Economics

1. **Which among the following is not the component of micro economics?**
   a. Consumer behaviour
   b. Factor pricing and location of an industry
   c. General price level
   d. Economic condition of a section of the people

Solution: (c); Micro Economics concerned with study of the economic behaviour of an individual, firm or industry in an economy. It solves three basic problems of what, how and for whom to produce.

There are several **components of Micro Economics** such as- product pricing, consumer behaviour, factor pricing, economic condition of a section of the people, study of firms and location of an industry.

Whereas **Macro Economics** concerned with study the working and performance of the economy as a whole. Its **components** include- national income and output, general price level, balance of trade and payment, external value of money, saving and investment and employment and economic growth.

2. **Which economy system used cost-benefit analysis to answer the fundamental questions of what to produce, how to produce and whom to produce?**
   a. Right-wing/ capitalism
   b. Centrist/mixed economy
   c. Centrally planned economy

Solution: (b)

3. **Which among the following is not the assumption of production possibility curve?**
   a. Full/maximum utilization of resources
   b. Resources are fixed
   c. Technology remains constant
   d. Only two goods are produced and maximum quantity of each good to be produced

Solution: (d); under production possibility curve (PPC), only two goods are produced with minimum quantity of each good.

4. **Under which circumstances PPC (production possibility curve) is a straight line?**
   a. Due to scarcity of resources
   b. Increasing marginal opportunity cost
   c. Opportunity cost is constant
   d. No unemployment of resources

Solution: (c); PPC is always concave to the origin because of increasing the marginal opportunity cost and it may be straight line when opportunity cost is constant.

5. **Which among the following is not a type of need?**
   a. Delight need
   b. Secret need
   c. Unstated need

d. Autonomous need

Solution: (d); there are five types of needs such as Stated need, Real need, Unstated need, Delight need and Secret need.

6. **Unwholesome demand state that**

a. Consumer may be unaware of/ or uninterested in products
b. Existing products does not satisfy the needs and expectations of consumers
c. Products have undesirable social consequences
d. Consumer dislike the products

Solution: (c); unwholesome demand means existing products have undesirable social consequences. For example- alcohol and beverage, ciggrates etc.

7. **Which among the following is not a type of demand?**

a. Negative demand
b. No demand
c. Decline demand
d. Less demand

Solution: (d); there are mainly 8 types of demand such as negative demand, non-existence/ or no demand, latent demand, declining demand, irregular demand, full demand, overfull demand and unwholesome demand.

8. **Ceteris paribus states that**

a. Stability in future price of a commodity
b. No change in the price of other goods
c. Factors other than price remain constant
d. There is positive income effect

Solution: (c); ceteris paribus means factors other than price (such as consumer's income, consumer's tastes and preference, price of substitutes etc.) which influenced demand may remain constant.

9. **Law of demand is a combination of**

a. Income effect and substitution effect
b. Positive income effect and positive substitution effect
c. Positive income effect and negative substitution effect
d. Both a and c

Solution: (c)

10. **Downward sloping marginal utility curve states that**

a. There is diminishing marginal utility and income effect
b. There may be substitution effect
c. A product have different use
d. All the above

Solution: (d); demand curve is also known as average revenue curve or marginal utility curve. It always slop downward due to- diminishing marginal utility, income effect, substitution effect, arrival of new consumers, and different uses of products.

11. **Veblen effect means**
   a. High price, higher utility and lower price lower utility
   b. Price have no effect on utility
   c. Interdependence of the demand of consumers
   d. When goods having prestigious value and it create desire for purchase

Solution: (a); prestigious goods or conspicuous consumption means higher the price, higher is the utility and vice versa and the effect is called Veblen effect.

12. **For the following two statements of Assertion (A) and Reasoning (R) indicate the correct code :**

Assertion (A): Gossen's first law of consumption is invariably applicable in case of individuals' consumption behaviour.

Reasoning (R): It serves as an important determinant of demand for the goods and services in the market.

Codes:

   a. Assertion (A) and Reasoning (R) both are correct.
   b. Assertion (A) and Reasoning (R) both are incorrect.
   c. Assertion (A) is correct but Reasoning (R) is incorrect.
   d. Assertion (A) is incorrect but Reasoning (R) is correct.

