

BINDURA UNIVERSITY OF SCIENCE EDUCATION**FACULTY OF COMMERCE**

JUN 2024

DEPARTMENT OF ECONOMICS**EC101 (3): ECONOMIC PRINCIPLES 1****PROGRAMMES**

BACHELOR OF SCIENCE HONOURS IN ECONOMICS

BACHELOR OF ACCOUNTANCY

BACHELOR OF COMMERCE HONOURS IN MARKETING

BACHELOR OF COMMERCE HONOURS IN PURCHASING & SUPPLY

BACHELOR OF BUSINESS ADMINISTRATION HONOURS IN POLICE & SECURITY
STUDIES

BACHELOR OF COMMERCE HONOURS IN FINANCIAL INTELLIGENCE

BACHELOR OF COMMERCE HONOURS IN BANKING AND FINANCE

BACHELOR OF SCIENCE HONOURS IN STATISTICS AND FINANCIAL
MATHEMATICS**DURATION: 3 HOURS TOTAL MARKS: 100****INSTRUCTIONS TO CANDIDATES**

- (i) **Section A and B are compulsory.**
- (ii) **Answer questions in Section A on the separate sheet provided by marking the appropriate answer with an 'X'.**
- (iii) **Answer any one question from section C.**
- (iv) **Start the answers for section B and section C on new pages.**
- (v) **Graphical and mathematical responses are encouraged.**
- (vi) **No cell phones are allowed into the examination room.**
- (vii) **Marks for sections B and C are in parenthesis.**

1. Which of the following involve a trade-off?

- A. Taking a nap
- B. All of these answers involve trade-offs.
- C. Watching a football game on Saturday afternoon
- D. Going to university
- E. Buying a new car

2. Trade-offs are required because wants are unlimited and resources are

- A. Economical.
- B. Unlimited.
- C. Efficient.
- D. Marginal.
- E. Scarce.

3. Economics is the study of

- A. How society manages its unlimited resources.
- B. How to reduce our wants until we are satisfied.
- C. How society manages its scarce resources.
- D. How to fully satisfy our unlimited wants.
- E. How to avoid having to make trade-offs.

4. A rational person does not act unless

- A. The action is ethical.
- B. The action produces marginal costs that exceed marginal benefits.
- C. The action produces marginal benefits that exceed marginal costs.

D. The action makes money for the person.

E. None of these answers.

5. Suppose you find ZWL20000. If you choose to use the ZWL 20000 to go to a football match, your opportunity cost of going to the game is

A. Nothing, because you found the money.

B. ZWL 20000 (because you could have used the ZWL 20000 to buy other things) plus the value of your time spent at the game.

C. ZWL 20000 (because you could have used the ZWL 20000 to buy other things) plus the value of your time spent at the game, plus the cost of the dinner you purchased at the game.

D. ZWL 20000 (because you could have used the ZWL 20000 to buy other things).

E. None of these answers

6. Since people respond to incentives, we would expect that, if the average salary of accountants increases by 50% while the average salary of teachers increases by 20%, then

A. Fewer students will take degree courses in accounting and more will take education courses.

B. Fewer students will take degree courses in education and more will take accounting courses.

C. Fewer students will attend university.

D. None of these answers.

7. Which of the following is not part of the opportunity cost of going on holiday?

A. The money you spent on a theatre show there.

B. The money you could have made if you had stayed at home and worked.

C. The money you spent on food.

D. The money you spent on airline tickets.

8. Which of the following statements is true about a market economy?

- A. With a large enough computer, central planners could guide production more efficiently than markets.
- B. In a market the self-interested actions of market participants are coordinated in such a way as to bring about an outcome from which everybody benefits.
- C. The strength of a market system is that it tends to distribute resources evenly across consumers.
- D. Taxes help prices communicate costs and benefits to producers and consumers.

