

UNIVERSITY OF SWAZILAND  
FACULTY OF SOCIAL SCIENCE  
DEPARTMENT OF ECONOMICS  
MAIN EXAMINATION PAPER  
DECEMBER 2017

TITLE OF PAPER: PRINCIPLES OF MICROECONOMICS

COURSE CODE: ECO101/IDE-ECO101/IDE-ECON 102

TIME ALLOWED: TWO (2) HOURS

- INSTRUCTIONS:
1. IN SECTION A ANSWER QUESTION 1 (COMPULSORY) AND ANY OTHER QUESTION BETWEEN QUESTIONS 2 AND 3.
  2. IN SECTION B ANSWER QUESTION 4 (COMPULSORY) AND ANY OTHER QUESTION BETWEEN QUESTIONS 5 AND 6

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR.

## SECTION A

### Question 1 Compulsory (Total marks 30)

- a) Discern between non-durable goods, semi durable and durable goods: (5 marks)
- b) Suppose that Luvu's income increases from E1000 to E2000 per month, ceteris paribus, her demand for apples goes up from 400 units to 600 units per month. Stating the formula, find her income elasticity of demand. Is it elastic or inelastic? Classify apples. (5 marks)
- c) Given that the price of good A increases from E10 to E15 per unit, ceteris paribus, and the demand for good B falls from 10 to 6 units per month. State the formula and calculate the relevant elasticity. Is it elastic or inelastic? Classify goods B and A. (5 marks)
- d) Indicate if the following statements are true or false (1 mark each)
- (i) An economic good is a good that has no price.
  - (ii) A private good is a good where consumption by other individuals can be excluded.
  - (iii) The price elasticity of demand is always negative.
  - (iv) Points inside and above the PPF are all inefficient points.
  - (v) The income elasticity of demand for a normal good is negative.
  - (vi) A straight line downward sloping PPC depicts decreasing opportunity cost.
  - (vii) A slide along the demand curve can be caused by a change in tastes.
  - (viii) Habit forming products tend to be price inelastic.
  - (ix) Time affects the size of the price elasticity of demand such that the longer a price change is maintained the smaller its size will be.
  - (x) Indifference curves for substitute goods are L-shaped.
  - (xi) The MRS declines as we move from right to left of the indifference curve.
  - (xii) If the income of the consumer falls the budget line shifts to the left.
  - (xiii) Fixed costs vary with the level of output in the short run.
  - (xiv) When the law of diminishing marginal returns sets in, the MP curve has a positive slope.
  - (xv) Decreasing returns to scale are also called diseconomies of scope.

### Question 2

- a) In one sentence define a PPF/PPC. Sketch a PPF/PPC showing consumer goods on the horizontal axis and capital goods on the vertical axis. (5 marks)
- b) Based on graph in part (a) above, demonstrate and outline the effect of an improvement in a technique for producing consumer goods. Use a diagram. (5 marks)
- c) List **any five** determinants of price elasticity demand. (5 marks)
- d) Suppose you calculate the price elasticity of demand for Siphu and Mave and you find that it is equal to -2 and -1 respectively. How would you interpret this elasticity? (5 marks)

### Question 3

- a) Define MRS between goods X and Y and MRTS between capital and labour, in not more than two sentences each. (5 marks)
- b) Use diagrams to show the equilibrium position for a consumer and that of a producer (use separate graphs). Label graphs and axis appropriately. Outline the appropriate equations that depict each equilibrium point. (15 marks)

## SECTION B

### Question 4 Compulsory (Total marks 30)

A. Read each question carefully, and choose only **ONE** correct answer for each question.

1. Which of the following statements is true about a firm that sells its output in a perfectly competitive market?
  - a) The demand for its product is a downward sloping function.
  - b) The firm will earn zero economic profits in long-run equilibrium.
  - c) Advertising is an important tool of the firm.
  - d) The firm will increase its total economic profits if it charges a price that is lower than the market price.
2. One justification for government regulation of a monopoly is that the unregulated monopoly
  - a) Earns a normal profit
  - b) Sells too much of a product
  - c) Has a very elastic demand curve
  - d) Charges a price higher than a competitive market price
3. Which of the following is necessarily true of the profit-maximising equilibrium of a monopolist who sets a single price?
  - a) Price equals average total cost
  - b) Price is greater than marginal cost
  - c) Average total cost is at its minimal level
  - d) Marginal revenue is greater than marginal cost
4. What is the difference between perfect competition and monopolistic competition?
  - a) Perfect competition has a large number of small firms while monopolistic competition does not
  - b) In monopolistic competition, firms produce identical goods, while in perfect competition, firms produce slightly different goods
  - c) Perfect competition has no barriers to entry, while monopolistic competition does
  - d) In perfect competition, firms produce identical goods, while in monopolistic competition firms produce slightly different goods.
5. The price charged by a perfectly competitive market is
  - a) Higher the more the firm produces
  - b) Lower the more the firm produces
  - c) The same as the market price
  - d) Different than the price charged by competing firms
6. Firms in monopolistic competition have demand curves that are
  - a) U-shaped
  - b) Horizontal
  - c) Downward sloping
  - d) Upward sloping

