PART A
INSTRUCTIONS: 1. THERE ARE TWO (2) QUESTIONS IN THIS PART.
2. ANSWER BOTH QUESTIONS.

Question 1
The inverse demand curve for product X is given by:

\[ P_X = 25 - 0.005Q + 0.15P_Y, \]

where \( P_X \) represents price in ringgit Malaysia per unit, \( Q \) represents rate of sales in ringgit Malaysia per week, and \( P_Y \) represents selling price of another product Y in ringgit Malaysia per unit. The inverse supply curve of product X is given by:

\[ P_X = 5 + 0.004Q. \]

a. Determine the equilibrium price and sales of X. Let \( P_Y = \text{RM}10. \)  

[12 marks]

b. Determine whether X and Y are substitutes or complements. 

[8 marks]

[TOTAL: 20 MARKS]

Question 2
a. ‘Both short-run and long-run average cost curves may be \( \_\_\_\_ \)-shaped, but the explanations for their respective shapes are quite different.’ Explain this statement. 

[10 marks]

b. Why do marginal cost curves intersect both the average variable cost curve and the average cost curve at their lowest point? 

[10 marks]

[TOTAL: 20 MARKS]
PART B
INSTRUCTIONS: 1. THERE ARE FIVE (5) QUESTIONS IN THIS PART.
               2. ANSWER THREE (3) QUESTIONS ONLY.

Question 1

The information below shows the price elasticity of demand, cross price elasticity of demand and income elasticity of demand for Max digital camera.
Price elasticity of demand = -1.2
Cross price elasticity of demand = 1.2
Income elasticity of demand = 2.6

Analyze the following statement and answer the following questions.

a. Define price elasticity of demand and cross elasticity of demand. [5 marks]

b. Would you categorise max digital camera a luxury good? Why. [5 marks]

c. If the management wants to increase its total revenue should they increase the price of Max digital camera. [5 marks]

d. When price of competitor decreased by 10%, what is the percentage change in demand for Max digital camera? [5 marks]

[TOTAL: 20 MARKS]

Question 2

Alisher an accountant, working for a foreign consultant firm and earning RM 78,000 per year is contemplating giving up his job and set up his own tax consultant firm. He estimates that renting an office would cost RM 780 per month, hiring a secretary with salary RM 1,500 per month and purchasing for required supplies would cost him RM 10,000 per annum. He estimated that his total revenues for the year would be RM 120,000.

a. Differentiate between explicit cost and implicit cost. [4 marks]
b. Calculate the consultant’s following cost/profit for running his own tax consultant firm:
   i) Explicit cost.
   ii) Implicit cost.
   iii) Accounting profit.
   iv) Economic profit.

   [12 marks]

c. Explain briefly whether Alisher should practice his own tax consultant firm or not.

   [4 marks]

   [TOTAL: 20 MARKS]

Question 3

The production function of one firm is given below:

\[ Q = -0.5L^2 + 20L \]

a. Determine return to scale for this production function.

   [5 marks]

b. Write down the average product and marginal product of labor function.

   [5 marks]

c. Find the profit-maximizing rate of labor to be hired by a firm given wage rate= RM 20 and product price = RM4.

   [5 marks]

d. At the profit-maximizing rate of labor, calculate maximum output produced.

   [5 marks]

   [TOTAL: 20 MARKS]
Question 4

The demand curves for oligopoly are given as: \( P_1 = 60 - 0.5Q \) and \( P_2 = 84 - 2Q \).

a. What are the profit maximizing level of output and price if marginal cost is given as \( MC = 30 \)?

b. If MC changes to \( MC = 3 + 0.5Q \), determine the profit-maximizing level of output and price.

c. Sketch the kinked demand curve to illustrate your answer in (b).

[8 marks]

[8 marks]

[4 marks]

[TOTAL: 20 MARKS]

Question 5

a. If the industry under perfect competition faces a downward-sloping demand curve, why does an individual firm face a horizontal demand curve?

b. If supernormal profits are competed away under perfect competition, why will firms have an incentive to become more efficient?

[10 marks]

[10 marks]

[TOTAL: 20 MARKS]

QUESTION PAPER ENDS HERE