9. You are planning to run a hot dog stand during a forthcoming fair. You originally estimated that you will generate sales revenue of ZWL 2000 and you have already spent ZWL 1000 building the hot dog stand. The hot dog stand is nearly completed but now you estimate total sales to be only ZWL 800 because the fair clashes with a major music festival in a nearby location. You can complete the hot dog stand for another ZWL 300. Your decision rule should be to complete the hot dog stand as long as the cost to complete the stand is less than

- A. ZWL 300
- B. ZWL 100
- C. ZWL 500
- D. none of these answers.
- E. ZWL 800

10. In which way does a straight-line production possibilities curve differ from a concave production possibilities curve?

- A. A straight-line production possibilities curve has a decreasing opportunity cost.
- B. A straight-line production possibilities curve has a constant opportunity cost.
- C. A straight-line production possibilities curve has an increasing opportunity cost.
- D. A straight-line production possibilities curve does not show opportunity cost.
- E. Upward-sloping production possibilities curve.

11. Which of the following would cause a leftward shift of the production possibilities curve?

- A. An increase in unemployment
- B. An increase in inflation
- C. An increase in capital equipment
- D. A decrease in consumer demand
- E. A decrease in working-age population

12. The law of increasing opportunity cost is reflected in the shape of the

- A. Production possibilities curve concave to the origin ("bowed-out")
- B. Production possibilities curve convex to the origin ("bowed-in")
- C. Horizontal production possibilities curve
- D. Straight-line production possibilities curve
- E. Upward-sloping production possibilities curve

13. Suppose that a consumer purchases two goods X and Y and that the marginal utility of X is MU_x , the total utility of X is TU_x , the marginal utility of Y is MU_y , and the total utility of Y is TU_y . If the prices of X and Y are P_x and P_y , respectively, which of the following expressions defines consumer equilibrium?

- A $TU_x = TU_y$
- B $MU_x = MU_y$
- C $TU_x/P_x = TU_y/P_y$
- D $MU_x/P_x = MU_y/P_y$
- E $(MU_x)(P_x) + (MU_y)(P_y) = 1$

14. Which of the following is true if consuming one unit of a good yields 80 utils and consuming the second unit of the

good increases satisfaction by 30 utils?

- A. The marginal utility of the first unit is 30.
- B. The marginal utility of the second unit is 80.
- C. The marginal utility of the second unit is 50.
- D. The total utility of consuming two units is 110.
- E. The total utility of consuming one unit is greater than the total utility of consuming two units.

15. Which of the following is true if consuming one unit of a good yields 80 utils and consuming the second unit of the good increases satisfaction by 30 utils?

- A. The marginal utility of the first unit is 30.
- B. The marginal utility of the second unit is 80.
- C. The marginal utility of the second unit is 30.
- D. The total utility of consuming two units is 50.
- E. The total utility of consuming one unit is greater than the total utility of consuming two units.

16. Suppose there is an increase in both the supply and demand for personal computers. In the market for personal computers, we would expect

- A. The equilibrium quantity to rise and the equilibrium price to rise.
- B. The equilibrium quantity to rise and the equilibrium price to fall.
- C. The equilibrium quantity to rise and the equilibrium price to remain constant.
- D. The change in the equilibrium quantity to be ambiguous and the equilibrium price to rise.
- E. The equilibrium quantity to rise and the change in the equilibrium price to be ambiguous.

17. A perfectly competitive market has

- A. Firms that set their own prices.
- B. Only one seller.
- C. At least a few sellers.
- D. Many buyers and sellers.
- E. None of these answers.

18. Total revenue necessarily equals

- A. Total output multiplied by the average cost of output.
- B. Total output multiplied by sales price of output.
- C. (total output multiplied by sales price) – inventory surplus.

D. (total output multiplied by the average cost of output) – inventory shortage.

19. An example of an implicit cost of production would be the

- A. Cost of raw materials for a printing company to print books.
- B. Income an entrepreneur could have earned working elsewhere.
- C. Cost of a delivery truck in a business that rarely makes deliveries.
- D. All of the above are correct.