Solution: (d); Law of Diminishing Marginal Utility is also called Gossen's First Law of Consumption. It states that every successive unit of the commodity offer less and less satisfaction. It means marginal utility (MU) tends to decline as consumption of the commodity increases. Assumption of Gossen's First Law of Consumption-

   i. There is identical and homogeneous units
   ii. There is no time gap in consumption i.e. continuous consumption
   iii. Consumption of large units
   iv. Cardinal measurability of utility
   v. Marginal utility of money is constant
   vi. Utility are independents
   vii. Rational behaviour of consumers.

13. **Production function for a product is based on certain assumptions. Indicate the correct code from the following :**
   a. Complementarity
   b. Substitutability
   c. Product elasticity
   d. Specificity

Codes-

(1) (a) (b) (c)

(2) (b) (c) (d)

(3) (a) (c) (d)

(4) (a) (b) (d)

Solution: (4)

14. Ordinal utility analysis of the consumer's behaviour is considered superior to the cardinal utility analysis mainly due to

a. Assumption of the rationality of the consumer's behaviour.

b. Possibility of the derivation of the consumer's demand.

c. Bifurcation of price effects into income and substitution effects.

d. Consideration of the available limited resources for satisfying consumer's demand

Solution: (c); cardinal analysis is given by Alfred Marshall and they assumed that utility (satisfaction) could be expressed in terms of numbers where as Ordinal utility is given by J. R. Hick and R.J.D. Allen. They assumed that utility could be arranged in the order of preference. They developed indifference curve analysis for ascertaining the consumer's equilibrium level.

15. For the following statements of Assertion (A) and Reasoning (R) indicate the correct code:

Assertion (A): Price reduction normally leads to an increase in the demand for a commodity.

Reason (R) : Price reduction leads to the entry of new buyers of the commodity in the market.

Codes :

a. (A) is correct but (R) is not correct.

b. (A) is not correct but (R) is correct.

c. Both (A) and (R) are correct and (R) offers full explanation of (A).

d. Both (A) and (R) are correct but (R) does not offer full explanation of (A).

Solution: (d); law of demand state that there is inverse relationship between price and quantity demand.

16. **The minimum Long Run Average Cost (LAC) can be determined on a**

I. LAC curve for a normal production function

II. LAC curve for a linear production function

III. Planning curve

IV. Envelope curve

Codes :

a. I II III

b. II III IV

c. I III IV

d. I II IV

Solution: (c)

17. Monopoly is not considered desirable from the point of view of the society mainly because the monopolist endeavours to

a. earn net revenue on sale of all goods including those involving no cost of production

b. earn net revenue on sale of goods in short run as well as long run.

c. charge different prices for the same product from the different categories of buyers.

d. produce below economic capacity level when he exhibits satisfaction with normal profit only.
Solution: (d); due to loss of consumer surplus, monopoly is not desirable from the point of view of the society.

18. Product-line pricing strategy includes which combination of the following?

a. Public utility pricing
b. Complementary goods pricing
c. Spare parts pricing
d. Load factor pricing

Codes :

1. I II III
2. II III IV
3. I II IV
4. I III IV

Solution: (2); product line pricing consists of complementary goods pricing, spare parts pricing and load factor pricing.

19. In case the quantity of a commodity demanded changes due to change in price of the commodity, it is called

(1) Increase or decrease in demand
(2) Expansion or contraction of demand
(3) Law of demand
(4) Positive change in demand

Solution: (2); expansion or contraction of demand takes place as a result of change in price and all other factors which affect demands (such as taste, fashion, technology, price of substitutes etc.) remain constant. Whereas increase or decrease in demand leads to change in all other factors except price of the commodity.

