FINAL
Examination Paper

(COVER PAGE)

Session : August 2015
Programme : Diploma In Business / Finance / Entrepreneurship (DIB/DIF/DENT)
Course : ECO2103: Principles Of Microeconomics
Date of Examination : December 12, 2015
Time : 5.00pm – 7.00pm Processing Time : Nil
Duration : 2 Hours

Special Instructions :
Section A: Answer ALL Multiple Choice questions.
Section B: Answer any TWO (2) questions.
Section C: Answer any ONE (1) question.

IMPORTANT NOTE : THIS PAPER SHOULD NOT BE TAKEN OUT OF THE EXAMINATION HALL

Material permitted : Non-Programmable Calculator

Materials provided : OMR Sheets

Examiner(s) : Mr. Yee Aik Phoay, Ms. Diana Nabila, Mr. Lee Weng Chang
Ms. Hazrina

Moderator : Associate Professor Dr. Evelyn Paul Devadason

This paper consists of 11 printed pages, including the cover page
SECTION A (40%)

Instructions: This section consists of 20 questions. Answer ALL questions in the OMR sheet provided below. Each question carries 2 marks.

1. The following diagram illustrates the production possibilities of a country.

Which of the following statements is TRUE?

A. Point B and D are equally efficient.
B. Compared to point B, resources are more efficiently used at point C.
C. The country has insufficient resources to produce at point A.
D. Scarcity does not occur in this country.

2. The _________ is an example of a microeconomics topic.

A. increase in national output
B. economy’s inflation rate
C. effect of tax on sales of domestic cars
D. reasons behind an economy’s high unemployment rate

3. Consumers in the _________ have the greatest power to decide “what to produce”.

A. mixed economic systems
B. free market economic systems
C. command economic systems
D. planned economic systems
4. Which of the following is **TRUE** about the law of supply?

I. Price and quantity demanded are positively related.
II. In the long run, producers will exit when there are losses.
III. When a tax per unit is charged, the supply curve will shift upwards.
IV. The supply curve is upward sloping.

A. I and II
B. II and III
C. II, III and IV
D. IV

5. The diagram below shows the market for fresh fish.

![Diagram of supply and demand with shifts S1 to S2](image)

The shift from S1 to S2 is likely to be caused by ____________.

A. higher subsidies for the fishermen
B. a fall in consumers' income
C. a fall in the price of fresh fish
D. bad weather; less fishermen go out to catch fish

6. If demand and supply were to reduce at the same time, the market price ________.

A. may increase, decrease or remains the same
B. will definitely decrease
C. will definitely increase
D. remains the same

7. When demand is perfectly price inelastic, ____________.

A. a higher price will cause the quantity demanded to decrease by less than 1%
B. total revenue earned by the producers remains constant at higher price level
C. the demand curve is vertical
D. the product has a lot of substitutes
8. The initial market equilibrium for product J is represented by point X in the diagram below.

Product J has negative income elasticity of demand. If the country's economy improves and people's income rises, the new market equilibrium point for product J will be _________.

A. point A  
B. point B  
C. point C  
D. point D

9. Janice spends her income on Coke and pizzas. Currently, the marginal utility per dollar spent on Coke is 5 utils per dollar. Janice will spend more income on buying pizzas if the marginal utility per dollar spent on pizzas is _____________.

A. 3 utils per dollar  
B. 5 utils per dollar  
C. 8 utils per dollar  
D. None of the above.
10. The following diagram shows the budget line of Beckham.

![Budget Line Diagram]

Note: Tacos is a type of food.

If burgers are priced at $8 per burger, we can conclude that Beckham has a budget of _______ to be allocated for these two products.

A. $10  
B. $48  
C. $80  
D. $240

11. Which of the following statements is TRUE about fixed costs?

A. Fixed costs are fixed by the owner of a business.  
B. In the long run, fixed costs can change.  
C. Material costs are fixed costs because all businesses must have material costs.  
D. The graph for fixed costs is upward sloping.

12. The short run marginal costs fall initially because the firm is experiencing _______.

A. increasing marginal returns  
B. decreasing marginal returns  
C. negative marginal returns  
D. economies of scale
13. Based on the economics theories, which of the following costs curves is likely to be U-shaped?

I. Average Fixed Cost
II. Short run Average Total Cost
III. Short run Average Variable Cost
IV. Long Run Average Total Cost

A. I only.
B. I, II and III only.
C. II and III only.
D. II, III and IV only.

14. Which of the following pairs **CORRECTLY** describe the assumptions of the perfect competition market and oligopoly?

<table>
<thead>
<tr>
<th></th>
<th>Perfect Competition</th>
<th>Oligopoly</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Many producers in the market</td>
<td>Only one producer</td>
</tr>
<tr>
<td>B.</td>
<td>Freedom to enter</td>
<td>Barriers to entry quite significant</td>
</tr>
<tr>
<td>C.</td>
<td>Sell differentiated goods.</td>
<td>Sell identical goods</td>
</tr>
<tr>
<td>D.</td>
<td>Firm is a price taker</td>
<td>Firm is a price taker</td>
</tr>
</tbody>
</table>

15. In the long run, firms in the monopolistic competitive market earn __________.

A. normal profits
B. positive economic profits
C. negative economic profits
D. unexpected economic profits

16. If a monopoly firm continues to reduce the price of the goods that it sells, total revenue (TR) __________.

A. will increase initially and then decrease.
B. will increase all the way.
C. will decrease all the way.
D. remains unaffected.

17. Firms in the __________ market structure are inter-dependent.

A. perfect competition
B. monopolistic competition
C. oligopoly
D. monopoly
18. Which statements about externalities is **TRUE**?