7. Firms in an Oligopoly

- i) Are independent of each other's actions
  - ii) Can each influence the market price
  - iii) Charge a price equal to marginal revenue
- a) i only
  - b) i and ii
  - c) ii only
  - d) i, ii, and iii

8. A cartel is a collusive agreement among a number of firms that is designed to

- a) Expand output and lower prices but not to a predatory level
- b) Expand output and lower prices but to a predatory level
- c) Restrict output and raise prices
- d) Expand output and raise prices

9. For a perfectly competitive firm, marginal revenue is

- a) Greater than the price
- b) Less than the price
- c) Equal to the price
- d) Undefined because the firm's demand curve is horizontal

10. A kinked demand curve model assumes

- a) Firms match price increases, but not price cuts
- b) Demand is more elastic for price cuts than for price increases
- c) Changes in marginal cost can never lead to changes in market price
- d) None of the above is correct

11. Factor-market analysis could not be complete without some characterization of

- a) Product-market demand
- b) The marginal productivities of the different factors of production
- c) Market prices for final goods and services
- d) All of the above are correct

12. What cause the labour demand curve to shift?

- i) Changes in productivity
  - ii) Changes in wages
  - iii) Changes in output prices
- a) i) and ii)
  - b) ii) and iii)
  - c) i) and iii)
  - d) All listed

13. A firm with some market power in the product market but is competitive in the factor market will

- a) Pay a lower wage than a competitive firm in the product market
- b) Hire the same number of workers as a competitive firm and pay the same wage
- c) Hire less workers than a competitive firm but pay the same wage
- d) Hire more workers than a competitive firm but pay a lower wage

14. In the long run, a profit making firm will choose to exit a market when
- Fixed costs exceed sunk costs.
  - Average fixed cost is rising
  - Revenue from production is less than total costs
  - Marginal cost exceeds marginal revenue at the current level of production.
15. When firms have an incentive to exit a competitive market, their exit will
- Drive down prices.
  - Drive down profits of existing firms in the market.
  - Decrease the quantity of goods supplied in the market.
  - All of the above are correct

[1 mark each]

B. Read each statement and indicate whether the statements are **True** or **False**. Write answer in full.

- There is no product differentiation in a perfectly competitive industry.
- The similarity between a monopoly and a monopolistic firm is that they both are able to realise supernormal profits in the long-run period.
- A discriminating monopolist will charge a higher price to groups with elastic demand.
- There is a strong link between the labour market and the goods market.
- Actions by institutions such as trade unions determine the position of the supply-of-labour curve.
- Under perfect competition the supply curve of the individual firm will be downward sloping.
- The length of time does not determine the wage elasticity of the demand for labour.
- Oligopoly refers to a single supplier for the whole market.
- Monopoly and monopolistic competition mean the same.
- A perfectly competitive firm's demand curve is above its marginal revenue curve.
- Every profit-maximizing firm should produce a level of output where marginal revenue is equal to marginal cost.
- A perfectly competitive firm maximizes profit by producing a level of output where marginal cost is equal to price.
- The shut-down point of a perfectly competitive firm is at the minimum point on its short-run average variable cost curve.
- Monopolists are price takers.
- Deadweight loss refers to the net fall in welfare as a result of the monopolist's restriction of output.

[1 mark each]

## Answer any one question

### Question 5

- a) What are the five key assumptions of perfectly competitive markets for the factors of production? [10 marks]
- b) Describe five reasons why people in the real world do not receive the same remuneration. [10 marks]

### Question 6

- a) Give a brief description of two arguments against government intervention to introduce price ceilings and price floors. [10 marks]
- b) Explore two reasons why a monopoly is an undesirable type of market structure. [10 marks]