000, starting from the end of the first year of retirement. Find the single amount that should be deposited now so that she receives the above mentioned annual equivalent amount at the end of every year for 20 years after her retirement. Assume $i = 15\%$ compounded annually.	8	CO3	K5
5.a.	What do you mean by inflation? Elucidate various measures of control of inflation.	7	CO4	K1
b.	What is capital market ? how it is different from money market.	8	CO4	K1

(OR)

c.	Give definition and meaning of bank? And explain the primary functions of commercial bank?	7	CO4	K1
d.	Explain about bank? What is receiving depository function of a commercial bank?	8	CO4	K1

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