## PRESIDENCY UNIVERSITY <br> BENGALURU

## SCHOOL OF ENGINEERING

TEST 1 EXAMINATION
Odd Semester: 2021-2022
Course Code: MGT 112
Course Name: Engineering Economics
Program \& Sem: B. Tech \& IV Sem

Date: $28^{\text {th }}$ April 2022
Time: 03.00 PM to 04.00 PM
Max Marks: 30
Weightage: 15\%

## Instructions:

(i) Read the all questions carefully and answer accordingly. All parts are compulsory.

## Part A [Memory Recall Questions]

Answer all the Questions. Each question carries FOUR marks.
(3Qx 4M= 12M)

1. Define Micro and Macro Economics.
(C.O.No.1) [Knowledge]
2. List all factors considered for Production.
(C.O.No.1) [Knowledge]
3. Write short notes on Substitution effect and Diminishing Marginal Utility with an example.
(C.O.No.2) [Knowledge]

## Part B [Thought Provoking Questions]

Answer both the Questions. Each question carries FIVE marks.
(2Qx5M=10M)
4. Discuss the principles of engineering economics needed for making decisions about the acquisition and retirement of capital goods by industry and government.
(C.O.No.1) [Comprehension]
5. Demand is the quantity of a good that consumers are willing and able to purchase at various prices during a given period of time. Based on the price and quantity demanded, give reasons and show graphically what will happen in each case:
(i) Consider that peanut butter and jam are compliments. What will happen to the demand of jam, if the price of peanut butter increases?
(ii) Assume that Cello is a normal good. What will happen to the demand or the quantity demanded of Cello, if the income of people who buy Cello goes down?
(C.O.No.2) [Comprehension]

## Part C [Problem Solving Questions]

Answer the Question. The question carries EIGHT marks.
(1Qx8M=8M)
6. The Circular-Flow diagram a visual model of the system, shows how money flows through markets among households and firms. Justify the statement in your view by taking a real time example.
(C.O.No.1) [Application]

## PRESIDENCY UNIVERSITY <br> BENGALURU

## SCHOOL OF ENGINEERING

TEST 2
Odd Semester: 2021-2022
Course Code: MGT 112
Course Name: Engineering Economics
Program \& Sem: B. Tech (MECH) \& IV Sem

Date: $3^{\text {rd }}$ June 2022
Time: 3.00 PM to 4.00 PM
Max Marks: 30
Weightage: 15\%

Instructions:
(i) Read the all questions carefully and answer accordingly. All parts are compulsory.

## Part A [Memory Recall Questions]

Answer all the Questions. Each question carries FOUR marks.
(3Qx 4M= 12M)

1. Write a short note on Price elasticity of Demand.
(C.O.No.2) [Knowledge]
2. Plot a curve to represent increase and decrease in supply.
(C.O.No
.2) [Knowledge]
3. State the laws of production function.
(C.O.No.3) [Knowledge]

## Part B [Thought Provoking Questions]

Answer both the Questions. Each question carries FIVE marks.
4. There are certain situations where the law of demand does not apply or becomes ineffective with a fall in the price the demand falls and with the rise in price the demand rises are called as the exceptions to the law of demand. List and explain the exceptions to the law of demand.
(C.O.No.2) [Comprehension]
5. Factors which cause an increase/decrease in supply, but are not really price-related are known to be shifters. With a neat graph explain the changes in supply curve for increase/decrease in supply.
(C.O.No.2) [Comprehension]

## Part C [Problem Solving Questions]

## Answer the Question. The question carries EIGHT marks.

6. If the price of an ice cream cone increases from $\$ 2.00$ to $\$ 2.20$ and the amount you buy falls from 10 to 8 cones and income of consumers increases from 200 to 400 . Calculate price and income elasticity of demand and indicate whether the demand is elastic or inelastic. (C.O.No.2) [Application]

## PRESIDENCY UNIVERSITY BENGALURU

## SCHOOL OF ENGINEERING

## END TERM EXAMINATION

Odd Semester: 2021-22
Course Code: MGT 112
Course Name: Engineering Economics
Program \& Sem: B. Tech \& IV Sem

Date: $6^{\text {th }}$ July 2022
Time: 9.30 AM TO 12.30 PM
Max Marks: 100
Weightage: 50\%

## Instructions:

(ii) Read the all questions carefully and answer accordingly.
(iii) Scientific and Non-programmable calculators are permitted.

## Part A [Memory Recall Questions]

## Answer all the Questions. Each question carries 6 marks.

(5Qx 6M=30M)

1. Define Micro and Macro Economics.
(C.O.No.1) [Knowledge]
2. Write short notes on laws of demand with an example.
(C.O.No
o.2) [Knowledge]
3. State the laws of production function.
(C.O.No
o.3) [Knowledge]
4. What is Production Function. List the types of Production function.
(C.O.No
4) [Knowledge]
5. Define simple interest and compound interest?
(C.O.No
.4) [Knowledge]

## Part B [Thought Provoking Questions]

Answer all the Questions. Each question carries 10 marks.
(4Qx10M=40M)
6. Engineers must understand how their investment decisions affect overall position of the company and its future growth and prospectus. In this context, explain the principles of Engineering economy. (C.O.No.1) [Comprehension]
7. Factors which cause an increase/decrease in supply, but are not really price-related are known to be shifters. With a neat graph explain the changes in supply curve for increase/decrease in supply and supply on the curve.
(C.O.No.2) [Comprehension]
8. Brake Even analysis is a technique that helps decision makers understand the relationships among sales volume, costs and revenues in any organization. List and explain the terminologies Break even analysis.
(C.O.No.3) [Comprehension]
9. How much money will you have in 5 years if you invest $\$ 100$ and $\$ 200$ today at a $10 \%$ rate of return?
(C.O.No.4) [Comprehension]

## Part C [Problem Solving Questions]

## Answer both the Questions. Each question carries 15 marks.

10. Use the given data

- Selling price of a good $=\$ 150$ per unit
- Variable cost $=\$ 90$ per unit
- Fixed cost $=\$ 600000$
(i) What is the break-even point?
(ii) What is the selling price per unit if the break-even point is 12000 units?
(C.O.No.3) [Application]

11. Product is considered to be elastic if the quantity demand of the product changes more than proportionally when its price increases or decreases. In this context, solve the following:
(i) As the price of tomatoes increases from $\$ 2.5$ to $\$ 3$, the quantity produced increases from 1,800 tons to 2000 tons. What is the price elasticity of supply for tomatoes? Is it elastic, inelastic, or unit elastic?
(ii) Income rises by 10 percent; demand decreases by 4 percent. Calculate the income elasticity of demand. Is it an inferior good or a normal good? If it is a normal good, is it a luxury or a necessity?
(iii). When the price of pencils rises by 20 percent, the demand for erasers falls by 10 percent.

Calculate the cross-price elasticity of demand. Are the goods complements or substitutes?
(C.O.No.2) [Application]

