

## **Assignment A (Microeconomics)**

### **Business Economics (BUECO5903)**

**Semester 2, 2015**

**Drafted by: Paul McPhee (Course Coordinator);**

**Checked by: David Spiers  
(Pre-Assessment Moderator)**

#### **Instructions to candidates:**

1. Print your name and student number on your work as well as the assignment cover sheet which is available from the Business School office;
2. Please submit your assignment by pasting into the Assignment Submission Folder in the subject's 'Moodle Shell';
3. Please submit Part A (microeconomics) on the due date as provided in the course description;
4. (a) Attempt any five (5) questions from Part A, Microeconomics;
5. Please reference all copied diagrams, formula, definitions and quotations or direct extracts;
6. Each question is worth 10 marks.
7. This assignment contributes to ten per cent (10%) of total assessment.

**Part A – Microeconomics:**

Answer any five (5) of the following questions. Each question is worth 10 marks.

**Question 1:**

- (a) Suppose that oil prices rise sharply for years as a result of a war in the Middle East. Illustrate with a diagram what happens to the: (1 mark each)
- (i) Demand for automobiles?
  - (ii) Demand for home insulation?
  - (iii) Demand for coal?
  - (iv) Demand for tyres?
  - (v) Demand for bicycles?
- (b) Explain the impact of external costs and external benefits on resource allocation; (2.5 marks)
- (c) Why are public goods not produced in sufficient quantities by private markets? (2.5 marks)

**Question 2:**

- (a) Explain why scarcity forces individuals and society to incur opportunity costs. Give specific examples. (2.5 marks for explanation and diagram plus 2.5 marks for specific examples)
- (b) Suppose a chocolate bar manufacturer promotes its products by advertising and opportunity to win a 'free car'. Is this car *free* because the winner pays zero for it? Illustrate and explain using a diagram. (2.5 marks)
- (c) Why is the production possibility frontier bowed outwards? (2.5 marks)

**Question 3:**

In some large cities, motorists pay a fee when they bring their vehicles into the busiest part of the city (congestion charge).

- (a) Illustrate with a diagram and explain how this charge is an example of the price system at work; (2.5 marks for diagram plus 2.5 marks for explanation)
- (b) How do you think that the authorities would determine the level of the charge if they have a particular target for the reduction in the number of vehicles entering the congestion charge zone? (2 marks)
- (c) Given that revenues from these congestion charges are invested in the city's transport system, how will this affect the charge level holding all other variables constant? (3 marks)

**Question 4:**

- (a) Suppose the income elasticity of demand for pre-recorded music compact disks is +7 and the income elasticity of demand for a cabinet maker's work is +0.7. Compare the impact on pre-recorded music compact disks and the cabinet maker's work of a recession that reduces consumer incomes by 10 per cent. (2 marks)

- (b) How might you determine whether MP3 music players and the pre-recorded music compact discs are in competition with each other? (2 marks)
- (c) Interpret the following Income Elasticities of Demand (YED) values for the following and state if the good is normal or inferior; (3 marks total, 1.5 marks per part)

$$YED = +0.8$$

$$YED = -2.4$$

- (d) Interpret the following Cross-Price Elasticities of Demand (XED) and explain the relationship between these goods. (3 marks total, 1.5 marks per part)

