UNIVERSITI KUALA LUMPUR
Malaysian Institute of Marine Engineering Technology

FINAL EXAMINATION

MARCH 2025 SEMESTER SESSION

SUBJECT CODE	:	**LOB10603**
SUBJECT TITLE	:	**PRINCIPLES OF ECONOMICS**
PROGRAMME NAME (FOR MPU: PROGRAMME LEVEL)	:	**BACHELOR IN MARITIME OPERATIONS (HONOURS)**
TIME / DURATION	:	**02.00 PM - 5.00 PM** **(3 HOURS)**
DATE	:	**24 JUNE 2025**

INSTRUCTIONS TO CANDIDATES

1. Please read **CAREFULLY** the instructions given in the question paper.

2. This question paper has information printed on both sides of the paper.

3. This question paper consists of **Section A and Section B. Answer ALL Questions in Section A. Choose ONLY THREE (3) Questions in Section B.**

4. Please write your answer on the answer booklet provided.

5. Answer all questions in English language ONLY.

6. Answer should be written in blue or black ink except for sketching, graphic and illustration.

7. The formula sheet has been appended for your reference.

THERE ARE 7 PAGES OF QUESTIONS, INCLUDING THIS COVER PAGE.

SECTION A: 40 Marks.

INSTRUCTION: Answer ALL Questions.

Question 1:

Table 1 shows the Production Possibilities schedule for an economy of Manjung Heavy Machinery Sdn Bhd.

Table 1: Production Possibility Schedule

Production possibilities combination	Marine Machine (units)	Boat (Units)
A	0	80
B	10	70
C	20	60
D	30	50
E	40	30
F	50	0

(a)   Illustrate the economy's production possibilities curve in one graph paper for Manjung Heavy Machinery Sdn Bhd. Please show all the combinations.

(Hint: Y-axis for marine machine and X-axis for boat).

(5 Marks)

(b)   Calculate the opportunity cost of increasing boat from 30 to 60 units.

(5 Marks)

(c)   Identify **TWO (2)** significant factors Manjung Heavy Machine Sdn Bhd could apply to increase more demand towards the production of marine machine and boat. .Include **ONE (1)** example in your explanation.

(10 Marks)

Question 2:

(a)   Table 2 shows the Total Utility and Marginal Utility consumption of eating Durian Tupai King for Faisal. Find the Marginal Utility (MU).

(5 Marks)

Table 2: TU and MU of eating Durian Tupai King for Faisal

Units of eating Durian Tupai King	Total Utility (TU)	Marginal Utility (MU)
1	20	
2	35	
3	45	
4	50	
5	50	
6	45	
7	35	
8	20	

(b)   From answers in (b), in **ONE (1)** graph paper illustrate the TU and MU curves. Find the maximum and minimum points for both TU and MU.

(5 Marks)

(c)   Differentiate in **ONE (1)** graph paper by using your own scales to show curves for: Total Production (TP), Marginal Production (MP) and Average Production (AP). Explain the **THREE (3)** stages and the relationship between TP, MP and AP.

(10 Marks)

SECTION B: 60 Marks.

INSTRUCTION: Choose THREE (3) Questions ONLY.

Question 3:

(a)   Using your scale, illustrate in **ONE (1)** graph paper for short-run curves on the following curves:

Marginal Cost (MC), Average Total Cost (ATC), Average Variable Cost (AVC) and Average Fixed Cost (AFC).

(5 Marks)

(b)   Compute Marginal Revenue (MR) and Marginal Cost (MC) in Table 3 below.

(5 Marks)

Table 3: MR and MC

Quantity	Total Revenue (TR)	Marginal Revenue (MR)	Total Cost (TC)	Marginal Cost (MC)
0	0		800	
1	1000		1200	
2	2200		2100	
3	3000		2800	
4	4000		3700	
5	5000		5000	
6	6500		6200	
7	7800		9000	

(c)   Explain **FIVE (5)** characteristics of Monopoly. Include **ONE (1)** example for each characteristic.

(10 Marks)

Question 4:

(a)   Table 4.shows cost for one company. Identify the following costs for Total Variable
        Cost (TVC), Average Fixed Cost (AFC), Average Variable Cost (AVC).

(5 Marks)

Table 4: Cost

Quantity (Q)	Total Fixed Cost (TFC)	Total Variable Cost (TVC)	Total Cost (TC)	Average Fixed Cost (AFC)	Average Variable Cost (AVC)	Average Total Cost (ATC)	Marginal Cost (MC)
0	2000		2000			0	0
100	2000		3500			3500	1500
200	2000		4500			2200	1000
300	2000		5000			1600	500
400	2000		5500			1300	500
500	2000		6500			1300	1000

(b)   Illustrate in **ONE (1)** graph paper using your own scale to show Super Normal Profit
        for Monopolistic Competition in a short run.

