

**University of Colombo**  
**Faculty of Arts**  
**First year Examination in Arts 2015- 16**  
**(First Semester End) - Repeat**  
**ECN 1101: Elementary Microeconomics**  
**Answer any Four (4) Questions**  
**Time allowed: Two (02) hours only**

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Using numerical examples and/or diagrams explain the following concepts.

- (i) Marginal utility
- (ii) Opportunity cost
- (iii) Production possibility curve
- (iv) Disutility (negative utility)

(6.25 per section)

(a)

P	Q <sub>D</sub>
20	100
60	20

P is price. Q<sub>D</sub> is quantity demanded.  
Find the demand equation.

(4 Marks)

(b) The supply curve equation is

$$Q_S = 20 + P$$

Find the quantity supplied for the prices given above.

(4 Marks)

(c) Using equations calculate the equilibrium price and quantity.

(5 Marks)

(d) Using diagrams explain how the events given below affect the equilibrium price and quantity.

- (i) The shoe market when the wages paid to cobblers goes up
- (ii) The umbrella market during the rainy season

(4 marks per section)

(e) Using the data given above in part (a), calculate the elasticity of demand when price rises.

(4 Marks)

3. (a) Why does consumer surplus occur? Using hypothetical numbers explain how consumer surplus arises, with the aid of a diagram. (5 Marks)
- (b) Give an example of an instance when producer surplus increases. Illustrate this situation using a diagram. (5 Marks)
- (c) Using diagrams, explain the market impacts that arise in each of the instances below.
- Government imposes a control price
  - Government imposes a minimum price
  - Government imposes a unit tax on a commodity
- (5 Marks per section)
4. (a) "A person's labour supply curve bends backwards". Explain why this phenomenon occurs. (5 Marks)
- (b) (i) "Paying efficiency wages is beneficial to the worker and the firm".  
(ii) Wage discrimination is economically and socially harmful".  
Analyse the two statements. (7.5 Marks per section)
- (c) A machine costs Rs 10,000 in 2016. It has a life time of 3 years. The expected net income from this machine is Rs 4000 at the end of 2017, Rs 4000 at the end of 2018 and Rs 5000 at the end of 2019. The discount rate is 5%. Should this machine be purchased? (5 Marks)
5. (a) Using appropriate diagrams, explain the concept 'diminishing marginal product' in relation to
- the total product curve and
  - the marginal product curve
- (4 Marks per section)
- (b) Explain why the phenomenon of 'diminishing marginal product' occurs, as the number of workers is increased. (4 Marks)
- (c) (i) Using the information given below choose which technique of production the firm would choose if a unit of capital cost Rs300 and a unit of labour cost Rs 350.  
Production technique A uses 4 units of capital and 3 units of labour  
Production technique B uses 3 units of capital and 4 units of labour. (4 Marks)
- (ii) Under what situation would the firm choose the alternative production technique? (3 Marks)
- (d) Propose three methods by which a firm could increase the productivity of labour. (6 Marks)

- a. List the characteristics of a perfectly competitive market. (5 Marks)
- (b) Illustrate each of the situations given below and explain what would occur in the market in the future.
- (i) Price is determined above the average total cost ( $P > ATC$ )
  - (ii) Price is determined at less than the average total price but above the average variable price ( $AVC < P < ATC$ )
  - (iii) Price is determined below the average variable cost ( $P < AVC$ )
- (5 Marks per section)
- (c) In a perfectly competitive market, using a diagram, explain how a firm determines its supply curve. (5 Marks)
- (a) List three ways in which monopolies can occur in an economy. (6 marks)
- (b) Using a diagram explain how the monopolist determines
- (i) quantity to be produced
  - (ii) price
- (4 Marks per section)
- (c) Using the relevant diagrams prove that perfect competition results in greater consumer surplus than monopoly. (6 marks)
- (d) What measures can the government take to control monopolies in the economy? (5 Marks)

5. Write short notes on any four (04) of the following:

- (i) Income elasticity of demand
- (ii) Linear production possibility curve
- (iii) Luxury goods and inferior goods
- (iv) Characteristics of oligopoly
- (v) Land
- (vi) Entrepreneurship
- (vii) Advertising

(6.25 per section)

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