

ECO402 Microeconomics Final Term Papers Solved MCQs by Virtualians Social Network

1. The "perfect information" assumption of perfect competition includes all of the following except one. Which one?

Consumers know their preferences.
Consumers know their income levels.
Consumers know the prices available.

Consumers can anticipate price changes.

2. Incremental cost is the same concept as _____ cost.

Average
Marginal
Fixed
Variable

3. A production function assumes a given:

Technology.

Set of input prices.
Ratio of input prices.
Amount of output.

4. Assume that beer is an inferior good. If the price of beer falls, then the substitution effect results in the person buying _____ of the good and the income effect results in the person buying _____ of the good.

More, more
More, less
Less, more
Less, less

5. Producer surplus for the whole market can be thought of as:

Total profit.
Variable operating profit plus factor rents.
Total profit minus factor rents earned by lower cost firms.

Total profit plus factor rents earned by lower cost firms.

- 6. Baba Burgers has discovered there are economies of scope available to the restaurant. Which is most likely to be a response to this discovery?**

Baba expands burger production, focusing on that one good.

Baba contracts burger production.

Baba adds grilled chicken sandwiches to the menu.

Baba cuts back on the diversity of the menu.

- 7. The endpoints (horizontal and vertical intercepts) of the budget line:**

Measure its slope.

Measure the rate at which one good can be substituted for another.

Measure the rate at which a consumer is willing to trade one good for another.

Represent the quantity of each good that could be purchased if all of the budget were allocated to that good.

- 8. The "perfect information" assumption of perfect competition includes all of the following except one. Which one?**

Consumers know their preferences.

Consumers know their income levels.

Consumers know the prices available.

Consumers can anticipate price changes.

- 9. The difference between the economic and accounting costs of a firm are:**

The accountant's fees.

The corporate taxes on profits.

The opportunity costs of the factors of production that the firm owns.

The sunk costs incurred by the firm.

- 10. Plastic and steel are substitutes in the production of body panels for certain automobiles. If the price of plastic increases, with other things remaining the same, we would expect:**

The price of steel to fall.

The demand curve for steel to shift to the right.

The demand curve for plastic to shift to the left.

The demand curve for steel to shift to the left.

Quiz 2

11. Cost-output elasticity can be written and calculated as:

MC/AC.

AC/MC

(AC)(MC)

(AC)²(MC)

12. Fixed costs are fixed with respect to changes in:

Output.

Capital expenditure.

Wages.

Time.

13. The presence of a learning curve may induce a decision maker in a startup firm to choose:

Low levels of output to exploit economies of scale.

High levels of output to exploit economies of scale.

Low levels of output to shift the average cost curve down over time.

High levels of output to shift the average cost curve down over time.

14. Which of the following is true regarding the relationship between returns to scale and economies of scope?

A firm experiencing economies of scope must also experience increasing returns to scale.

Economies of scale and economies of scope must occur together.

A firm experiencing increasing returns to scale must also experience economies of scope.

There is no definite relationship between returns to scale and economies of scope.

15. Salman would prefer a certain income of \$20,000 to a gamble with a 0.5 probability of \$10,000 and a 0.5 probability of \$30,000. Based on this information:

We can infer that Salman is risk neutral.
We can infer that Salman is risk averse.
We can infer that Salman is risk loving.
We cannot infer Salman 's risk preferences.

16. When the average product is decreasing, marginal product:

Equals average product.
Is increasing.
Exceeds average product.
Is less than average product.

17. Government intervention can increase total welfare when:

There are costs or benefits that are external to the market.
Consumers do not have perfect information about product quality.
A high price makes the product unaffordable for most consumers.
There are costs or benefits that are external to the market and consumers do not have perfect information about product quality.

18. If a competitive firm's marginal cost curve is U-shaped then:

Its short run supply curve is U-shaped too.
Its short run supply curve is the downward-sloping portion of the marginal cost curve.
Its short run supply curve is the upward-sloping portion of the marginal cost curve.
Its short run supply curve is the upward-sloping portion of the marginal cost curve that lies above the short run average variable cost curve.

19. Economies of scope refer to:

Changes in technology.
The very long run.
Multiproduct firms.
Single product firms that utilize multiple plants.

20. Although there are many reasons why a market can be non-competitive, the principal economic difference between a competitive and a non-competitive market is:

The extent to which any firm can influence the price of the product.