$$XED = +0.85$$

$$XED = -4.5$$

### Question 5:

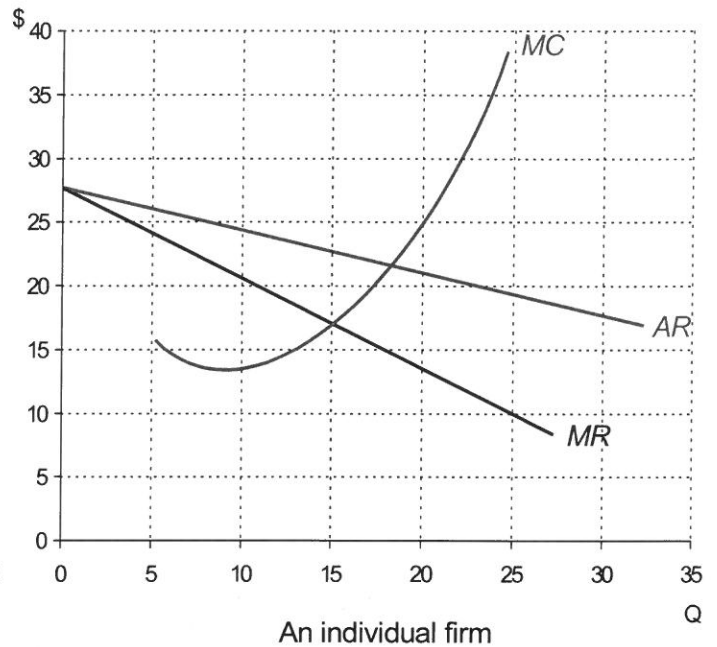
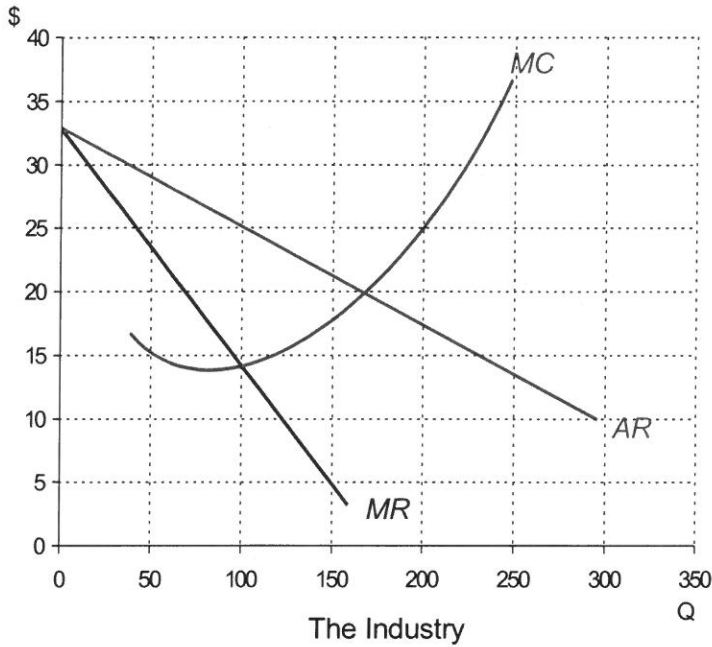
- (a) Discuss the following statement: 'In the real world there is no industry which conforms precisely to the economist's model of perfect competition. This means that the model is of little practical value'. (2.5 marks)
- (b) Illustrate with a diagram and explain the short-run perfectly competitive equilibrium for both (i) the individual firm and (ii) the industry; (2.5 marks each)
- (c) Illustrate with a diagram and explain the long-run perfectly competitive equilibrium for the firm (2.5 marks).

### Question 6:

- (a) Suppose you own a coffee shop. List some of the fixed inputs and variable inputs you would use in operating the shop. (4 marks)
- (b) Baubles and Beads manufacturing produces 100 hammers per day. The total fixed cost for the plant is RM4000 per day and the total variable cost is RM13,000 per day. Calculate the average fixed cost, average variable cost, average total cost and total cost at the current output level. (4 marks)
- (c) Explain conditions under which labour might be treated as a variable cost and conditions under which it would be treated as a fixed cost. (2 marks)

**Question 7:**

The following diagrams illustrate an industry under oligopoly consisting of 10 equal-sized firms and a particular firm in that industry. Each of the firms produces an identical product.



- (a) Assuming that the firms form a cartel, what price will the cartel choose if it wishes to maximise overall profits for the cartel?  
.....
  - (b) What total output must the cartel produce in order to maintain this price?.....
  - (c) To what output will an individual firm be restricted if this price is to be maintained (assume all firms are permitted to produce the same level of output)?  
.....
  - (d) If the other firms stick to this output, how much would an individual firm be tempted to produce if it wished to maximise its own profit at the agreed price?  
.....
  - (e) If it undercut the cartel price, what price and output would maximise its profit (assuming that the other members did not retaliate)?  
.....
- (2 marks each)

**Thank You**