20. Match the items of the List – I with those of the List – II and indicate the correct code from the following:

List I	List II
a. Cardinal utility analysis	i. J. R. Hicks and R. G. D. Allen
b. Ordinal utility analysis	ii. Alfred Marshall
c. Revealed preference analysis	iii. J.R. Hicks
d. Logical ordering analysis	iv. Paul A. Samuleson

Codes:

(1) a-iii, b- iv, c- I, d- ii
(2) a- ii, b- i, c- iv, d- iii
(3) a- i, b- iii, c- ii, d- iv

(4) a- iv, b- ii, c- iii, d- i

Solution: (2)

21. Producer's equilibrium as per iso-quants and iso-costs can be determined on which combination of the following?

I. Convex to the origin iso-quant

II. Portion of iso-quant within Ridgelines

III. Linear iso-quant

IV. Complete complementarity iso-quant

Codes:

(1) I II III

(2) II III IV

(3) I II IV

(4) I III IV

Solution: (4); equilibrium is the point where producers with the production of output get maximum profits. Producer's equilibrium with iso-quant curve should be tanget to iso-cost at a particular point and at the point of tangency, the marginal rate of substitution between two factors should be equal i.e. change in capital = change in labour. Whereas, ridge lines are the locus point of is-quants where marginal product (MP) of variable factors is zero (0). The area within the ridge lines is called the 'area of economic efficiency'.

22. The impact of the price variation is to change:

(1) the degree of elasticity of demand as well as the degree of the elasticity of supply in the same direction.

(2) the degree of the elasticity of demand as well as the degree of the elasticity of supply in the inverse direction.

(3) the degree of the elasticity of demand but not the degree of the elasticity of supply.

(4) the degree of the elasticity of supply but not the degree of the elasticity of demand.

Solution: (2);

23. Cost plus pricing strategy is suitable for

I. Product Tailoring

II. Refusal Pricing

III. Monopoly Pricing

IV. Monopsony Pricing

Codes :

(1) I II III

(2) II III IV

(3) I II IV

(4) I III IV

Solution: (3); cost plus pricing strategy is suitable for product tailoring, refusal pricing and monopsony pricing.

24. Match the following:

List I	List II
a. Convexity of indifference curve to origin	i. Indifference curve analysis
b. Quantity of certain goods sacrificed for large quantity of other goods	ii. Consumer's equilibrium
c. Equality of the ratio of marginal utilities with that of the price of two goods	iii. Substitutability/or complementarity of two goods
d. Separation of substitution of income effects from the total price effect.	iv. Marginal rate of subtitution

Codes:

1. a-iv, b-ii, c-i, d-iii
2. a-iii, b-iv, c-ii, d-i
3. a-iii, b-i, c-iv, d-ii
4. a-i, b-iii, c-ii, d-iv

Solution: (2)

25. Firms producing and selling large goods and services will generally follow:

a. cost plus pricing

b. marginal pricing

c. skimming pricing

d. product line pricing

Solution: (d); product line pricing refers to the practice of reviewing and setting prices for multiple products in co-ordination with one another. It is generally used by retailers to separate goods into various cost categories in order to create different quality level in the mind of their customers.

26. From the following statements indicate the correct code:

i. All firms under perfect competition in long run earn only normal profits

ii. All firms under perfect competition in long run operate at the minimum average cost level

Codes-

a. both i and ii are correct
b. i is correct and ii is not correct
c. i is not correct and ii is correct
d. both i and ii not correct

Solution: (a); in the long-run a perfect competitive firm earn only normal profits and operate at the minimum average cost level. Therefore, producer's equilibrium in long-run is at the point where-(a) MR=MC; (b) AR=AC.

27. **Match the following items**

List I	List II
i. Substitute goods	a. Negative cross elasticity
ii. Complementary goods	b. Low price elasticity

iii.	Giffen goods	c.	Positive cross elasticity
iv.	High income consumption goods	d.	Positive price elasticity

Codes:

1. a-iii, b-iv, c-ii, d-i
2. a-iii, b-i, c-iv, d-ii
3. a-ii, b-iii, c-i, d-iv
4. a-i, b-ii, c-iii, d-iv

Solution: (2); substitute goods (positive cross elasticity), complementary good (negative cross elasticity), giffen goods (positive price elasticity), prestigious goods (positive cross elasticity).

28. The Marshallian utility of analysis if based on a less valid assumption of

a. cardinal measurability of utility

b. given marginal utility of money

c. diminishing marginal utility of goods

d. additivity of the utility

Solution: (b)

29**. Consumer is said to be in equilibrium, maximizing his total utility, when**

(a) the marginal utilities of the two goods consumed are equal.

(b) the proportions of the marginal utilities and respective prices are equal.

(c) the consumer gets full satisfaction from the consumption.