The size of the firms in the market.

The annual sales made by the largest firms in the market.

The presence of government intervention.

21. Indifference curves that are convex to the origin reflect:

An increasing marginal rate of substitution.

A decreasing marginal rate of substitution.

A constant marginal rate of substitution.

A marginal rate of substitution that first decreases, then increases.

22. The endpoints (horizontal and vertical intercepts) of the budget line:

Measure its slope.

Measure the rate at which one good can be substituted for another.

Measure the rate at which a consumer is willing to trade one good for another.

Represent the quantity of each good that could be purchased if all of the budget were allocated to that good.

23. Consider the following statements when answering this question: I. "In the long run equilibrium of a perfectly competitive market, a firm's producer surplus equals the sum of the economic rents earned on its inputs to production." II. "In the long run equilibrium of a perfectly competitive market, the amount of economic profit earned can differ across firms, but not the amount of producer surplus."

I and II are true.

I is true, and II is false.

I is false, and II is true.

I and II are false.

24. Suppose that the prices of good A and good B were to suddenly double. If good A is plotted along the horizontal axis:

The budget line will become steeper.

The budget line will become flatter.

The slope of the budget line will not change.

The slope of the budget line will change, but in an indeterminate way.

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25. A country's government would like to raise the price of one its most important agricultural crops, coffee beans. Which of the following government programs will result in higher prices for coffee beans?

Select correct option:

An import quota on coffee beans.

An acreage limitation program which provides coffee bean farmers financial incentives to leave some of their acreage idle.

An import tariff on coffee beans.

All of the given options.

26. Which of the following is NOT a generally accepted measure of the riskiness of an investment?

Select correct option:

Standard deviation.

Expected value.

Variance.

None of the given options.

27. Which of the following is a positive statement?

Select correct option:

When the price of a good goes up, consumers buy less of it.

When the price of a good goes up, firms produce more of it.

When the Federal government sells bonds, interest rates rise and private investment is reduced.

All of the given options.

28. Rabia knows average total cost and average variable cost for a given level of output. Which of the following costs can she not determine given this information?

Select correct option:

Average fixed cost

Fixed cost

Variable cost

Rabia can determine all of the above costs given the information provided.

29. Which of the following is NOT true about price floors?

Select correct option:

Consumer surplus is always lower than it would be in the competitive equilibrium.

Producer surplus could be lower, higher, or the same as it would be in competitive equilibrium.

Producer surplus could be negative as the result of a price floor.

Producers will often respond to a price floor by cutting production to the point at which price equals marginal cost.

30. A production function in which the inputs are perfectly substitutable would have isoquants that are:

Select correct option:

Convex to the origin.

L shaped.

Linear.

Concave to the origin.

31. For an inferior good:

Select correct option:

The price elasticity of demand is negative; the income elasticity of demand is negative.

The price elasticity of demand is positive; the income elasticity of demand is negative.

The price elasticity of demand is negative; the income elasticity of demand is positive.

The price elasticity of demand is positive; the income elasticity of demand is positive.

32. The short run is:

Select correct option:

Less than a year.

Three years.

However long it takes to produce the planned output.

A time period in which at least one input is fixed.

33. Any combination of products inside the production possibility frontier is:

Select correct option:

Allocatively inefficient

Consumer inefficient

Productively inefficient

None of the given option.

34. Which of the following is NOT an assumption regarding people's preferences in the theory of consumer behavior?

Select correct option:

Preferences are complete.

Preferences are transitive.

Consumers prefer more of a good to less.

None of the given options.

35. In 1970s the federal government imposed price controls on natural gas. Which of the following statements is true?

Select correct option:

These price controls caused a chronic excess supply of natural gas.

Consumers gained from the price controls, because consumer surplus was larger than it would have been under free market equilibrium.
Producers gained from the price controls because producer surplus was larger than it would have been under free market equilibrium.
This episode of price controls was unusual, because it resulted in no deadweight loss to society.

36. A production function defines the output that can be produced:

Select correct option:

- At the lowest cost, given the inputs available.
- With the fewest amount of inputs.
- If the firm is technically efficient.
- In a given time period if no additional inputs are hired.

37. A firm never operates:

Select correct option:

- At the minimum of its ATC curve.
- At the minimum of its AVC curve.
- On the downward-sloping portion of its ATC curve.
- On the downward-sloping portion of its AVC curve.