20. In economics, the field of industrial organization answers which of the following questions?

- A. Why are consumers subject to the law of demand?
- B. Why do firms experience falling marginal product of labor?
- C. Why do firms consider production costs when determining product supply?
- D. How does the difference in the number of firms affect prices and efficiency of market outcomes?

21. Miranda wants to start her own business. The business she wants to start will require that she purchase a factory that costs \$400,000. She is planning to use \$300,000 of her own money, and borrow an additional \$100,000 to finance the factory purchase. Assume the relevant interest rate is 10 percent. According to this scenario, what is the explicit cost of purchasing the factory for the first year of operation?

- A. \$10,000
- B. \$20,000
- C. \$30,000
- D. \$40,000

22. The marginal product of labor can be defined as (where D denotes “change”)

- A. $D\text{profit}/D\text{labor}$.

B. $\Delta \text{Output} / \Delta \text{Labor}$.

C. $\Delta \text{Labor} / \Delta \text{total cost}$.

D. $\Delta \text{Labor} / \Delta \text{Output}$.

23. Diminishing marginal product of labor would arise when

A. Workers are discouraged about the lack of help from other workers.

B. Only new workers are trained in using the most productive capital.

C. Crowded office space reduces the productivity of new workers.

D. Union workers are told to reduce their work effort in preparation for a new round of collective bargaining talks

24. The slope of the total product curve reveals information about the

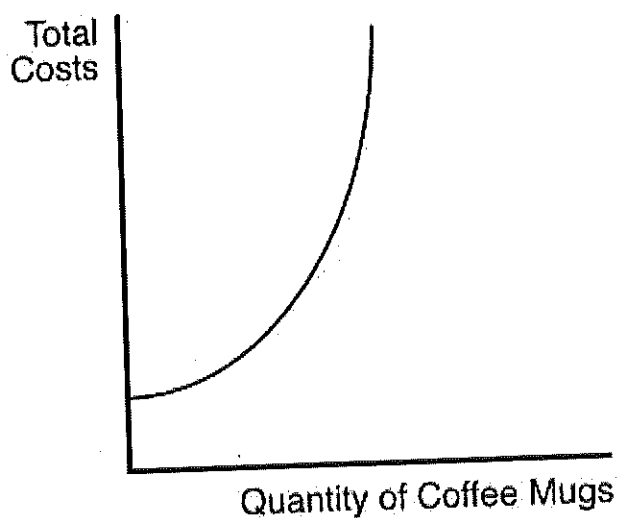
A. Marginal product of workers.

B. Average product of workers

C. Maximum product of workers.

D. Total product of workers

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The figure depicts a total cost function for a firm that produces coffee mugs. According to the figure, which of the statements below best captures information about the underlying production function?

- A. Output increases at an increasing rate with additional units of input.
- B. Output decreases at an increasing rate with additional units of input.
- C. Output increases at a decreasing rate with additional units of input.
- D. Output decreases at a decreasing rate with additional units of input.

26. Which of the following costs will be zero if a firm produces zero?

- A. Average cost
- B. Variable cost
- C. Opportunity cost
- D. All of the above are correct.

27. Average total cost equals

- A. $(\text{fixed costs} + \text{variable costs})/\text{quantity produced}$.
- B. $(\text{fixed costs} + \text{variable costs})/\text{change in quantity produced}$.
- C. $\text{Change in total costs}/\text{quantity produced}$.
- D. $\text{Change in total costs}/\text{change in quantity produced}$.

