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UNIVERSITY OF GHANA

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BA FIRST SEMESTER EXAMINATIONS: 2017/2018

DEPARTMENT OF ECONOMICS

ECON 101: INTRODUCTION TO ECONOMICS I (3 CREDITS)

INSTRUCTION: ANSWER ALL QUESTIONS IN SECTIONS A AND B. IN SECTION C, ANSWER QUESTION 1 AND ANY OTHER QUESTION.

TIME ALLOWED: TWO (2) HOURS

SECTION A: TRUE/ FALSE

1. The opportunity cost of a particular activity is the sum of the benefits that could have been received from all foregone activities. (True/ False)
2. The demand curve for a product will shift rightward when the price of a substitute decreases. (True/ False)
3. If the price of jelly (a complement with peanut butter) decreases, both the demand and supply curves of peanut butter will shift rightward. (True/ False)
4. If the price of leather (an input for leather shoes) increases, the equilibrium price of leather shoes will increase and the equilibrium quantity of leather shoes will decrease. (True/ False)
5. If sellers decide to sell more calculators by mass producing them and lowering the price so consumers will buy more, the supply and demand curves will both shift to the right. (True/ False)

SECTION B: MULTIPLE CHOICE QUESTIONS

6. For society as a whole, producing more of one good or service has an opportunity cost because
 - a. human wants are limited and resources are unlimited
 - b. both human wants and resources are unlimited
 - c. resources are limited; human wants are irrelevant
 - d. human wants are unlimited and resources are limited
 - e. both human wants and resources are limited
7. High-income people will sometimes pay higher prices at private hospitals for goods that are available at public hospitals. They do this because
 - a. they are irrational
 - b. their opportunity cost of time is low
 - c. crowded and understaffed public hospitals impose higher time costs
 - d. they like to be seen paying more money
 - e. they do not mind wasting time
8. Esi is considering attending a concert with a ticket price of Ghc35. She estimates that the cost of driving to the concert and parking there will total an additional Ghc20. In order to attend

- the concert, Esi will have to take time off from her part-time job. She estimates that she will lose 5 hours at work, at a wage of Ghs6 per hour. Esi's opportunity cost of attending the concert equals
- \$35
 - \$55
 - \$30
 - \$65
 - \$85
9. Assume that Kobby's various possible activities are mutually exclusive. The opportunity cost from choosing one activity equals the
- summed value of all her alternative activities
 - summed value of all her alternative activities minus the value of the chosen activity
 - value of the next most valuable alternative activity
 - value of the next most valuable alternative activity minus the value of the chosen activity
 - summed value of all her alternative activities minus the value of the next most valuable alternative activity
10. If the economy is producing a combination of goods inside its production possibilities frontier, then
- workers are on vacation
 - a significant number of workers have little education
 - some resources are being wasted
 - technology must improve before output can increase
 - the opportunity cost of producing more output is greater than the value of the additional output that could be produced
11. According to the law of demand,
- there is a positive relationship between quantity demanded and price
 - as the price rises, demand will shift to the left
 - there is a negative relationship between quantity demanded and price
 - as the price rises, demand will shift to the right
 - as the price rises, consumers switch their purchases to substitute goods
12. Which of the following statements about demand is correct?
- A change in the price of bicycles will not lead to a shift of the demand curve for bicycles.
 - A change in the price of automobiles will lead to a shift of the demand curve for motorcycles.
 - A change in demand is equivalent to a movement along a given demand curve.
 - When price falls, so does the quantity demanded.
 - When the demand curve shifts to the right, so will the supply curve.
13. Which of the following could cause the market demand curve for hot dogs to shift to the left?
- an increase in the price of hot dogs
 - a decrease in the price of hamburgers
 - an increase in the size of the population
 - an increase in the price of hot dog buns or rolls
 - an increase in the price of mustard
14. Baba graduates from college, where he earned Ghs3,000 a year working part-time, and takes a job as a third-grade teacher, where he now earns Ghs30,000 per year. About the same time he received his first paycheck, his bicycle was stolen. With his old income he would have purchased a new bike but with his new income he purchased a new car. Therefore,

