

DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES
UNIVERSITY INSTITUTE OF ENGINEERING AND TECHNOLOGY, CSJM UNIVERSITY, KANPUR

Engineering Economics (HSS- S401)

Semester: 2024 (Even Semester)
(2K22, CSE Branch)

Year: 2nd

Mid Semester-Examination I

Time: 1.5 hours

Maximum marks: 30

All questions are compulsory.

Section A

(9 x 1 mark)

1. State the problems which can be explained with the help of the production possibility curve.
2. What is the difference between change in quantity demanded and change in demand?
3. State the formula for the cross elasticity of demand for commodity X and commodity Y.
4. What are the determinants of the price elasticity of demand for a given commodity?
5. Write the name of the economist who said: "Resources are scarce."
6. The marginal utility of money _____ for a miser.
7. The marginal rate of substitution (MRS_{xy}) is the _____ of slope of an IC curve.
8. Left Shoe and Right Shoe are _____
9. What is meant by the Diamond Water paradox?

Section B

(3 x 3 marks)

- Demand supply Equ
10. Two drivers – Tom and Jerry – each drive up to a petrol pump. Without worrying about price, each places an order. Tom says, "I'd like 20 litres of petrol." Jerry says, "I'd like petrol worth Rs. 2000." What is each driver's price elasticity of demand? Explain with the help of appropriate graphs.
11. Discuss the properties of an indifference curve.
12. Demand and Supply are the two forces which can influence the price in a market. Explain with the help of a suitable diagram.

Section C

(2 x 6 marks)

13. The market demand equation and the market supply equation for Mangoes are given by:
 $Q_d = 500 - 6P$ and $Q_s = 100 + 2P$, respectively. Find the market equilibrium price and quantity for Mangoes. Also, illustrate the market equilibrium using a suitable diagram.
14. Explain consumer's equilibrium with the help of a suitable diagram.

Engineering Economics (HSS- 5401-CSE)

Semester: 2023-24 (Even Semester)
(2K22, CSE Branch)

Year: 2nd

Mid Semester 2 Examination

Time: 1.5 hours

Maximum marks: 30

All questions are compulsory.

Section A

(9 x 1 mark)

1. _____ is the positive value of the slope of an isoquant at a given point.
2. Isoquants are _____ to the origin.
3. _____ cost cannot be recovered.
4. If production function is _____, then isocline is a straight line.
5. Write the formula for elasticity of substitution _____
6. State the Law of DMRTS_{L,K} _____
7. If labour and capital are perfect complements, then elasticity of substitution equals _____
8. In the _____, one factor input is fixed. [Assume only two inputs.]
9. The cost of one thing in terms of the alternative given up is known as _____

Section B

(3 x 3 marks)

10. What is meant by the Product Line? Explain with the help of a suitable diagram.
11. Explain the properties of isoquant.
12. Explain Break-Even Analysis with the help of a suitable diagram.

Section C

(2 x 6 marks)

13. Explain Returns to Scale with the help of a suitable diagram.
14. Show graphically income effect, substitution effect and price effect for two commodities X and Y, if commodity X is an inferior commodity.

Section – A

10 marks (Each question carries one mark.)

State whether the following statement is True, or False. Correct the statement, if it is False.

1. In a perfectly competitive market, a firm faces two demand curves. \bar{C}
2. Diseconomies of scale occur, when LAC increases as output increases. \bar{P}
3. If households provide their services to a firm/business, they will receive subsidies from the firm in \bar{r} return.
4. Selling cost is a feature of an oligopoly market. $\bar{1}$
5. The existing firms in a perfectly competitive market will exit the market in the long run, if they \bar{T} are making loss.

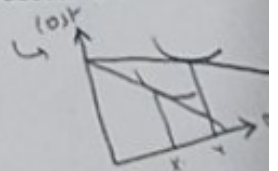
Fill in the blanks:

6. ----- commodities are taxed at a lower rate under GST.
7. Product differentiation is a distinguishing characteristic in ----- \bar{morka}
8. ----- tax system is followed to calculate income tax in India
9. Intermediary goods are not included in the calculation of -----
10. The quantitative function of RBI primarily focuses on -----

Section – B

20 marks (Each question carries 4 marks.)

1. Elaborate upon the credit control method used by RBI to control inflation in India.
2. Explain demand-pull inflation, with the help of a suitable diagram.
3. Suppose X is a normal commodity. Also, the price of commodity Y and consumer's income are held constant. If the price of commodity X decreases, then show the income effect, substitution effect and price effect, with the help of a suitable diagram.
4. Discuss the difficulties in measuring NI.
5. What are the components of GST? Explain.



Section – C

20 marks (Each question carries 5 marks.)

- 1.a. Tom and Jerry are discussing the Prisoner's Dilemma game. Tom says "The dominant strategy in this game is 'Not Confess'." Jerry doesn't agree with Tom. Who do you think is correct – Tom, or Jerry? Explain with the help of a suitable example.
- 1.b. Explain the circular flow of income in the "4-sector" economy, with the help of a suitable diagram.
- 2.a. Explain the different phases of business/trade cycle, with the help of a suitable diagram.
- 2.b. Depict supra-normal profit, normal profit and loss in the short-run equilibrium in a monopolistic competitive market, by drawing separate diagrams.