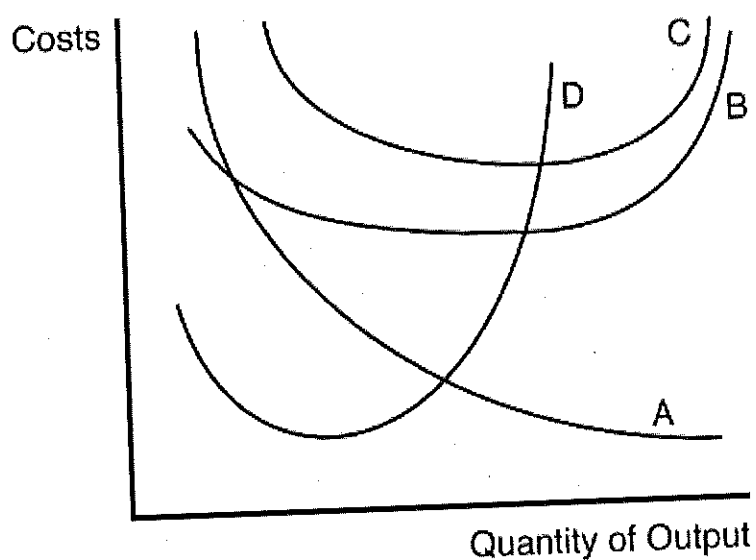
14. If we assume that marginal product of labor is always decreasing, average total cost

- A. And average fixed cost are always falling.
- B. And average fixed cost is always U-shaped.
- C. And average fixed cost are always rising.
- D. Is U-shaped and average fixed cost is always falling.

28. At all levels of production beyond the point where the marginal cost curve crosses the average variable cost curve, average variable cost

- A. Falls.
- B. Rises.
- C. Does not change.
- D. All of the above are possible, it depends on the shape of the marginal cost curve

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The figure reflects information about the cost structure of a firm. According to the figure, which of the lines is most likely to represent average total cost?

- A. A
- B. B
- C. C
- D. D

30. When a factory is operating in the short run,

- A. It cannot alter variable costs.
- B. Total cost and variable cost are usually the same.
- C. Average fixed cost rises as output increases
- D. It cannot adjust the quantity of some inputs.

31. In general, elasticity is

- A. A measure of the competitive nature of a market.
- B. The friction that develops between buyer and seller in a market.
- C. A measure of how much government intervention is prevalent in a market
- D. A measure of how much buyers and sellers respond to changes in market conditions.

32. If the demand curve is linear and downward sloping, which of the following would NOT be correct?

- A. Elasticity will change with a movement down the curve.
- B. The upper part of the demand curve is more elastic than the lower part.
- C. The lower part of the demand curve would be less elastic than the upper part.
- D. Elasticity and slope would both remain constant along the curve.

33. On a downward-sloping, linear demand curve, total revenue would be at a maximum at the

- A. Upper end of the demand curve
- B. Midpoint of the demand curve.
- C. Lower end of the demand curve.
- D. It is impossible to tell without knowing the price and quantity demanded.

34. The main determinant of the price elasticity of supply is

- A. Time.

- B. Luxuries vs. necessities
- C. The definition of the market.
- D. The number of close substitutes.

35. A monopoly is a market structure in which

- A. A single firm exercises its power over smaller firms
- B. A single firm produces a product with a wide variety of very close substitutes
- C. Each firm is run by a small proprietor
- D. There is only one firm producing a product which has no close substitutes

36. External diseconomies arise due to:

- A. Growth of ancillary industries
- B. High cost of technologies
- C. Increase in the price of factors of production
- D. None of the above

37. A a right ward shift of the supply curve may be caused by;

- A. A rise in the price of the product
- B. A decrease in the subsidy on the good
- C. A decrease in the costs of production of the firm
- D. An increase in the tax on the good

38. For a product with negative externalities

- A. Market equilibrium results in too much of the good being produced.
- B. Market equilibrium results in too little of the good being produced.
- C. The market will provide the optimal quantity of the good.
- D. Large economies of scale work as a barrier to firm entry.