38. Two firms, each producing different goods, can achieve a greater output than one firm producing both goods with the same inputs. We can conclude that the production process involves:

Select correct option:

- Diseconomies of scope.
- Economies of scale.
- Decreasing returns to scale.

Increasing returns to scale.

39. In long-run competitive equilibrium, a firm that owns factors of production will have an:

Select correct option:

- Economic profit = \$0 and accounting profit > \$0.
- Economic and accounting profit = \$0.
- Economic and accounting profit > \$0.
- Economic and accounting profit can take any value.

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40. When a product transformation curve is bowed outward, there are _____ in production.

- Economies of scope
- Economies of scale**
- Diseconomies of scope
- Diseconomies of scale

41. The marginal rate of technical substitution is equal to the:

- Slope of the total product curve.
- Change in output minus the change in labor.
- Change in output divided by the change in labor.**
- Ratio of the marginal products of the inputs.

42. Consider two goods X and Y available for consumption. Assume that the price of X changes while the price of Y remains fixed. For these two goods, the price-consumption curve illustrates the:

- Relationship between the price of X and consumption of Y.**
- Utility-maximizing combinations of X and Y for each price of X.
- Relationship between the price of Y and the consumption of X.
- Utility-maximizing combinations of X and Y for each quantity of X.

43. Assume that two investment opportunities have identical expected values of \$100,000. Investment A has a variance of 25,000, while investment B's variance is 10,000. We would expect most investors (who dislike risk) to prefer investment opportunity:

- A because it has less risk.
- A because it provides higher potential earnings.

B because it has less risk.

B because of its higher potential earnings.

44. The law of diminishing returns refers to diminishing:

: Total returns.

Marginal returns.

Average returns.

All of the given option

45.: If the isoquants are straight lines, then:

: Inputs have fixed costs at all use rates.

The marginal rate of technical substitution of inputs is constant.

Only one combination of inputs is possible.

There are constant returns to scale.

H99s1: 4th

46.: The total cost (TC) of producing computer software diskettes (Q) is given as:

TC = 200 + 5Q. What is the variable cost?

: 200

5Q

5

5 + (200/Q)

47. The demand curve facing a perfectly competitive firm is:

The same as the market demand curve.

Downward-sloping and less flat than the market demand curve.

Perfectly horizontal.

Perfectly vertical.

48.: The cost-output elasticity is used to measure:

Economies of scope.

Economies of scale.

The curvature in the fixed cost curve.

Steepness of the production function.

:

49. The budget line in portfolio analysis shows that:

The expected return on a portfolio increases as the standard deviation of that return increases.

The expected return on a portfolio increases as the standard deviation of that return decreases.

The expected return on a portfolio is constant.

The standard deviation of a portfolio is constant.

50. A Rolling Stones song goes: "You can't always get what you want." This echoes an important theme from microeconomics. Which of the following statements is the best example of this theme?

Consumers must make the best purchasing decisions they can, given their limited incomes. Workers do not have as much leisure as they would like, given their wages and working conditions.

Workers in planned economies, such as North Korea, do not have much choice over jobs.

Firms in market economies have limited financial resources.

51. Compared to a tariff, an import quota, which restricts imports to the same amount as the tariff, will leave the country as a whole:

Worse off than a comparable tariff.

Not as bad off as a comparable tariff.

About the same as a comparable tariff.

Any of the above can be true.

52. Any combination of products inside the production possibility frontier is:

Allocatively inefficient

Consumer inefficient

Productively inefficient

None of the given option.

53.: In the long run, which of the following is considered a variable cost?

Expenditures for wages.

Expenditures for raw materials.

Expenditures for capital machinery and equipment.

All of the given options.

54. Two firms, each producing different goods, can achieve a greater output than one firm producing both goods with the same inputs. We can conclude that the production process involves:

: Diseconomies of scope.

Economies of scale.

Decreasing returns to scale.

Increasing returns to scale.

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55. The change in the quantity demanded of a good resulting from a change in relative price with the level of satisfaction held constant is called the _____ effect.

Select correct option:

Giffen

Real price

Income

Substitution

56. If a competitive firm's marginal cost always increases with output, then at the profit maximizing output level, producer surplus is:

Select correct option:

Zero because marginal costs equal marginal revenue.

