

b) Labourc) Capital

|             |  | <br> | <br> | <br> |  | <br> |
|-------------|--|------|------|------|--|------|
| Roll Number |  |      |      |      |  |      |

# Narula Institute of Technology An Autonomous Institute under MAKAUT 2024

## END SEMESTER EXAMINATION - EVEN 2024 HSMC604 - ECONOMICS FOR ENGINEERS

TIME ALLOTTED: 3Hours FULL MARKS: 70

#### Instructions to the candidate:

Figures to the right indicate full marks.

Draw neat sketches and diagram wherever is necessary.

Candidates are required to give their answers in their own words as far as practicable

Candidates are required to give their answers in their own words as far as practicable Group A (Multiple Choice Type Questions) Answer any ten from the following, choosing the correct alternative of each question: 10×1=10 1.i) The subject matter of economics is distributed into (1) CO1 parts a) 2 b) 3 c) 4 d) 5 BL2 1.ii) When the price elasticity of demand is equal to one, the (1) CO4 demand curve is .... a) rectangular hyperbola b) parallel to the horizontal axis c) parallel to the vertical axis d) negatively sloped straight line 1.iii) If the price elasticity of demand is [0.5], then the commodity is (1) CO4 BL5 a) Luxury b) Necessary c) Inferior d) Giffen 1.iv) . The concept of 'Consumer Surplus' was introduced in Economics CO2 BL1 (1) bν a) Prof. Robbins b) Prof. Samuelson c) Prof. Smith d) Prof. Marshall 1.v) Which one of the following is not a factor of production? (1) CO5 BL5 a) Land

| d) Bank Loan   |     |     |     |
|--|-----|-----|-----|
| <ul> <li>1.vi) Which one of the following cost can never become zero?</li> <li>a) Average cost</li> <li>b) Fixed cost</li> <li>c) Marginal cost</li> <li>d) Variable cost</li> </ul>   | (1) | CO3 | BL1 |
| <ul> <li>1.vii) According to the 'Law of Demand, demand varies with price.</li> <li>a) Directly</li> <li>b) Indirectly</li> <li>c) Proportionately</li> <li>d) Inversely</li> </ul>  | (1) | CO5 | BL5 |
| <ul> <li>1.viii) Which of the first order condition for the profit of a firm be maximum?</li> <li>a) AC = MR</li> <li>b) MC = MR</li> <li>c) MR = AR</li> <li>d) AC = AR</li> </ul>  | (1) | CO2 | BL2 |
| <ul> <li>1.ix) In the case of rare coins, supply curve will be</li> <li>a) Horizontal</li> <li>b) Vertical</li> <li>c) backward bending</li> <li>d) positively sloped</li> </ul>   | (1) | CO4 | BL2 |
| <ul> <li>1.x) Opportunity cost is measured in terms of the</li> <li>a) optional cost that has been avoided</li> <li>b) negative cost that has been sacrificed</li> <li>c) accounting cost that has been paid</li> <li>d) next best alternative that has been foregone</li> </ul> | (1) | CO1 | BL4 |
| <ul> <li>1.xi) The AR curve and industry demand curve are identical</li> <li>a) in case of monopoly</li> <li>b) in case of oligopoly</li> <li>c) in case of monopolistic competition</li> <li>d) in case of perfect competition 3</li> </ul>                                     | (1) | CO2 | BL3 |
| 1.xii) defined economics as a science which deals with wealth. a) J.B. Say b) A.C.Pigou c) Alfred Marshall d) Lionel Robbins   | (1) | CO2 | BL2 |
| Group B  |     |     |     |
| (Short Answer Type Questions)  |     |     |     |
| (Answer any three of the following) 3x5=15 2. What is elasticity of Demand?  | (5) | CO1 | BL4 |

- 3. A project costs Rs 15,00,000 and gives an annual profit of Rs 3,00,000 before tax @ 50% and after depreciation @ 10%. Calculate the Pay back Period
- (5) CO5 BL6
- 4. How managerila decisions are taken care with the help of Decision Tree?
- (5) CO4 BL4

- 5. From the following information prepare a Trading a/c as on 31/12/2023: -
- (5) CO4 BL3

Fixed Assets a/c - Rs110000, Capital- Rs 200000, Purchase's a/c-Rs 63000, Return outward- Rs 3000, Sales- Rs 83000, Return inward- Rs3000, Wages- Rs 5000, Opening Stock-Rs 10000.

