PART A
INSTRUCTIONS: 1. THERE ARE FOUR (4) QUESTIONS IN THIS PART.
2. ANSWER ALL QUESTIONS.

Question 1
Mat Tonal’s announced the launch of its “Now Taste Menu” at all of its Malaysian restaurants. Mat Tonal’s is one of the Asia’s largest food service retailers, serving over 43 million customers each day. More than 85 percent of Mat Tonal’s restaurants around Asia are owned and operated by independent franchisees. Mat Tonal’s “Now Taste Menu” is an innovative plan to bring choice and variety to customers by permitting local restaurants to showcase seasonal and regional menu items that cater to the cravings of local customers. Based on local preferences, a restaurant might offer the Mat leg Jr., Mighty leg or the Sausage Breakfast Puree on its local menu board.

Explain the sustainable impact on Mat Tonal’s bottom line.

[TOTAL: 15 MARKS]

Question 2
Imagine that you are in Kayaland where there is no regulated price on petrol. The price of crude oil declined during the early 2009, from about $110 to $54 per barrel. As a result of declining crude oil prices, consumers in most locations enjoyed lower petrol prices. However, not all consumers reaped the benefits of lower crude. In a few isolated areas, consumers cried foul because petrol retailers did not pass on the price reductions to those who pay at the pump. Consumer groups argue that this corroborated their claim that petrol retailers in these areas were colluding in order to earn monopoly profits. For obvious reasons, the petrol retailers involved denied the allegations.

Based on the evidence, do you think that petrol stations in these areas were colluding in order to earn monopoly profits? Why?

[TOTAL: 12 MARKS]
Question 3

Toyota reported that between 2002 and early 2004, the rise in U.S steel prices raised the price to produce its vehicles in North America by US$100. Among the causes for the increased price of steel was the growth of the Chinese economy. How can the Chinese economy affect the cost of production globally?

[TOTAL: 13 MARKS]

Question 4

Soroue Appetite is a French Restaurant in KLCC. At Soroue, “Entree prices average RM12 at lunch, RM21 at dinner.” Soroue is located very close to the Philharmonic Hall and the many evening entertainment options in downtown KL. Many restaurants find the demand for dinner to be less elastic than the demand for lunch.


[5 marks]

b. Assume that the average total cost of providing each luncheon meal is RM1 more than the price paid for each luncheon meal. The management of Soroue is uncertain about whether it is wise to continue opening for lunch. One famous chef at Soroue claims that Soroue is losing money at lunch, and that the most profitable thing to do is to end lunch service. Another restaurateur at Soroue wants to continue serving lunch. Please provide the owners of this French restaurant with your advice concerning these issues.

[10 marks]

[TOTAL: 15 MARKS]
PART B
INSTRUCTIONS: 1. THERE ARE FOUR (4) QUESTIONS IN THIS PART.
   2. ANSWER THREE (3) QUESTIONS ONLY.

Question 1

A firm has determined that its variable costs are given by the following relationship:

\[ VC = 0.05Q^3 - 5Q^2 + 500Q \]

where \( Q \) is the quantity of output produced.

a. Determine the output level where average variable costs are minimized.  
   [4 marks]

b. Determine the output level where marginal costs are minimized.  
   [4 marks]

c. The following matrix shows the payoffs for an advertising game between Coke and Pepsi. The firms can choose to advertise or not to advertise. Numbers in the matrix represent profits; the first number in each cell is the payoff to Coke. (Numbers in millions.)

<table>
<thead>
<tr>
<th>Coke (rows)/Pepsi (columns)</th>
<th>Advertise</th>
<th>Don’t Advertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertise</td>
<td>(10, 10)</td>
<td>(500, -50)</td>
</tr>
<tr>
<td>Don’t Advertise</td>
<td>(-50, 500)</td>
<td>(100, 100)</td>
</tr>
</tbody>
</table>

i) Explain why this would be described as a Prisoner’s Dilemma game.  
   [3 marks]

ii) Explain the probable outcome of this game.  
    [4 marks]

[TOTAL: 15 MARKS]
Question 2

The demand function for two identical products of company A and B is \( P = 10,000 - Q_a - Q_b \), where \( Q_a \) and \( Q_b \) are the quantities sold by the respective firms and \( P \) is the selling price. Total cost functions for the two companies are:

\[
\begin{align*}
TCA &= 500,000 + 200Q_a + 0.5Q_a^2 \\
TCB &= 200,000 + 400Q_b + Q_b^2
\end{align*}
\]

a. As the advisor, please advice and justify the best market strategy to maximise profit for both firms. [7 marks]

b. Assume that the firms form a cartel to maximise total industry profits (sum of Firm A and Firm B profits). Determine the optimum output and selling price for each firm. [8 marks]

[TOTAL: 15 MARKS]

Question 3

Superior Metals Company has seen its sales volume decline over the last few years as the result of rising foreign imports. In order to increase sales (and hopefully, profits), the firm is considering a price reduction on luranium—a metal that it produces and sells. The firm currently sells 60,000 Kg of luranium a year at an average price of RM10 per pound. Fixed costs of producing luranium are RM250,000. Current variable costs per pound are RM5. The firm has determined that the variable cost per pound could be reduced by RM.50 if production volume could be increased by 10 percent (fixed costs would remain constant). The firm's marketing department has estimated the arc elasticity of demand for luranium to be \(-1.5\).

a. How much would Superior Metals have to reduce the price of luranium in order to achieve a 10 percent increase in the quantity sold? [7 marks]

b. What would be the firm's (i) total revenue, (ii) total cost, and (iii) total profit before and after the price cut? [8 marks]
Question 4

Read Mad Publishing (RMP) is a coupon book publisher with markets in several southern states. RMP coupon books are sold directly to the public, sold through religious and other charitable organizations, or given away as promotional items. Operating experience during the past year suggests the following demand function for RMP’s coupon books:

\[ Q = 5,000 - 4,000P + 0.02\text{Pop} + 0.25I + 1.5A, \]

where \( Q \) is quantity, \( P \) is price (RM), \( \text{Pop} \) is population, \( I \) is disposable income per household (RM), and \( A \) is advertising expenditures (RM).

a. Determine the demand faced by RMP in a typical market in which \( P = \text{RM}10, \text{Pop} = 1,000,000 \text{ persons}, I = \text{RM}60,000, \text{and} A = \text{RM}10,000. \)

[4 marks]

b. Calculate the level of demand if RMP increases annual advertising expenditures from \( \text{RM}10,000 \) to \( \text{RM}15,000. \)

[4 marks]

c. Calculate the demand curves faced by RMP in parts a and b.

[7 marks]