(d) the consumer feels satisfied with his expenditure on the various goods.

Solution: (b); in the case of consumption of two goods, consumers is said to be in equilibrium when the proportion of marginal utilities of two goods and their respective prices are equal.

30**. Match the items of the following two lists**

List I	**List II**
a. zero income elasticity	**i. substitute goods**
b. Unit cross elasticity	**ii. Complementary goods**
c. Positive cross elasticity	**iii. Indifferent goods**
d. Negative cross elasticity	**iv. Independent goods**

Codes :

a b c d

(A) iii ii i iv

(B) ii iii iv i

(C) iii iv i ii

(D) iv i ii iii

Solution: (C); indifferent goods have zero income elasticity, independent goods have unit cross elasticity, substitute goods have positive cross elasticity and complementary goods have negative cross elasticity.

31. Find out the statement:

Statement A. the iso-quant curves are drawn convex to the origin due to diminishing technical rate of substitution

Statement B. the lesser the convexity of iso-quant curve the greater the possibility of the complementarity of two inputs.

Codes:

a. Both statement are true
b. Only Statement A is true
c. Only statement B is true
d. Both statement are wrong

Solution: (b); only statement A is correct. Iso-quant curve represent the combination of two inputs for a given level of production. When two inputs are complementary then iso-quant curve is a right angle.

32. Match the following

List I	**List II**
a. Constant average cost over a range of output	i. Economic capacity
b. Average cost become constant momentarily	ii. Reserve capacity
c. Normal average cost is U-shaped	iii. Production and managerial cost effect
d. Modern long run average cost is L-shaped	iv. Economies and diseconomies

Codes:

1. a-i, b-ii, c-iii, d-iv
2. a-ii, b-iii, c-iv, d-i
3. a-iii, b-iv, c-ii, d-i
4. a-ii, b-i, c-iv, d-iii

Solution: (1); due to economies and diseconomies of scale the long-run modern average cost curve if L-shaped and average cost curve is U-shape due to production and managerial cost-effect.

33. The inverse relationship between variations in the price and quantity demanded is not due to

(A) Income Effects (B) Substitution Effects

(C) Future Expectations (D) Law of Diminishing Marginal Utility

Solution: (d); law of demand states that there is an inverse relationship between price and quantity demanded. There are several factors which influenced law of demand such as income of consumers, taste and preference of consumers, price of related goods, expected future price etc.

35. A rectangular hyperbola shaped demand curve on all its point has

a. equal slope of the price demand curve

b. price elasticity equal to unity

c. varying price elasticity

d. both slope and price elasticity equal

Solution: (b); when the price elasticity of demand is equal to one the demand curve has a rectangular hyperbola.

36. In case of short-run equilibrium, a perfect competitive firm while earning abnormal profits operates at an output where:

a. marginal cost is minimum

b. average cost is minimum

c. both marginal cost and average cost are equal

d. marginal cost is higher than average cost

Solution: (d)

37. Which one of the following statement is false?

a. normally, a price demand curve slopes downward from left to right

b. economies of scale and economies of scope are the same

c. for optimization, equality between marginal cost (MC) and marginal revenue (MR) is a necessary condition but it is not a sufficient one

d. law of variable proportion denotes input-output relationship during short-run.

Solution: (b); economies of scale and economies of scope both are not same thing. Economies of scope is an economic theory stating that the average total cost of production decreases as a result of increasing the number of different goods. Economies of scale involve reducing the average cost arising from increasing the scale of production for a single product type where as economies of scope involve lowering average cost by producing more types of products.

38. Match the following

List I	**List II**
a. law of diminishing marginal utility	i. cross demand
b. relationship between price of one commodity and demand for other commodity	ii. oligopoly
c. skimming the crime policy	iii. cardinal approach
d. price rigidity	iv. pioneering pricing

Codes-

1. a-i, b-ii, c-iii, d-iv
2. a-iii, b-i, c-iv, d-ii
3. a-ii, b-iv, c-i, d-iii
4. a-iv, b-iii, c-ii, d-i

Solution: (2)

39. from the following equation of demand and supply in a perfect competitive market, find out the equilibrium price

$P=12+0.3Q_s$

$P=40-0.4Q_d$

a. Rs. 24
b. Rs. 10

c. Rs. 40
d. Rs. 20

Solution: (a); equilibrium under perfect competitive market is at point where demand is equal to supply. If use hit and trial method and using the given option in equation we can found equilibrium price.

