

**Section I (20 questions; 1 mark each)**

1. Which of the following statements is not true:
  - a. Rich countries also face problems of scarcity
  - b. Economies can resolve the problem of scarcity by discovering new resources**
  - c. Economic profit is less than accounting profit
  - d. Economies struggle with the problem of efficiency and equity
2. Which of the following is not a determinant of supply for a product?
  - a. Price of inputs
  - b. Taste of consumers**
  - c. Price of the product
  - d. Number of suppliers
3. Economics deals primarily with the concept of
  - a. scarcity**
  - b. markets
  - c. poverty
  - d. organizations
4. The principle that "people face tradeoffs" applies to
  - a. Only individuals.
  - b. Only companies.
  - c. Only nations
  - d. All individuals, companies and nations**
5. In a market economy, supply and demand are important because they
  - a. are direct policy tools used by government agencies to regulate the economy.
  - b. illustrate when a market is in equilibrium, but they are not helpful when a market is out of equilibrium.
  - c. can be used to predict the impact on the economy of various events and policies.**
  - d. can be used for individual decision making
6. The demand for a good or service is determined by
  - a. the government
  - b. those who buy the good or service**
  - c. those who sell the good or service.
  - d. both those who buy and those who sell the good or service.
7. Law of demand states that:
  - a. Larger the number of buyers, larger is the quantity demanded
  - b. Quantity demanded changes with increase in price only if supply changes
  - c. With the increase in price quantity demanded decreases, other things remaining the same**
  - d. Market should always fulfil all demand
8. A natural monopoly consists of:
  - a. A firm with huge fixed costs**
  - b. A firm with a patent
  - c. Only producer of a good controlled by the government.
  - d. Small number of buyers
9. In price discrimination, a producer:
  - a. Charges prices that match willingness to pay of consumers**
  - b. Charges price higher than what consumers are willing to pay
  - c. Charges prices higher than market price
  - d. Charges prices as charged by rival firms
10. Which of the following will cause a movement along the supply curve for coffee?

- a. A change in consumer tastes and preferences for tea
  - b. A change in the price of tea.
  - c. A rise in prices of coffee beans.
  - d. **A change in the price of coffee.**
11. Elasticity is
- a. the study of how the allocation of resources affects economic well-being.
  - b. **a measure of how much buyers and sellers respond to changes in market conditions**
  - c. the maximum amount that a buyer will pay for a good.
  - d. the value of everything a seller must give up to produce a good.
12. The price elasticity of supply measures.
- a. **producer's responsiveness to a change in the price of a good.**
  - b. the extent to which supply increases as additional producers enter the market.
  - c. how much more of a good is supplied when incomes increase.
  - d. the movement along a demand curve when there is a change in supply.
13. A fall in the consumer's income, other things being equal, will
- a. Cause a downward movement along the demand curve for an inferior good.
  - b. Shift the supply curve for a normal good to the left.
  - c. Shift the demand curve for an inferior good to the left.
  - d. **Cause a downward movement along the supply curve for a normal good**
14. Price ceilings generally lead to:
- a. unemployment.
  - b. **shortages.**
  - c. surpluses.
  - d. entry of new firms in the market
15. In the \_\_\_\_\_ run, firms can only adjust the variable factors of production. In the \_\_\_\_\_ run, firms are able to change all of the factors of production including the capital.
- a. long; short
  - b. medium; short
  - c. **short; long**
  - d. short; short.
16. The burden of a gasoline tax will be borne mostly by \_\_\_\_\_ because the demand curve is relatively \_\_\_\_\_.
- a. producers; inelastic
  - b. producers; elastic
  - c. **consumers; inelastic**
  - d. consumers; elastic
17. We get fewer and fewer additional output as we add more and more units of the inputs to the production process. We call this fact the:
- a. diseconomies of scale
  - b. **law of diminishing returns**
  - c. law of supply.
  - d. law of marginal product
18. Which of the following formulas is correct?
- a.  **$AVC = (TC-FC)/Q$**
  - b.  $AVC = FC/Q$
  - c.  $AVC = TC/Q$
  - d.  $AVC = (MC*Q-FC)/Q$

