MORNING

0 9 JUL 2022

Total No. of Questions: 09]

Uni. Roll No. ....

Program: B.Tech.

MORNING

0 9 JUL 2022

[Total No. of Pages: 02]

Semester (1/2)

Name of Subject: Principles of Engineering Economics and Management

Subject Code: HSMC-103

Paper ID: 15928

Time Allowed: 03 Hours

Max. Marks: 60

NOTE:

1) Parts A and B are compulsory
2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
3) Any missing data may be assumed appropriately
4) Use of calculator is allowed

Part – A

Q1. [Marks: 02 each]

a) Define (i) Economics (ii) Average cost
b) Explain Esprit De Corps.
c) Define (i) Direct Cost (ii) Work in progress.
d) Explain any two economies of scale of production.
e) "Good management is the lifeblood of the healthy corporate body. Getting rid of it to save cost is like losing weight by giving blood". Comment.
f) Draw the graph of point method of elasticity of demand.

Part – B

[Marks: 04 each]

Q2. Draw the diagrams and explain properties of Indifference curves .

Q3. Calculate Prime Cost when value of raw material used =Rs 35,500 Direct Wages are 25% of raw material used and Direct Expenses are 15%of Direct Wages .

Q4. Draw the graph and calculate Break Even Point, when Fixed Cost=Rs3,50,000, Selling Price=Rs75/unit and Variable Cost =Rs25/unit .

Q5. Calculate Payback period when initial investment is Rs 6,05,000 and annual cash inflows are Rs 1,10,000.

Q6. "Replacing an asset can be an expensive decision." Comment.

Q7. "First two stages are just the passing phases, third stage is the ultimate law of variable proportions." Comment and draw the diagram.

1

P.T.O.

Part – C

Q8. Explain Modern Productivity theory of distribution.

Or

Define Elasticity of Demand, explain and draw the diagrams of price elasticity of demand.

Q9. Select the best project by Net Present Value method and give reason for the same. (estimated life of the projects is 6 years)

Cash inflows of project A	Cash inflows of project B	Net Present Value of Re.1 @ 10% discounting factor
	Rs 195,000	0.909
Rs 2,00,000	Rs 1,90,000	0.826
Rs 1,90,000	Rs 1,65,000	0.751
Rs 1,55,000	Rs 1,10,000	0.683
Rs 1,15,000	Rs 85,000	0.621
Rs 75,000	Rs 60,000	0.564
Rs 65,000		

Project A : Initial investment of the project =Rs 3,35,000
Project B : Initial investment of the project =Rs 3,30,000

Or

Calculate internal rate of return when:
Initial outlay =Rs 2,00,000, Net cash Inflow per annum=Rs45,000, Estimated life of the Project is 7 years and required rate of return is 9%. Discount factor at 11% is 4.7122 and Discount factor at 17% is 3.9224. Give your opinion whether the project should be accepted or rejected

****