If quantity=40 units, given $p=12+0.3Q_s$, putting the value- p=12+0.3*40=24 similarly $p=40-0.4Q_d$= 40-0.4*40=24

40. From the following statements indicate the correct statement

a. From the marginal costing approach point of view, the marginal cost is compared with purchase price.

b. If the marginal cost is less than the purchase price it should be purchased rather than manufactured

1. both statements are correct
2. only a is correct
3. only b is correct
4. both are incorrect

Solution: (2); only statement ‘a’ is correct. Keeping in mind the marginal cost approach, marginal cost is compared with the purchase price and if marginal cost is less than the purchase price it should be manufactured rather than purchase.

42. Match the following statement

List I	List II
a. Hypothesis of sales revenue maximization	i. W.J.Baumol
b. Hypothesis of maximization of firm’s growth rate	ii. Robbin Marris
c. Hypothesis of maximization of managerial utility function	iii. O.E.Williamson
d. Hypothesis of satisfying behaviour	iv. Cyert and March

Codes:

1. a-ii, b-i, c-iii, d-iv
2. a-ii, b-iii, c-i, d-iv
3. a- i, b-ii, c-iii, d-iv
4. a-i, b-iv, c-ii, d-iii

Solution- (3)

43. Given short-run production function of a firm as follow

$$Q= -L^3 +15L^2+10L$$

Where Q= total output; L=unit of labour which are homogeneous but are not perfectly divisible and change in labour does not tend to become zero.

Statement A: in this production function, the marginal product of 5th unit is 85
Statement B: similarly, in this production function, the average product of the 5th unit of labour is 60.

Codes

1. both statement is true
2. only statement A is true
3. only statement B is true
4. Both statement is wrong

Solution: (3);

If we take 5 units of labour and putting the value of labour unit in the given equation then we found average product, marginal product, and total product are as follow:

Labour (L) (input)	**Output (Q)i.e. total output (TP)**	**Average product (TP/no. of inputs i.e. L)**	**Marginal Product (TP_n-TP_{n-1})**
1	24	24	-
2	72	36	48
3	108	36	36
4	216	54	108
5	300	60	84

44. The Kinked demand curve model of oligopoly was developed by

(1) Augustin Cournot
(2) Stackelberg
(3) Edgeworth
(4) Sweezy

Solution: (4)

45. For the success of the penetration price policy, which one of the following is not desirable?

(1) Short-run demand for the product to have elasticity greater than unity.
(2) Availability of economies of large scale production.
(3) Product to have very low cross-elasticity of demand.
(4) Easy acceptance and adoption of the product by the consumers.

Solution: (3); penetration pricing means charging lower price of the product. It indicates that-

1. Elasticity of demand is greater than one i.e. if there is a small increase in price there is a large fall in quantity demanded;

2. when a firm enjoy economies of large scale production then he can easily fixed lower price for the product;
3. Products have also large cross-elasticity of demand because there is large substitute available in the market
4. Consumers easily accept and adopt the goods

46. From the following statements, identified the correct statements

I. Business decision makers deal with the complex, rather chaotic, business condition of the real world and have to find the way to their destination, i.e. achieving the goal that set for themselves

II. Even without application of economic logic and tools of analysis, business decisions are always rational and real are not counterproductive.

Codes-

a. Both are true
b. Only I is true
c. Only II is true
d. Both statements are wrong

Solution: (b);

47. Which one of the following statement is true?

a. pure profit is the return in excess of the opportunity cost

b. accounting profit is the excess of total revenue over and above the explicit and implicit costs

c. profit maximization is the sole objective of the modern firm

d. profit is maximum when the difference between marginal revenue and marginal cost is maximum.

Solution: (a); accounting profit= total revenue – explicit cost; presently the sole objective of modern firm is to provide maximum customer satisfaction with minimum cost and earn profit; profit is maximum at point where the difference between TR (total revenue) and TC (total cost) is maximum.