- a. bicycles are a normal good for Baba
 - b. automobiles are an inferior good for Baba
 - c. automobiles are a normal good for Baba
 - d. Baba's supply curve for automobiles is upward-sloping
 - e. bicycles and automobiles are complementary goods for Baby
15. An increase in the number of buyers in the market causes
- a. a decrease in equilibrium quantity
 - b. a decrease in equilibrium price
 - c. an increase in demand
 - d. a decrease in production
 - e. an increase in supply
16. What do supply and demand curves have in common?
- a. They both usually slope upward.
 - b. They both show a relationship between quantity and price.
 - c. They both usually slope downward.
 - d. They can both shift in response to changes in income or wealth.
 - e. Neither of them is influenced by the size of the population.
17. An increase in the price of a particular good, with all other variables constant, causes
- a. a movement along a given supply curve to a lower quantity supplied
 - b. a shift to a different supply curve with lower quantities supplied
 - c. a movement along a given supply curve to a higher quantity supplied
 - d. a shift to a different supply curve with higher quantities supplied
 - e. no movement along a given supply curve unless demand also changes
18. Which of the following would not lead to a change in the supply of chocolate ice cream?
- a. a change in productive capacity
 - b. a change in the price of strawberry ice cream
 - c. a change in the price of milk
 - d. a change in the price of chocolate ice cream
 - e. a change in the expected future price of chocolate ice cream
19. If steel manufacturers expected that the price of steel was going to rise in the next six months, this would
- a. have no change in the competitive market for steel
 - b. lead to a decreased demand for steel
 - c. lead to a decreased supply of steel
 - d. increase the future demand for automobiles
 - e. lead to a decrease in the quantity of steel supplied to the market
20. The equilibrium price and quantity of a good, once attained, will
- a. change only if either supply or demand changes
 - b. change only if both supply and demand change
 - c. change only if supply changes
 - d. change only if demand changes
 - e. never change
21. If the demand for baseball cards rises and the supply curve does not shift, then the price
- a. will rise and quantity will fall
 - b. and quantity will rise
 - c. will fall and quantity will rise
 - d. and quantity will fall
 - e. will rise, but quantity may rise or fall

22. If there is an increase in the demand for automobiles, and at the same time auto workers receive a substantial raise, what will happen to equilibrium price and quantity in the automobile market?
- Price and quantity will rise.
 - Price and quantity will fall.
 - Price will rise; quantity will fall.
 - Quantity will rise; price change cannot be determined.
 - Price will rise; quantity change cannot be determined.
23. A decrease in both equilibrium price and quantity could be produced by a(n)
- decrease in supply, with demand constant
 - increase in supply, with demand constant
 - decrease in demand, with supply constant
 - increase in demand, with supply constant
 - improvement in technology
24. A decrease in demand coupled with a decrease in supply results in a(n)
- increase in equilibrium price and a decrease in equilibrium quantity
 - decrease in equilibrium price and a decrease in equilibrium quantity
 - increase in equilibrium price and a increase in equilibrium quantity
 - ambiguous effect of equilibrium price and a decrease in equilibrium quantity
 - ambiguous effect on equilibrium price and a increase in equilibrium quantity
25. An increase in demand causes
- a surplus
 - excess supply
 - an increase in supply
 - an increase in equilibrium price and equilibrium quantity
 - an improvement in technology
26. The price elasticity of demand is important to firms because
- it explains the relationship between income and demand for the goods they sell
 - it shows how price changes affect total expenditures on the goods they sell
 - the law of demand suggests that elasticity falls as total expenditures continuously rises
 - it helps identify the equilibrium price and quantity in the market
 - it relates price to supply
27. If the price elasticity of demand for Cheer detergent is 3.0, then a
- 12 percent drop in price leads to a 36 percent rise in the quantity demanded
 - 12 percent drop in price leads to a 4 percent rise in the quantity demanded
 - \$1,000 drop in price leads to a 3,000-unit rise in the quantity demanded
 - \$1,000 drop in price leads to a 333-unit rise in the quantity demanded
 - 12 percent rise in price leads to a 36 percent rise in the quantity demanded
28. The concept of elasticity is used to
- indicate the economy's ability to rebound from a recession
 - measure the robustness of a variable
 - measure the sensitivity of one variable to changes in another
 - measure price changes
 - measure income changes
29. Moving downward along a straight-line demand curve, the absolute value of the price elasticity of demand