Zero because price equals marginal costs.

Positive because price exceeds average variable costs.

Positive because price exceeds average total costs.

57. The concept of a risk premium applies to a person that is:

Select correct option:

Risk averse.

Risk neutral.

Risk loving.

All of the given options.

58. Governments may successfully intervene in competitive markets in order to achieve economic efficiency:
Select correct option:

At no time; competitive markets are always efficient without government intervention.
In cases of positive externalities only.
In cases of negative externalities only.
In cases of both positive and negative externalities.

59. What happens in a perfectly competitive industry when economic profit is greater than zero?
Select correct option:

Existing firms may get larger.
New firms may enter the industry.
Firms may move along their LRAC curves to new outputs.
All of the given options.

60. Which of the following is NOT true about price floors?
Select correct option:

Consumer surplus is always lower than it would be in the competitive equilibrium.
Producer surplus could be lower, higher, or the same as it would be in competitive equilibrium.
Producer surplus could be negative as the result of a price floor.
Producers will often respond to a price floor by cutting production to the point at which price equals marginal cost.

61. Indifference curves that are convex to the origin reflect:
Select correct option:

An increasing marginal rate of substitution.
A decreasing marginal rate of substitution.
A constant marginal rate of substitution.
A marginal rate of substitution that first decreases, then increases.

62. Which of the following statements is true regarding the differences between economic and accounting costs?

Select correct option:

Accounting costs include all implicit and explicit costs.

Economic costs include implied costs only.

Accountants consider only implicit costs when calculating costs.

Accounting costs include only explicit costs.

63. Rabia and Samina are shopping for new cars (one each). Rabia expects to pay \$15,000 with 1/5 probability and \$20,000 with 4/5 probability. Samina expects to pay \$12,000 with 1/4 probability and \$20,000 with 3/4 probability. Refer to the above scenario, Rabia's expected expense for his car is:

Select correct option:

\$20,000.

\$19,000.

\$18,000.

\$17,500.

64. A decreasing-cost industry has a downward-sloping:

Select correct option:

Long-run marginal cost curve.

Short-run average cost curve.

Short-run marginal cost curve.

Long-run industry supply curve.

65. Producer surplus is measured as the:

Select correct option:

Area under the demand curve above market price.
Entire area under the supply curve.
Area under the demand curve above the supply curve.
Area above the supply curve up to the market price.

66. In a constant-cost industry, an increase in demand will be followed by:

Select correct option:

No increase in supply.
An increase in supply that will not change price from the higher level that occurs after the demand shift.
An increase in supply that will bring price down to the level it was before the demand shift.
An increase in supply that will bring price down below the level it was before the demand shift.

67. The "perfect information" assumption of perfect competition includes all of the following except one. Which one?

Select correct option:

Consumers know their preferences.
Consumers know their income levels.
Consumers know the prices available.
Consumers can anticipate price changes.

68. A Giffen good:

Select correct option:

Is always the same as an inferior good.
Is the special subset of inferior goods in which the substitution effect dominates the income effect.
Is the special subset of inferior goods in which the income effect dominates the substitution effect.
Must have a downward sloping demand curve

69. The object of diversification is:

Select correct option:

To reduce risk and fluctuations in income.
To reduce risk, but not to reduce fluctuations in income.
To reduce fluctuations in income, but not to reduce risk.
Neither to reduce risk, nor to reduce fluctuations in income.

70. A price support may be pictured by:

Select correct option:

Shifting the demand curve to the right by the amount of the government purchase.
Shifting the demand curve to the left by the amount of the government purchase.
Shifting the supply curve to the right by the amount of the government purchase.
Shifting the supply curve to the left by the amount of the government purchase.

71. Ali and Sarah decide to go into business together as economic consultants. Ali believes they have a 50-50 chance of earning \$200,000 a year, and that if they don't, they'll earn \$0. Sarah believes they have a 75% chance of earning \$100,000 and a 25% chance of earning \$10,000. Refer to the scenario, the probabilities discussed in the information above are:

Select correct option:

Objective because they are single numbers rather than ranges.
Objective because they have been explicitly articulated by the individuals involved.
Subjective because the event hasn't happened yet.
Subjective because they are estimates made by individuals based upon personal judgment or experience.

72. The law of diminishing returns refers to diminishing:

Select correct option:

Total returns.
Marginal returns.
Average returns.
All of the given options.