48. Which one of the following is not the basic assumption on which the theory of consumer behaviour is based on the cardinal utility approach?

a. Rationality

b. Constant marginal utility from successive units

c. Constant marginal utility of money

d. Utility is measurable

Solution: (b);

49. From the following statement identify the correct statements

I. Point price elasticity of demand in terms of marginal and average revenues can be measured with the following formula- AR/AR-MR

II. The point price elasticity of demand is the product of the slope of the demand function and the ratio between corresponding price and quantity.

1. Both statements are true

2. Only I is true
3. Only II is true
4. Both statements are false

Solution: (1)

50. Which one of the following is not the basic property of indifference curves?

1. Negative slope
2. Indifference curves of two imperfect substitutes are concave to the point of origin
3. The indifference curves do not intersect nor they tangent to one another
4. Upper indifference curves indicate a higher level of satisfaction.

Solution: (2);

51. Ice cream sells for Rs. 20. X who likes ice cream, has already consumed 4 units. His marginal utility (MU) of Rs. 1 is 4. Should he consumed more ice cream or stop the consumption?

a. consumed up to the level when MU_x = Rs.80 and stop consuming beyond that level

b. consumed up to the level when MU_x > Rs.80 and stop consuming beyond that level

c. consumed up to the level when MU_x < Rs.80 and stop consuming beyond that level

d.None of the above

Solution: (a)

Since, $P_x = MU_x/MU_m$ therefore $MU_x = P_{x*}MU_m$ (20*4) =80

52. Match the following:

List I	**List II**
a. Postage stamp pricing	i. Equality of marginal and average cost
b. Loss leader	ii. Constant average and marginal cost
c. Economic capacity	iii. Product line pricing
d. Reserve capacity	iv. Differential pricing

Codes :

a b c d

(1) iii iv ii i

(2) iv iii i ii

(3) ii i iii iv

(4) i ii iv iii

Solution: (2)

53. For the following two statements of Assertion (A) and Reasoning (R) indicate the correct code:

Assertion (A) : Low initial pricing for new products is regarded as the principal instrument for entering into mass markets.

Reasoning (R): Firms generally go for production of new products with excess capacity initially.

Codes:

(1) Assertion (A) and Reasoning (R) both are correct but (R) does not offer full explanation for (A).

(2) Assertion (A) and Reasoning (R) both are wrong.

(3) Assertion (A) is correct but Reasoning (R) is wrong.

(4) Assertion (A) and Reasoning (R) both are correct and (R) offers full explanation for (A).

Solution: (1)

55. For the following two statements of Assertion (A) and Reasoning (R), indicate the correct code:

Assertion (A): High initial price with heavy promotional expenditure at early stages for selling new products is justified.

Reasoning (R): Demand for new product is likely to be less elastic at the early stages of market development.

Codes:

(1) (A) is correct but (R) is not correct.

(2) (A) is not correct but (R) is correct.

(3) (A) and (R) both are correct.

(4) (A) and (R) both are not correct.

Solution: (2)

56. Match the following items

List I	**List II**
a. Producer's equilibrium range	i. Leon Walras's approach
b. Possible input use	ii. Alfred Marshall's approach
c. New price equilibrium after change in demand is set through price adjustment	iii. Isoquant curve
d. New price equilibrium after change in demand is set through quantity adjustment	iv. Ridge lines

Codes :

a b c d

(1) i ii iii iv

(2) ii iv i iii

(3) iv iii i ii

(4) iii i iv ii

Solution: (3)

57. Gossen's second law of consumption is based on which combination of the following assumptions :

I. Rational Behaviour of consumers
II. Cardinal measurability of the utility
III. Comparability of the utility
IV. Desire for attaining satiety
Indicate the correct code:
Codes :
(1) I II III
(2) II III IV
(3) I II IV
(4) I III IV

Solution: (3); The law of equi-marginal utility is also known as Gossen's second law of consumption. Accordingly, the consumer will try to maximize his satisfaction when there are substitute goods available in the market. Thus, consumer equilibrium is when

$MU_{m=}$ MU_x/MU_y = Px/P_y

Assumptions of Gossen second law of consumption

1. Rational behviour of consumers
2. Cardinal measurability of utility
3. Marginal utility of money is constant
4. Income of the consumer is given
5. Price of commodity is given
6. It is based on law of diminishing return

57. Perfect competition cannot be distinguished from monopolistic competition as per which combination of the following features of the market:

(a) freedom for entry into or exit from the market.
(b) level of knowledge of the market.
(c) number of buyers and sellers in the market.
(d) nature of goods bought and sold.
Indicate the correct code :
Codes :
(1) (a) (b) (d)
(2) (b) (c) (d)
(3) (a) (b) (c)
(4) (a) (c) (d)

Solution: (3)

58. The short-run cost function of a firm is as follows :

TC = 200 + 5Q + 2Q2

Where TC = Total Cost
Q = Physical units of the product of the firm

What would be the level of optimum output?