- a. always rises
- b. rises until the midpoint of the curve is reached, and then falls
- c. falls until the midpoint of the curve is reached, and then rises
- d. always falls

30. A local store noticed that when it increased the price of milk from \$2.50 to \$3.50 per gallon, it sold the same amount of milk per week (165 gallons). Since everything else remained the same, we would say the

- a. demand for milk is perfectly elastic
- b. demand for milk is elastic
- c. demand for milk is perfectly inelastic
- d. demand for milk is unitary elastic

31. If the demand curve is a vertical line, then

- a. demand is perfectly elastic
- b. demand is perfectly inelastic
- c. demand is unit elastic
- d. demand is determined by supply
- e. supply is a horizontal line

32. If the numerical value of the price elasticity of demand is 3, then a one-percent change in price will cause a(n)

- a. larger percentage change in quantity demanded, so demand is elastic
- b. larger percentage change in quantity demanded, so demand is inelastic
- c. smaller percentage change in quantity demanded, so demand is elastic
- d. smaller percentage change in quantity demanded, so demand is inelastic
- e. equal percentage change in quantity demand, so demand is unitary elastic

33. A public university knows that demand from potential students is elastic. If the university wants to increase tuition revenue, it should

- a. raise its tuition rate
- b. hold its tuition rate constant and increase faculty salaries
- c. increase its financial aid
- d. lower its tuition rate
- e. increase its enrollment

34. If the demand for a good is price inelastic, a decrease in total revenue from the good would result from a(n)

- a. increase in price
- b. decrease in quantity demanded
- c. favorable shift in tastes and preferences
- d. decrease in price
- e. increase in consumers' incomes

35. If demand is unitary elastic, a price decrease results in

- a. an increase in total seller's total revenue
- b. no change in total seller's total revenue
- c. a decrease in total expenditure on the good
- d. a decrease in quantity demanded of the good
- e. an increase in supply of the good

36. Suppose a local bookstore notices that a 2 percent increase in book prices leads to a 2 percent decrease in the number of books sold. Which of the following is true?

- a. Demand for books is price elastic.

- b. The store's sales revenue did not change.
 - c. Demand for books is price inelastic.
 - d. Demand for books is perfectly inelastic.
 - e. The bookstore could increase revenue by further lowering prices.
37. As a result of heavy spring rains in the Brong Ahafo region, the corn crop declined sharply. If corn growers experienced an increase in sales revenue, the demand for corn must be
- a. price elastic
 - b. price inelastic
 - c. unitary elastic
 - d. perfectly inelastic
 - e. perfectly elastic
38. Which of the following goods is likely to have the most elastic demand over the relevant range of prices?
- a. insulin
 - b. eggs
 - c. milk
 - d. Pepsi Cola
 - e. Gasoline
39. In general, the more of an individual's total budget that is spent on a given product, the
- a. greater the supply-side response
 - b. less elastic is the demand for that good
 - c. more elastic is the demand for that good
 - d. more the demand curve will shift when the price changes
 - e. less the demand curve will shift when the price changes
40. The more available substitutes there are for a good, the
- a. larger the number of consumers
 - b. smaller the number of consumers
 - c. smaller the supply side response
 - d. more elastic the demand for that good
 - e. less elastic the demand for that good
41. A less elastic demand for a good could result from
- a. strong supply-side reactions
 - b. an increased number of available substitutes
 - c. lower consumer incomes
 - d. a longer time horizon
 - e. a shorter time horizon
42. As the price per minute of phone time falls,
- a. the individual's budget constraint rotates inward and she purchases fewer minutes
 - b. the individual's budget constraint rotates outward and she purchases fewer minutes
 - c. the individual's indifference curve rotates outward and she purchases more minutes
 - d. the individual's indifference curve rotates inward and she purchases more minutes
 - e. the individual's budget constraint rotates outward and she consumes more minutes
43. Budget constraints exist for consumers because
- a. their utility from consuming goods eventually reaches a maximum level
 - b. even with unlimited incomes, they have to pay for each good they consume
 - c. they have to pay for goods and they have limited incomes
 - d. prices and income are inversely related
 - e. demand curves for goods generally slope downward