73. The marginal rate of technical substitution is equal to the:

Select correct option:

Slope of the total product curve.
Change in output minus the change in labor.
Change in output divided by the change in labor.
Ratio of the marginal products of the inputs.

74. Boeing Corporation and Airbus Industries are the only two producers of long-range commercial aircraft. This market is not perfectly competitive because:

Select correct option:

Each company has annual sales over \$10 billion.

Each company can significantly affect prices.

Airbus cannot sell aircraft to the United States government.

All of the given options.

75. In a short run production process, the marginal cost is rising and the average total cost is falling as output is increased. Thus, marginal cost is:

Select correct option:

Below average total cost.

Above average total cost.

Between the average variable and average total cost curves.

Below average fixed cost.

76. In the short run, a perfectly competitive profit maximizing firm that has not shut down:

Select correct option:

Is operating on the downward-sloping portion of its AVC curve.

Is operating at the minimum of its AVC curve.

Is operating on the upward-sloping portion of its AVC curve.

Is not operating on its AVC curve.

77. When the federal government installs a price support program that requires the government to purchase all of a good not bought in the private economy at the support price, changes in producer surplus:

Select correct option:

Are negative.

Are positive, but more than offset by the cost to consumers and the government.

Are positive, and not offset by the cost to consumers and the government.

None of the given options.

78. Rabia and Samina are shopping for new cars (one each). Rabia expects to pay \$15,000 with $\frac{1}{5}$ probability and \$20,000 with $\frac{4}{5}$ probability. Samina expects to pay \$12,000 with $\frac{1}{4}$ probability and \$20,000 with $\frac{3}{4}$ probability. Refer to the above scenario, Rabia's expected expense for his car is:

Select correct option:

- \$20,000.
- \$19,000.
- \$18,000.
- \$17,500.

79. Marginal utility measures:

Select correct option:

- The slope of the indifference curve.
- The additional satisfaction from consuming one more unit of a good.
- The slope of the budget line.
- The marginal rate of substitution.

80.

The endpoints (horizontal and vertical intercepts) of the budget line:

Select correct option:

- Measure its slope.
- Measure the rate at which one good can be substituted for another.
- Measure the rate at which a consumer is willing to trade one good for another.
- Represent the quantity of each good that could be purchased if all of the budget were allocated to that good.

81. Deadweight loss refers to:

Select correct option:

- Losses in consumer surplus associated with excess government regulations.
- Situations where market prices fail to capture all of the costs and benefits of a policy.
- Net losses in total surplus.
- Losses due to the policies of labor unions.

82.

the marginal product of an input is:

Select correct option:

- Total product divided by the amount of the input used to produce this amount of output.
- The addition to total output that adds nothing to profit.
- The addition to total output due to the addition of one unit of all other inputs.

The addition to total output due to the addition of the last unit of an input, holding all other inputs constant.

83. If the isoquants are straight lines, then:

Select correct option:

Inputs have fixed costs at all use rates.

The marginal rate of technical substitution of inputs is constant.

Only one combination of inputs is possible.

There are constant returns to scale.

84. Consider the following statements when answering this question: I. "In the long run equilibrium of a perfectly competitive market, a firm's producer surplus equals the sum of the economic rents earned on its inputs to production." II. "In the long run equilibrium of a perfectly competitive market, the amount of economic profit earned can differ across firms, but not the amount of producer surplus."

Select correct option:

I and II are true.

I is true, and II is false.

I is false, and II is true.

I and II are false.

85. The amount of output that a firm decides to sell has no effect on the market price in a competitive industry because:

Select correct option:

The market price is determined (through regulation) by the government.

The firm supplies a different good than its rivals.

The firm's output is a small fraction of the entire industry's output.

The short run market price is determined solely by the firm's technology.

86. Producer surplus is measured as the:

Select correct option:

Area under the demand curve above market price.

Entire area under the supply curve.

Area under the demand curve above the supply curve.

Area above the supply curve up to the market price.

87. price ceilings:

Select correct option:

Always increase consumer surplus.

May decrease consumer surplus if demand is sufficiently elastic.

May decrease consumer surplus if demand is sufficiently inelastic.

Always decrease consumer surplus.

88. An individual consumes only two goods, X and Y. Which of the following expressions represents the utility maximizing market basket?