A. External cost affects consumers only.
B. Externalities may lead to over or under-production in the society.
C. The health problems faced by the smokers is an example of externalities that arise from smoking.
D. Public goods are not produced by private businessmen because production of public goods leads to negative externalities.

19. What is an externality created by an individual buying a smartphone?

A. the cost to the individual of purchasing the phone
B. the pollution created by the individual when the spoilt phone is disposed
C. the satisfaction derived by the individual from using the phone
D. the time saved by the individual while contacting others

20. Product J : a new Toyota car  
Product K : lights along the streets  
Product L : fried chicken

Based on the lists of products given, the product(s) with non-rivalry and excludable characteristics is (are) ________________.

A. J only  
B. K only  
C. J and L  
D. None of the above.
SECTION B (40%)

Instructions: Answer any TWO (2) questions out of the three questions provided. Each question carries 20 marks.

1. The following table illustrates the information related to the corn market which economists categorize as perfectly competitive.

<table>
<thead>
<tr>
<th>Price per Bushel</th>
<th>Quantity Demanded (bushels)</th>
<th>Quantity Supplied (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3</td>
<td>30,000</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>26,000</td>
<td>4,000</td>
</tr>
<tr>
<td>9</td>
<td>22,000</td>
<td>9,000</td>
</tr>
<tr>
<td>12</td>
<td>18,000</td>
<td>12,000</td>
</tr>
<tr>
<td>15</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td>18</td>
<td>12,000</td>
<td>22,000</td>
</tr>
<tr>
<td>21</td>
<td>8,000</td>
<td>28,000</td>
</tr>
<tr>
<td>24</td>
<td>4,000</td>
<td>36,000</td>
</tr>
</tbody>
</table>

(a) With reference to perfect competition market structure, briefly explain any THREE (3) characteristics of the corn market. 

(6 marks)

(b) Based on the information given, determine the market equilibrium price, quantity and total revenue earned by all the farmers in the corn market. 

(3 marks)

(c) The following table shows the total revenue, marginal revenue and marginal cost of Oliver, a farmer in the corn market.

<table>
<thead>
<tr>
<th>Output (bushels)</th>
<th>Total Revenue (TR)</th>
<th>Marginal Revenue (MR)</th>
<th>Marginal Cost (MC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Recopy the above table into your answer booklet and fill in the missing values. [Note: Kindly use a highlighter to highlight your answers.] 

(4 marks)

(d) Explain whether Oliver is maximizing his profits by producing 28 bushels of corn. 

(3 marks)

(e) Can farmers in the perfect competition market continue to earn supernormal profits in the long run? Briefly explain your answer. 

(4 marks)
2. The government of a small developing country has given special rights to Linden Enterprise for the production of plastic syringes.

The following table shows the cost and demand data for this government protected monopolist. The firm has fixed costs of $5.00.

<table>
<thead>
<tr>
<th>Quantity per Day (boxes)</th>
<th>Price per box</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$16</td>
<td>$7.00</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>9.50</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>11.00</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>12.00</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
<td>14.50</td>
</tr>
<tr>
<td>6</td>
<td>11</td>
<td>17.50</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>21.00</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>25.00</td>
</tr>
<tr>
<td>9</td>
<td>8</td>
<td>30.00</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>35.50</td>
</tr>
</tbody>
</table>

(a) Based on the information given, determine Linden’s profit maximizing price and output. Support your answer by calculating the profits at all levels of output. (8 marks)

(b) The following table below shows part of the Average Total Costs (ATC), Average Variable Costs (AVC) and Average Fixed Costs (AFC) for Linden Enterprises.

<table>
<thead>
<tr>
<th>Quantity per Day (boxes)</th>
<th>TC</th>
<th>ATC</th>
<th>AVC</th>
<th>AFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>14.50</td>
<td></td>
<td>$1.90</td>
<td>$1.00</td>
</tr>
<tr>
<td>6</td>
<td>17.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>21.00</td>
<td>$3.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>25.00</td>
<td></td>
<td>$2.50</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>30.00</td>
<td></td>
<td></td>
<td>$0.56</td>
</tr>
</tbody>
</table>

Recopy the above table into your answer booklet and fill in the missing values. [Note: Kindly use a highlighter to highlight the answers.] (5 marks)

(c) Linden Enterprise has found a way to separate the consumers in the country into two different groups and each group has different price elasticity of demand (PED).
Group A: PED = - 3.88
Group B: PED = - 0.33

How does the information of price elasticity of demand help Linden to implement a successful price discrimination? (7 marks)
The diagram above shows the market for petrol. In order to reduce the consumption of petrol, the government has decided to impose a tax on petrol.

(a) From the diagram, determine the tax per unit imposed by the government. (2 marks)

(b) Calculate the following:
   (i) the total tax received by the government (3 marks)

   (ii) the amount of tax paid by the consumers (3 marks)

   (iii) the amount of tax paid by the producers (3 marks)

(c) Using demand and supply diagrams, explain the impact of the petrol tax on the market for cars. (6 marks)

(d) Starting from point \( E_0 \), what will the new market equilibrium price and quantity in the petrol market be if the government decides to provide a subsidy of $1.50 per unit rather than tax? (3 marks)
SECTION C (20%)

Instructions: Answer any ONE (1) question out of the two questions provided. Each question carries 20 marks.

1. (a) Using a diagram, illustrate how a rental ceiling leads to a shortage and lower producer surplus in the housing market. Include the definition of rental ceiling in your answer.

   (10 marks)

(b) Why do some economists refuse to support the rental ceiling policy? Explain any FOUR (4) points.

   (10 marks)

2. (a) How are private goods different from public goods? Explain your answer with the aid of examples.

   (10 marks)

(b) Using diagrams, explain how negative externalities from consumption in the alcohol market leads to market failure. Include the definition of negative externalities in your answer.

   (10 marks)

~THE END~