19. The firm will choose to shut down when:
  - a. **revenues no longer cover variable costs.**
  - b. losses are larger than fixed costs.
  - c. both the revenues no longer cover variable costs and the losses are larger than fixed costs
  - d. neither the revenues no longer cover variable costs nor the losses are larger than fixed costs
20. In the long-run, under monopolistic competition, prices are \_\_\_\_\_ marginal costs, but economic profits are \_\_\_\_\_.
  - a. above; positive
  - b. below; positive
  - c. **above; zero**
  - d. below; zero

### Section II (20x2)

1. In a market economy
  - a. Demand determines supply
  - b. Supply determines demand
  - c. **Supply and demand are independent of each other and determine prices together**
  - d. the allocation of scarce resources determines prices and prices, in turn, determine supply and demand
2. When the government tax the wealthy to distribute wealth to the poor,
  - a. efficiency is improved, but equality is not.
  - b. both the wealthy and poor are benefitted.
  - c. **Efficiency falls as there is less incentive for people to work and hence output falls in the economy**
  - d. the government collects more revenue in total hence efficiency improves
3. The market supply curve is the relation between
  - a. **Aggregate of all quantities supplied by all firms at each price**
  - b. Aggregate of all prices at which all firms supply each quantity
  - c. Price and quantity supplied for a single representative firm
  - d. Price and quantity supplied by the rival firms in a market
4. Using the midpoint method, calculate the price elasticity of demand for ice cream cones in the market, when  $P = ₹ 70$ ,  $Q_d = 5000$  if  $P = ₹ 90$ ,  $Q_d = 3000$ 
  - a. 0.5
  - b. 2.5
  - c. **2.0**
  - d. 12.5
5. The supply of my seven old and rare coins collection is
  - a. Perfectly elastic
  - b. **Perfectly inelastic**
  - c. Unit elastic
  - d. Highly elastic
6. Price controls are usually enacted
  - a. as a means of raising revenue for public purposes.
  - b. **when policymakers believe that the market price of a good or service is unfair to buyers or sellers.**
  - c. when policymakers detect inefficiencies in a market.
  - d. to reduce chaos in a market with high demand
7. If a binding price floor is imposed on movie tickets, then
  - a. Demand for movies will decrease.
  - b. Supply of movies will increase.
  - c. **Movie theatres will go empty**
  - d. Movie theatres will shut down
8. Consumer surplus is

- a. **the amount a buyer is willing to pay for a good minus the amount the buyer actually pays for it.**
  - b. the amount a buyer is willing to pay for a good minus the cost of producing the good.
  - c. the amount by which the quantity supplied of a good exceeds the quantity demanded of the good.
  - d. a buyer's willingness to pay for a good plus the price of the good.
9. When the demand for a good increases and the supply of the good remains unchanged, consumer surplus
- a. decreases.
  - b. is unchanged.
  - c. increases.
  - d. **may increase, decrease, or remain unchanged.**
10. Which of the following can be added to profit to obtain total revenue?
- a. net profit
  - b. capital profit
  - c. operational profit
  - d. **total cost**
11. The things that must be forgone to acquire a good are called
- a. implicit costs.
  - b. **opportunity costs.**
  - c. explicit costs.
  - d. accounting costs.
12. A firm has market power if it can
- a. maximize profits.
  - b. minimize costs.
  - c. **influence the market price of the good it sells.**
  - d. hire as many workers as it needs at the prevailing wage rate.
13. Who is a price taker in a competitive market?
- a. buyers only
  - b. sellers only
  - c. **both buyers and sellers**
  - d. neither buyers nor sellers
14. If a firm in a perfectly competitive market triples the quantity of output sold, then total revenue will
- a. more than triple.
  - b. less than triple.
  - c. **exactly triple.**
  - d. Any of the above may be true depending on the firm's productivity.
15. Which of the following is not an example of a barrier to entry?
- a. **A wheat farmer is the first in the county to use a new brand of fertilizer.**
  - b. Microsoft obtains a copyright for its Windows operating system.
  - c. A pharmaceutical company obtains a patent for a new medication to treat arthritis.
  - d. Ola cabs obtain a license to legally provide transportation from Kolkata to the city suburbs
16. When a firm's average total cost curve continually declines, the firm is a
- a. government-created monopoly.
  - b. **natural monopoly.**
  - c. revenue monopoly.
  - d. in a monopolistic competition
17. Games that are played more than once generally
- a. lead to outcomes dominated purely by self-interest.
  - b. lead to outcomes that do not reflect joint rationality.
  - c. encourage cheating on cartel production quotas.
  - d. **make collusive arrangements easier to enforce.**
18. Individual profit earned by Dave, the oligopolist, depends on which of the following?