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44. The intercept of a budget line measures the
- amount of a good that a consumer will purchase
 - maximum amount of a good that a consumer could purchase, given his consumption of some other good
 - maximum amount of a good that could be consumed at given prices and income
 - minimum amount of a good that could be consumed at given prices and income
 - minimum consumption of a good consistent with utility maximization
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 - minimum amount of a good that could be consumed at given prices and income
 - minimum consumption of a good consistent with utility maximization
46. A family on a trip budgets \$800 for restaurant meals and fast food. The price of a fast-food meal is \$20 and the family can afford 16 restaurant meals if they don't buy any fast food. How many fast-food meals would the family gain if they gave up one restaurant meal?
- 1
 - 0.4
 - 2
 - 2.5
 - 5
47. If a consumer's budget line between meat and potatoes has a vertical axis intercept at 100 pounds of meat and a horizontal axis intercept at 100 pounds of potatoes
- demand must be inelastic
 - the consumer's budget must equal \$100
 - both meat and potatoes must be priced at \$1 per pound
 - the price of a pound of meat must equal the price of a pound of potatoes
 - the opportunity cost of meat in terms of potatoes cannot be determined
48. The slope of the budget line
- is always -1
 - represents the opportunity cost of consuming one more unit of the good measured on the horizontal axis
 - increases as more of one good is consumed
 - decreases as more of one good is consumed
 - is negative because of the law of demand
49. An increase in the price of the good measured on the vertical axis of a budget line diagram will
- cause a parallel outward shift of the budget line
 - leave the budget line unchanged
 - cause a parallel inward shift of the budget line
 - make the budget line flatter
 - make the budget line steeper
50. An increase in the price of the good measured on the horizontal axis of a budget line diagram will
- make the budget line flatter
 - make the budget line steeper
 - leave the budget line unchanged
 - cause a parallel inward shift of the budget line
 - cause a parallel outward shift of the budget line

SECTION C: SHORT-ANSWER QUESTIONS

Answer Question one and any other question

Question 1 (Compulsory Question) [30 marks]

- Briefly distinguish between the first and third degrees price discrimination [5 marks]
- Explain the difference between a firm shutting down and a firm exiting. [5 marks]
- State three (3) major features of the rational stage of production and demonstrate briefly why the stage is considered economically rational. [6 marks]
- Briefly explain internal economies of scale and state three (3) factors that could potentially trigger internal economies of scale. [6 marks]
- The table below seeks to contrast Perfect Competition and Monopoly. You are required to complete the table [8 marks]

	Perfect Competition	Monopoly
E.g. Number of sellers	Many sellers	Single sellers
Entry conditions		
Nature of product		
Profit situation in the long run		
Conditions for equilibrium		

Question 2 [20 marks]

The Cowbell Company produces milk powder in Ghana. A tin currently sells from the factory at GHC 20 each but cost GHC 25 each to produce [Average Fixed Cost (AFC) = GHC 10 and Average Variable Cost (AVC) = GHC 15.

The chief accountant has advised the board to shut down the factory because the firm incurs a loss of GHC 5 for every tin of milk powder it produces

- Do you agree with the Chief accountant's position? Provide a brief justification for your answer. [6 marks]
- Would your view change if $AVC = \text{GHC } 20$? Provide a brief justification for your answer. [4 marks]
- What if $AVC = \text{GHC } 30$? Provide a brief justification for your answer. [4 marks]
- Give four (4) reasons why the knowledge of cost information is relevant in managerial decisions? [6 marks]

Questions 3 [20 marks]

Consider a firm in a perfectly competitive market. The firm has just built a plant that cost GHC 25,000. Each unit of output requires GHC 5 worth of materials. Each worker costs GHC 5 per hour.

Hours of work	Output	TFC	TVC	TC	MC	AVC	ATC
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0	0						
25	100						
50	150						
75	175						
100	195						
125	205						
150	210						
175	212						

Where; TFC is Total Fixed Cost

TVC is Total Variable Cost

TC is Total Cost

MC is Marginal Cost

AVC is Average Variable Cost

ATC is Average Total Cost

- Based on the information above, fill in the table below. [12 marks]
- If the market price is GHC 10, how many unit of output will the firm produce. [3 marks]
- At that price, what is the firm's profit or loss? [5 marks]