Adjustments: -

Closing stock as on 31/12/2023 is Rs 10000

Prepaid wages Rs 1000

6. State the difference between Microeconomics and Macroeconomics.

(5) CO2 BL2

### **Group C** (Long Answer Type Questions) (Answer any three of the following) 3x15=45

7. Define P/V ratio

(15)

a) Define P/V ratio

BL5 (3) CO4

| b) LIABILITIES  | AMOUNT   | ASSETS   | AMOUNT   |
|---|--|--|--|
| Equity Share Capital Preference share capital General Reserve Secured Loan Sundry Creditors | 5,00,000<br>2,00,000<br>1,00,000<br>3,00,000<br>1,00,000 | Land & Building Machinery Furniture Inventory Sundry Debtors Cash/Bank Balance | 1,00,000<br>4,00,000<br>50,000<br>3,00,000<br>3,00,000<br>50,000 |
|   | 12,00,000  |  | 12,00,000  |

(12)CO4 BL5

Calculate Following Ratios from the above balance sheet:

- 1. Current Ratio
- 2. Liquid Ratio
- 3. Proprietary Ratio
- 4. Stock Working capital Ratio

| 8. Briefly explain about element of cost and its classification?   | (15) CO3 BL4 |
|--|--------------|
| 9. Define Journal.write three chrecters of Journal   | (15)         |
| a) Define Journal.write three chrecters of Journal   | (5) CO1 BL2  |
| <ul><li>b) Record the following transactions in the books of "M/s Albert &amp; Brothers".</li><li>1. Albert starts business with Rs. 50,000.</li></ul> | (10) CO1 BL2 |
| 2. He opens a SBI saving bank account and deposits Rs. 20,000.   |              |
| 3. Bought furniture for Rs. 5,000, machinery for Rs. 10,000.   |              |
| 4. Purchased goods for Rs. 14,000.   |              |
| 5. Sold goods for Rs.8, 000.   |              |
| 6. Purchased goods from Malhotra & Company for Rs. 11,000.   |              |
| 7. Paid telephone rent for the year by Cheque Rs. 500  |              |
| 8.Bought one typewriter for Rs. 2,100 from 'Universal Typewriter Co'. on credit.  9. Sold goods to Keshav Ram for Rs. 12,000.                          |              |
| 10. Sold goods to Rajesh Kumar for Rs. 2000 cash.  |              |
| .Pass the Journal entries  |              |
|  |              |
| What is demand forecasting? Explain any four method of forecasting   | (15) CO1 BL2 |
| 11. Answer both a and b  | (15)         |
| a) Let demand and supply curve are D=02P+2, S=.07P+0.2   | (5) CO3 BL2  |
| Find out equilibrium price and quantity demanded   |              |
| b) Calculate National income: Item Amount (In Crore)   | (10) CO4 BL4 |
| Private final consumption expenditure 750  |              |
| Govt.final consumption expenditure 100   |              |
| Consumption of fixed capital 25  |              |
| Net Export -(25)   |              |
| Net factor Income from Abroad -(20)  |              |
| Gross fixed capital formation 300  |              |

#### B.Tech/AIML,CSE,CST,ECE,ECS,EIE,ME/HSMC604/Even/R21/R / 1

Change in stock 50

Direct purchase abroad by resident household 50

Direct purchase by nonresidents in domestic market 5

Net Indirect tax 100

a.1100 b.1130 c. 1200 d. 1250

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