- (i) The quantity of output that Dave produces
  - (ii) The quantities of output that the other firms in the market produce
  - (iii) The extent of collusion between Dave and the other firms in the market
    - a. (i) and (ii)
    - b. (ii) and (iii)
    - c. (iii) only
    - d. **(i), (ii), and (iii)**
19. The two types of imperfectly competitive markets are
- a. markets with differentiated products and monopoly.
  - b. markets with differentiated products and oligopoly.
  - c. oligopoly and monopoly.
  - d. **monopolistic competition and oligopoly.**
20. Each firm in a monopolistically competitive industry faces a downward-sloping demand curve because
- a. there are many other sellers in the market.
  - b. there are very few other sellers in the market.
  - c. **the firm's product is different from those offered by other firms in the market.**
  - d. the firm faces the threat of entry into the market by new firms.

**Section III (4x10 marks)**

1. Big Bazaar and D-Mart in a growing urban area are interested in expanding their market share. Both are interested in expanding the size of their store and parking lot to accommodate potential growth. The following game depicts the strategic outcomes that result from the game. The increase in annual profits of the two stores is shown in the table below. (2.5x4)

**Big Bazaar**

	<i>Increase the size of store and parking lot</i>	<i>Do not increase the size of a store and parking lot</i>
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<i>Increase the size of store and parking lot</i>	Big Bazaar = Rs 10 million D-Mart = Rs 15 million	Big Bazaar = Rs 4 million D-Mart = Rs 34 million
<i>Do not increase the size of store and parking lot</i>	Big Bazaar = Rs 32 million D-Mart = Rs 6 million	Big Bazaar = Rs 20 million D-Mart = Rs 25 million

- i. Pursuing its own best interest, each of Big Bazaar and D-Mart will
  - a. increase the size of its store and parking lot only if the other also increases the size of its store and parking lot.
  - b. increase the size of its store and parking lot only if the other does not increase the size of its store and parking lot.
  - c. increase the size of its store and parking lot regardless of the decision made by the other**
  - d. not increase the size of its store and parking lot regardless of the decision made by other
- ii. If both stores follow a dominant strategy, D-Mart's annual profit will grow by
  - a. Rs 6 million.
  - b. Rs 15 million.**
  - c. Rs 25 million.
  - d. Rs 34 million.
- iii. Suppose the owners of Big Bazaar and D-Mart meet at a social event one afternoon and they both agree to cooperate on a strategy that maximizes their joint profits, annual profit will grow by
  - a. Rs 10 million for Big Bazaar and by Rs 15 million for D-Mart
  - b. Rs 4 million for Big Bazaar and by Rs 34 million for D-Mart
  - c. Rs 32 million for Big Bazaar and by Rs 6 million for D-Mart
  - d. Rs 20 million for Big Bazaar and by Rs 25 million for D-Mart**
- iv. The oligopoly price will be greater than marginal cost but less than the monopoly price when
  - a. the oligopolists collude by jointly choosing a quantity to produce and maintaining their agreement.
  - b. the oligopolists collude by jointly choosing a price to charge and maintaining their agreement.
  - c. each oligopolist individually chooses a quantity to produce to maximize profit.**
  - d. each oligopolist's objective is minimization of average total cost, rather than maximization of profit.

2. Answer the questions in reference to the following table: (2.5x4)

Price	Bheem's Quantity Demanded	Chhutki's Quantity Demanded	Raju's Quantity Demanded	Jaggu's Quantity Demanded
Rs0.00	20	16	4	8
Rs0.50	18	12	6	6
Rs1.00	14	10	2	5
Rs1.50	12	8	0	4
Rs2.00	6	6	0	2
Rs2.50	0	4	0	0