Select correct option:

MRS_{xy} is at a maximum.

P_x/P_y = money income.

MRS_{xy} = money income.

$MRS_{xy} = P_x/P_y$.

89. In the long run, a firm's producer surplus is equal to the:

Select correct option:

Economic rent it enjoys from its scarce inputs.

Revenue it earns in the long run.

Positive economic profit it earns in the long run.

Difference between total revenue and total variable costs.

90. The marginal product of an input is:

Select correct option:

Total product divided by the amount of the input used to produce this amount of output.

The addition to total output that adds nothing to profit.

The addition to total output due to the addition of one unit of all other inputs.

The addition to total output due to the addition of the last unit of an input, holding all other inputs constant.

91. Assume that two investment opportunities have identical expected values of \$100,000. Investment A has a variance of 25,000, while investment B's variance is 10,000. We would expect most investors (who dislike risk) to prefer investment opportunity:

Select correct option:

A because it has less risk.

- A because it provides higher potential earnings.
- B because it has less risk.
- B because of its higher potential earnings.

92. The price elasticity of demand for a demand curve that has a zero slope is:
Select correct option:

- Zero.
- One.
- Negative but approaches zero as consumption increases.
- Infinity.

93. A firm's producer surplus equals its economic profit when:
Select correct option:

- Average variable costs are minimized.
- Marginal costs equal marginal revenue.
- Fixed costs are zero.
- Total revenues equal total variable costs.

94. The long run supply curve in a constant-cost industry is linear and:
Select correct option:

- Upward-sloping.
- Downward-sloping.
- Horizontal.
- Vertical.

95. Prospective sunk costs:

Select correct option:

- Are relevant to economic decision-making.
- Are considered as investment decisions.
- Rise as output rises.
- Do not occur when output equals zero. 4th

96. An isoquant:

Select correct option:

- Must be linear.
- Cannot have a negative slope.
- Is a curve that shows all the combinations of inputs that yield the same total output.
- Is a curve that shows the maximum total output as a function of the level of labor input.
- 3rd

97. Which of the following would cause a shift to the right of the supply curve for gasoline? I. A large increase in the price of public transportation. II. A large decrease in the price of automobiles. III. A large reduction in the costs of producing gasoline.

Select correct option:

- I only.
- II only.
- III only.
- II and III only.

2nd

98. If price is between AVC and ATC, the best and most practical thing for a perfectly competitive firm to do is:

Select correct option:

- Raise prices.
- Lower prices to gain revenue from extra volume.
- Shut down immediately, but not liquidate the business.
- Continue operating, but plan to go out of business.

1st

99. The amount of output that a firm decides to sell has no effect on the market price in a competitive industry because:

Select correct option:

- The market price is determined (through regulation) by the government.
- The firm supplies a different good than its rivals.
- The firm's output is a small fraction of the entire industry's output.
- The short run market price is determined solely by the firm's technology.

1st

100. The law of diminishing returns applies to:

Select correct option:

- The short run only.
- The long run only.
- Both the short and the long run.
- Neither the short nor the long run.

3rd

101. In an unregulated, competitive market consumer surplus exists because some:

Select correct option:

- Sellers are willing to take a lower price than the equilibrium price.
- Consumers are willing to pay more than the equilibrium price.
- Sellers will only sell at prices above equilibrium price (or actual price).
- Consumers are willing to make purchases only if the price is below the actual price.

102. Which of the following is a positive statement?

Select correct option:

- The minimum wage should not be increased, because to do so would increase unemployment.
- Smoking should be restricted on all airline flights.
- All automobile passengers should be required to wear seatbelts in order to protect them against injury.
- None of the given options.

103. Which of the following is true concerning the income effect of a decrease in price?

Select correct option:

- It will lead to an increase in consumption only for a normal good.
- It always will lead to an increase in consumption.
- It will lead to an increase in consumption only for an inferior good.
- It will lead to an increase in consumption only for a Giffen good.

104. Generally, long-run elasticities of supply are:
Select correct option:

- Greater than short-run elasticities, because existing inventories can be exploited during shortages.
- Greater than short-run elasticities, because consumers have time to find substitutes for the good.
- Greater than short-run elasticities, because firms can make alterations to plant size and input combinations to be more flexible in production.
- Smaller than short-run elasticities, because the firm has made long-term commitments it cannot easily modify.

4th