University of Swaziland
Faculty of Social Science
Department of Economics
Final Examination Paper, December 2015

| Title of paper | $:$ | Principles of Microeconomics |
| :--- | :--- | :--- |
| Course Code | $:$ | ECO 101/IDE ECON 102 |
| Time allowed | $:$ | Two (2) hours |
| Instructions | $:$ | Answer question one and any other two questions. |
|  | Question one has twenty (20) multiple choice <br> questions |  |

Do not open this paper until the invigilator has granted permission.

## Question 1

1. Which of the following is consistent with the law of demand?
(a) an increase in the price of a CD increases the quantity of CDs demanded.
(b) a decrease in the price of a gallon of milk decreases the quantity of milk demanded.
(c) a decrease in the price of juice does not change the quantity of juice demanded.
(d) an increase in the price of a soda decreases the quantity of soda demanded.
2. The demand for a good decreases when the price of a substitute $\qquad$ _and also decreases when the price of a complement $\qquad$ .
(a) falls; falls
(b) rises; rises
(c) falls; rises
(d) rises; falls
3. What type of economic system does Swaziland have at present?
(a) A free market system
(b) A command based system
(c) A monarchial decentralised tinkhundla system
(d) A combination of market and command based economy
4. The chief characteristic of the market economic system is:
(a) Producer sovereignty
(b) barter
(c) centralised decision making
(d) consumer sovereignty
5. Utility can best be described as:
(a) the amount one is willing to pay for a good
(b) an abstract concept useful for obtaining predictions about human behaviour
(c) a testable hypothesis about the level of happiness achieved from consumption of goods
(d) the units that measure a person's income
6. 

| Units <br> Consumed | Marcellle's total <br> utility | Ryan's total <br> utility |
| :--- | :--- | :--- |
| 1 | 12 | 16 |
| 2 | 22 | 26 |
| 3 | 30 | 34 |
| 4 | 36 | 35 |

In the table above, what is Ryan's marginal utility from consuming the $3^{\text {rd }}$ unit of the good?
(a) 10
(b) 8
(c) 1
(d) -10
7. A private good
(a) is provided only by the public sector at a loss
(b) is provided only by the private sector at a loss
(c) can be consumed by many people simultaneously
(d) cannot be consumed by many people simultaneously
8. A positive statement is one which is:
(a) derived by induction
(b) derived by deduction
(c) subjective and is based on a value judgement
(d) objective and is based on verifiable facts.
9. Technological efficiency occurs when a firm produces a given level of output:
(a) at the least cost
(b) using the least amount of inputs
(c) at the most cost
(d) using the most amount of inputs
10. The income that owners of land, labour, capital, and entrepreneurship receive are:
(a) interest, wages, rent and profits respectively.
(b) rent, wages, dividends, and interest respectively.
(c) rent, profits, wages, and interest respectively
(d) rent, wages, interest, and profits respectively.
11. The central problem in economics is that of:
(a) comparing the success of command versus market economies
(b) guaranteeing that production occurs in the most efficient manner
(c) guaranteeing a minimum level of income for every citizen
(d) allocating scarce resources in such a manner that society's unlimited needs or wants are satisfied as well as possible
12. In a free-market economy the allocation of resources is determined by:
(a) votes taken by consumers
(b) a central planning authority
(c) by consumer preferences
(d) the level of profits of firms
13. Elasticity
(a) is the measure of sensitivity of a dependent variable to a change in an independent variable.
(b) is the measure of how prices change.
(c) is the tool that economists use to calculate what market action is appropriate.
(d) depends on changes in quantity demanded.
14. The price elasticity of demand
(a) Decreases as the further down the demand curve you move.
(b) equals the $\frac{\% \text { change in price }}{\% \text { change in income }}$
(c) equals the rate of change of the price
(d) does not exist
15. Total revenue is maximised when?
(a) Price elasticity of demand equals 1.
(b) income elasticity is 1 .
(c) goods are perfect substitutes.
(d) demand is equal to supply
16. The relationship between the marginal cost (MC) curve and the average total cost (ATC) curve is such that;
(a) the two curves are mirror images of each other.
(b) if $M C=A T C$, ATC reaches a maximum.
(c) If $M C$ is greater than ATC, ATC is declining
(d) If MC is less than ATC, ATC is declining.
17. If a firm decides to produce no output in the short run. Its costs will be equal to;
(a) marginal costs
(b) fixed costs plus variable costs
(c) fixed costs
(d) zero
18. Which of the following goods or services would not be provided by a pure free-market?
(a) public transport system
(b) pension
(c) national defence
(d) education
19. Which of the following are considered to be essential characteristics of a public good?
(a) it must be provided by the government
(b) consumption by one person does not diminish the quantity available for others
(c) once the good is provided, it is not possible to exclude people from consuming it
(d) it must benefit the whole economy
20. The amount less that you pay for a product than that which you are willing to pay is known as:
(a) the consumer surplus.
(b) the producer's surplus
(c) the profit
(d) the loss

## Question 2

a) What are the three basic economic questions that all economies must answer?
b) Suppose an individual spends all his monthly income on two goods, $x$ and y .
i) Draw his budget line if his income is E 150 per month, the price of x is E10 per unit, and the price of y is E15 per unit. (12 marks)
ii) Draw his budget line if the price of $x$ triples.

## (Show all the calculations)

c) Describe five characteristics of perfect competition. (10 marks)

## Question 3

a) Discuss whether the following can be classified under microeconomics or macroeconomics.
a. Swaziland's sugar exports.
b. Determination of total student enrolment at UNISWA.
c. Determination of inflation rate in Swaziland.
d. Determination of appropriate wages to pay teachers in Swaziland.
e. Setting limits for the omission of exhaust fumes by cars into the air in Swaziland.
(2 marks each)
b) Consider the following data for commodity x :

| Price (E per unit): | 2 | 4 | 6 | 8 | 10 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Quantity demanded (units per month): | 100 | 80 | 60 | 40 | 20 | 0 |

i) Calculate the price elasticity of demand when price is $E 4$ and when price is E10.
ii) Calculate the price elasticity of demand in the following ranges:

1. E4-E6
2. E10-E12
(10 marks)
c) Give an example of a perfectly competitive market in Swaziland, and another example of a monopolistically competitive market in Swaziland.

## Question 4

a) Discuss the meaning of the following concepts and comment on their importance in economic theory.
a. An economic problem
b. Elasticity of demand
c. Marginal Rate of Transformation
d. Law of diminishing returns
e. Unstable Equilibrium
(3 marks each)
b) Consider the following data for a firm:

Fixed cost: E8
Total cost (E): $\begin{array}{lllllll}10 & 16 & 18 & 28 & 45 & 66\end{array}$
Quantity Produced: $\begin{array}{lllllll}1 & 2 & 3 & 4 & 5 & 6\end{array}$
Calculate the following:
i) Average total cost (ATC)
ii) Average variable cost (AVC)
iii) Average fixed cost (AFC)
iv) Marginal cost (MC)
(2 marks each)
c) Sketch graphs that illustrate the following:
i) Price ceiling
(2 marks)
ii) Perfectly inelastic demand curve
(2 marks)
iii) Knife- edge equilibrium
(3 marks)