- i. Whose demand does not obey the law of demand?
  - a. Bheem's
  - b. Chhutki's
  - c. Raju's**
  - d. Jaggu's
- ii. If these are the only four buyers in the market, then the market quantity demanded at a

price of Re 1 is

- a. 4 units.
- b. 7.75 units.
- c. 14 units.
- d. 31 units.**

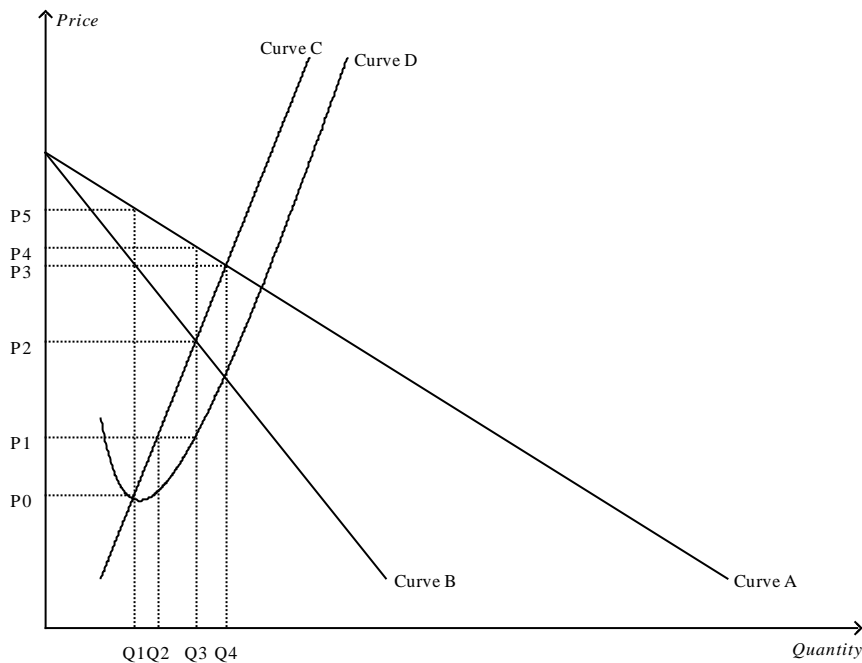
iii. If these are the only four buyers in the market, then when the price increases from Re 1.00 to Rs 1.50, the market quantity demanded

- a. decreases by 1.75 units.
- b. increases by 2 units.
- c. decreases by 7 units.**
- d. decreases by 24 units.

iv. For whom is the good a normal good?

- a. Only for Bheem
- b. Only for Raju
- c. For all four of them
- d. This cannot be determined from the table.**

3. Answer questions following the figure (2.5x4)



i. Based on the above figure, a profit-maximizing monopoly will produce an output level of

- a. Q1.
- b. Q2.
- c. Q3.**

- d. Q4.
  - ii. Based on the above figure, a profit-maximizing monopoly's total revenue is equal to
    - a. **P4 x Q3.**
    - b. P5 x Q1.
    - c. P3 x Q4.
    - d. (P4-P2) x Q3.
  - iii. Based on the above figure, a profit-maximizing monopoly's profit is equal to
    - a. P4 x Q3.
    - b. (P4-P2) x Q3.
    - c. **(P4-P1) x Q3.**
    - d. (P5-P0) x Q1.
  - iv. Based on the above figure, at the profit-maximizing level of output,
    - a. marginal revenue is equal to P3.
    - b. marginal cost is equal to P3.
    - c. **average revenue is equal to P4.**
    - d. average total cost is equal to P0.
4. Assume a certain firm is producing  $Q = 1,000$  units of output. At  $Q = 1,000$ , the firm's marginal cost equals Rs 20 and its average total cost equals Rs 25. The firm sells its output for Rs 30 per unit. Answer the following: (2.5x4)
- i. To maximize its profit, the firm should
    - a. **increase its output.**
    - b. continue to produce 1,000 units.
    - c. decrease its output but continue to produce.
    - d. shut down.
  - ii. At  $Q = 1,000$ , the firm's profits equal
    - a. Rs -5,000.
    - b. Rs 2,500.
    - c. **Rs 5,000.**
    - d. Rs 10,000.
  - iii. At  $Q = 999$ , the firm's total costs equal
    - a. Rs 24,970.
    - b. Rs 24,975.
    - c. **Rs 24,980.**
    - d. Rs 25,025.
  - iv. The competitive firm's short-run supply curve is that portion of the



- a. average variable cost curve that lies above marginal cost.
- b. average total cost curve that lies above marginal cost.
- c. **marginal cost curve that lies above average variable cost.**
- d. marginal cost curve that lies above average total cost.