(1) 5

(2) 10
(3) 12
(4) 15
Solution: (b);
By using hit and trial method and putting the value of Q from the following given option in equation i.e. TC= $200+5Q+2Q^2$

(1) when Q=5 then TC= $200+5*5+2(5^2)=275$
(2) when Q= 10 then TC=$200+5*10+2(10^2)= 450$
(3) when Q= 12 then TC= $200+5*12+2(12^2)=548$
(4) when Q=15 then TC= $200+5*15+2(15^2)=725$

Q (Quantity)	TC	AC(TC/Q)	MC(TC_n-TC_{n-1})
5	275	55	-
10	450	45	175
12	548	45.67	98
15	725	48.33	177

A firm has optimum level of output at a point where the firm's has minimum average cost. In this above table at the level of producing 10 units of output firm's has minimum average cost is 45. Therefore, firm's optimum level of output is 10.

59. Short-run demand and total cost functions for a monopoly firm are as under:
Demand function: Q = 100 – 0.2 P
Price function: P = 500 – 5 Q
Cost function: TC = 50 + 20 Q + Q2
Where Q = Total quantity of the product in physical units.
P = Price of the product per unit
TC = Total cost
What is the profit maximizing output of the pure monopoly firm ?
(1) 20
(2) 35
(3) 40
(4) 50
Solution: (3)
By using hit and trial method and putting the value of Q from the given options in the equation of cost, price and demand.

A. Putting the value of Q in cost function

(1) When Q=20 then TC= $50+20Q+Q^2= 50+20(20)+20^2= 850$
(2) When Q=35 then TC= $50+20(35)+35^2= 1975$
(3) When Q=40 then TC=$50+20(40)+40^2=2450$
(4) When Q=50 then TC=$50+20(50)+50^2=3550$

B. Similarly, putting the value of Q in price function

(1) When Q=20 and P=500-5Q= 500-5(20)=400

(2) When Q=35 and P=500-5Q= 500-5(35)=325
(3) When Q=40 and P=500=5Q= 500-5(40)=300
(4) When Q=50 and P=500-5Q=500-5(50)=250

Q(Output)	Price(AR)	TR(Q*AR)	MR (TR_n-TR_{n-1})	TC	AC(TC/Q)	MC(TC_n-TC_{n-1})
20	400	8000	-	850	42.50	-
35	325	11,375	3,375	1,975	56.42	1,125
40	300	12,000	625	2,450	61.25	475
50	250	12,500	500	3,550	71	1,100

Since, a monopoly firm gets profit maximization output at profit where MC curve must cut MR curve from below. Therefore, at the output level of 40 firm's get maximum profits.
In this table, AR-average revenue; TR- total revenue, MR-marginal revenue, TC-total cost, AC-average cost and MC- marginal cost.

60. In which one of the following market situations, the pricing above the prevailing market price is used as a more common practice?

(1) Markets where the selling firms face perfect competitive situations.
(2) Markets where the selling firms want to gain popularity of the products having high cross elasticity of their demand.
(3) Markets where sellers rely on their customers' high propensity to consume a prestigious commodity.
(4) Markets where the selling firms have entered into the stages of maturity and saturation.

Solution :(3)

61. **When a consumer increase the unit of X commodity by giving up some unit of Y commodity and even to attain the same level of satisfaction, the marginal rate of substitution will be calculated as**

(a) change in X commodity divided by change in Y commodity
(b) change in X commodity divided by marginal utility of Y commodity
(c) change in Y commodity divided by change in X commodity
(d) change in Y commodity divided by marginal utility of X commodity

Solution: (c); MRS_{yx}= change in Y commodity/change in X commodity

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