Total No. of printed pages = 3

HS 181506

Roll No. of candidate

28/12/22   **2022**

B.Tech. 5th Semester End-Semester Examination

ENGINEERING ECONOMICS

New Regulation (w.e.f 2017 – 18) and

New Syllabus (w.e.f 2018 – 19)

Full Marks – 70   Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer Question No. 1 and any *four* from the rest.

GROUP A

1. Fill in the blanks with appropriate words given in the brackets :   (10 × 1 = 10)

    (i)   'Nature and Significance of economic Science' was written by _____.

    (Robbins /Marshall / Adam Smith)

    (ii)   Marshall's definition is known as _____ of economics.

    (welfare definition / scarcity definition / growth definition)

    (iii) Macro economics is also known as _____.

    (theory of price / theory of income and employment / theory of income)

    (iv)   Reserve Bank of India was established in the year _____.

    (1987 / 1935 / 1908)

    (v)   For inferior goods income elasticity of demand is _____.

    (greater than one / less than one / equal to one)

    (vi)   Cross elasticity of demand for tea and coffee is _____.

    (positive /negative /zero)

    (vii) Product heterogeneity is a feature of _____.

    (monopoly market / perfect competition / monopolistic competition)

                                                              [Turn over

(viii) Death duty is a kind of _____.

(direct tax /indirect tax / value added tax)

(ix) 'C' in the supply function stands for _____.

(goal of the producer / state of technology / total expenditure)

(x) 'n' in the Keynes's equation of quantity theory of money n = PK denotes _____.

(cash held by the government / demand for money / cash held by the public)

GROUP B

Answer any *four* questions.

2. Write any three of the following : $(3 \times 5 = 15)$

(a) Show diagrammatically the different types of inflation on the basis of speed.

(b) Write how elasticity of demand (e_d) is measured by graphic method for decreasing function.

(c) Show the relations between AR, MR and TR.

(d) Prove that the marginal revenue declines twice when average revenue falls.

(e) Distinguish between (i) GNP FC and NNP FC (ii) GDP FC and NDP FC

3. (a) From the following data calculate total cost, average variable cost, average fixed cost and marginal cost.   (3)

Total output (units) :	0	20	30	40	50
TFC (Rs.)	500	500	500	500	500
TVC (Rs.)	0	300	350	400	550

(b) The sale record of an industry reveals the following. Estimate sales for the next three years.   (5)

Year	1988	1990	1992	1994	1996	1998
Sale in Lakh in Rs.	40	50	55	60	58	67

(c) Calculate simple aggregative price index from the following data.   (3)

Commodity :	A	B	C	D
Base year price (in Rs. per kg) :	80	140	120	220
Current year price :	100	200	180	350

(d) At Rs. 26 per unit, the demand for a commodity is 30 units. If the price increases from Rs. 26 to Rs. 30 per unit, the demand increases to 15 units. Calculate the price elasticity of demand.   (4)

4. (a) Define perfect competition. Explain how price and output are determined under perfect competition in the short run period. $(3 + 7 = 10)$

   (b) If $p^2 + q + p - 20 = 0$ and $2p^2 - q - 3p - 4 = 0$ are the demand and the supply function of certain market then calculate the equilibrium price and quantity. (5)

5. (a) What is monopoly market? Explains how price and output are determined under monopoly market. $(3 + 7 = 10)$

   (b) A monopolist is facing a linear demand $P = 100 - 4q$. His linear cost function is given by $C = 50 + 20q$. Calculate price, output and profit of the monopolist. (5)

6. (a) Discuss the main functions of the commercial banks. (7)

   (b) Explain the credit creation policy of the commercial banks with example. (8)

7. (a) Explain the various causes of increase in public debt in recent time. (5)

   (b) Discuss briefly the effects of public expenditure on production and distribution. $(5 + 5 = 10)$

8. (a) Define environmental economics. Discuss the nature of environmental economics. $(2 + 5 = 7)$

   (b) What do you mean by externalities? Explain the positive externalities of production with a diagram. $(2 + 6 = 8)$