39. Which of the following policies is government most inclined to use when faced with a positive externality?

- A. Subsidies
- B. Taxation
- C. Permits
- D. Usage fees

40. When calculating total production costs, economists consider:

- A. Implicit and explicit costs
- B. Only implicit costs
- C. Only explicit costs
- C. All implicit costs and a few explicit costs

41. Diminishing marginal returns set in when

- A. Marginal product is zero
- B. Total product is negative
- C. Total product is at its maximum
- D. Marginal product is falling

42. In the long run, a perfectly competitive firm earns

- A. Positive economic profit
- B. Zero economic profit
- C. Negative economic profit
- D. Subnormal profit

43. Points outside the production possibilities frontier (PPF) are

- A. Unattainable.
- B. Attainable, but productive inefficient.
- C. Preferable to points that lie on the PPF.

D. Attainable and productive efficient.

E. Possible.

44. If the marginal cost of the next slice of pizza exceeds marginal benefit you will

A. Eat the slice of pizza.

B. Not eat the slice of pizza.

C. Be unable to choose between eating or not eating.

D. Eat half the slice.

E. More information is needed to answer the question.

45. June has enough money to buy either a Mountain Dew, Pepsi, or a bag of chips. She chooses to buy the Pepsi. The opportunity cost of the Pepsi is

A. The Pepsi and the bag of chips.

B. The Mountain Dew or the bag of chips, whichever the best alternative given up.

C. The Mountain Dew and the bag of chips.

D. The Mountain Dew because it is a drink, as is the Pepsi.

E. Zero because she enjoys the Pepsi.

46. Labor, human capital, entrepreneurship, natural resources, and physical capital are all examples of which of?

A. Public goods

B. Inferior goods

C. Factors of production

D. Outputs

E. Substitutes in production

47. The demand curve for labor is derived from

A. The market labor demand curve

B. The demand curve for the output produced by labor

C. The labor supply curve for the firm

D. The equilibrium wage in the labor market

E. The market labor supply curve

48. Which of the following constitute the fundamental questions every economic system must answer?

I. What goods and services will be produced?

II. How will they be produced?

III. When will they be produced?

IV. For whom will they be produced?

V. Where will they be produced?

A I, III, and V only

B I, II, and IV only

C I, II, and V only

D II, IV, and V only

E II, III, and IV only

49. The market demand curve for labor will shift to the right when

- A. The number of firms increases
- B. An increase in the price of the firm's output
- C. The labor supply curve shifts to the right
- D. None of the above

50. Patents, control of resources, economies of scale, and exclusive licenses are

- A. All requirements for price discrimination
- B. Required in order for a firm to earn short-run profits
- C. All sources of elastic demand
- D. All barriers to entry
- E. All detriments to market power

SECTION B

Answer all questions

Question 1

Mr T Kondo under economics department collected the following information during their 2023 price survey at Bindura University farm.

Table 1

Units of output	TFC	TVC	TC	MC	AVC	AFC	ATC
0	100	0	---	—	—	—	—
1	100	80	---	—	—	—	—
2	100	140	---	—	—	—	—
3	100	180	---	—	—	—	—
4	100	200	---	—	—	—	—
5	100	230	----	—	—	—	—
6	100	290	---	—	—	—	—

7	100	390	----	—	—	—	—
8	100	540	----	—	—	—	—
9	100	740	----	—	—	—	—
10	100	1040	----	—	—	—	—

- a) Using clearly labelled diagrams, explain the relationship between
- i) Marginal product and marginal cost [5 marks]
 - ii) Long run average cost and short run average cost [5 marks]
- b) Using the information in the Table above, complete the table and show all your workings [15 marks]

SECTION C

Answer any ONE question from the following:

Question 1

Using underlying assumptions and clear labelled diagram and a table, explain short run period make use of the law of diminishing marginal returns (LDMR). [25 marks]

Question 2

Explain the characteristics of an oligopoly. Discuss how this market structure impacts on price and choice [25 marks]

END