(5 Marks)

(c)   Explain **FIVE (5)** characteristics of Oligopoly. Include **ONE (1)** example in your
        explanations.

(10 Marks)

Question 5:

(a)　　Table 5 shows the income and expenses for Country Ismith. Determine the Gross Domestic Product at Market Price (GDP $_{MP}$)

(5 Marks)

Table 5: Expenses and Income for Country Ismith

Items	RM (Millions).
Exports	500.00
Personal consumption and expenditure	1400.00
Changes in stocks	-40.00
Indirect business taxes	30.00
Government expenditure	990.00
Investments	1000.00
Personal income tax	80.00
Subsidies	50.00
Imports	40.00
Factors income paid abroad	80.00
Depreciation	40.00
Factors income received from abroad	90.00

(b)　　Interpret **ONE (1)** uses of National Income for Country Ismith. Include **ONE (1)** example in your explanations.

(5 Marks)

(c)　　Illustrate **ONE (1)** circular flow diagram to show the equilibrium of **FOUR (4)** Sectors Economy. Explain your answer.

(10 Marks)

Question 6:

(a)   Table 6 shows labor statistics for Country ZamZam 2022 and 2023. Identify the Unemployment Rate (UR) for the 2023.

(5 Marks)

Table 6: Labour statistic for Country ZamZam in 2022 and 2023

Labour statistic	2022	2023
Not in labor force (Million)	800	950
Total population (Million)	2400	2750
Employed (Million)	1950	1600

(b)   If the Consumer Price Index (CPI) for 2022 is 2320, and the CPI for 2023 is 2500. Find the rate of inflation for the year 2023.

(5 Marks)

(c)   Differentiate **TWO (2)** effects of Unemployment. Include **ONE (1)** example in each effect.

(10 Marks)

Question 7:

(a)   Explain **TWO (2)** Demand for Money. Include **ONE (1)** example in each demand.

(5 Marks)

(b)   Distinguish between Legal Tender and Token Money. Include **ONE (1)** example in each explanation.

(5 Marks)

(c)   Identify **TWO (2)** functions of Commercial Banks. Include **ONE (1)** example in each function.

(10 Marks)

END OF EXAMINATION PAPER

LOB 10603-PRINCIPLES OF ECONOMICS

LIST OF FORMULAES

1. Opportunity Cost=the loss of other alternatives when one alternative is chosen

2. Demand + Supply = Equilibrium

3. DD + SS= EQ

4. Elasticity € DD = $\dfrac{\text{Percentage change in Quantity Demanded (QDD)}}{\text{Percentage change in Price (P)}}$

5. Elasticity € DSS= $\dfrac{\text{Percentage change in Quantity Demanded (QSS)}}{\text{Percentage change in Price (P)}}$

6. Total Sales (TS)- Total Costs (TC) =Total Profit (TP)

7. Total Profit (TP)= Total Revenue (TR) – Total Cost (TC)

8. Total Revenue (TR)= Price (P) X Quantity (Qty)

9. Total Cost (TC)= Fixed Cost (FC) + Variables Cost (VC)

10. Average Fixed Cost (AFC) = $\dfrac{\text{Fixed Cost (FC)}}{\text{Output (Q)}}$

11. Average Variables Cost (AVC) = $\dfrac{\text{Variable Cost (VC)}}{\text{Output (Q)}}$

12. Average Total Cost (ATC) = $\dfrac{\text{Total Cost (TC)}}{\text{Output (Q)}}$

13. Marginal Revenue (MR) = $\dfrac{\text{Changes in Total revenue (TR)}}{\text{Changes in Output (Q)}}$

14. Marginal Cost (MC) = $\dfrac{\text{Changes in Total Cost (TC)}}{\text{Changes in Output (Q)}}$

15. Total Profit (TP) by curve = (Price – ATC) X Output

16. To check answer= TOTAL PROFIT (TP)= TR – TC- TABLE

17. TR= AR X Q and TC= ATC X Q

18. M1+ M2= M3

19. M1= currency + demand deposits + traveler's check + other checkable deposits

20. M1 + saving + small denomination time deposits + money market funds = M2

21. M2 + saving + large denomination time deposits + money market funds = M3

22. The Expenditure Approach: $GDP_{MP} = C + I + G + Xn (X-M)$

23. The Income Approach: GDP = Wages and Salaries + Rent + Interest + Dividend + Profits

24. GDP = W+S+R+I+D

25. The Product Approach = GDP = Final products in the economy

26. GNP_{MP} = GDP (MP) + Net factor Income abroad

27. GNP_{FC} = GNP (MP) - Indirect tax + Subsidy

28. National Income = GNP_{FC} − Depreciation

29. Personal income = NI+ Transfer payments − Corporate income taxes − Retained earnings − Social security contributions − Insurance premium

30. Disposable personal income = Personal income − Personal income tax

31. Marginal Utility (MU) = Price (P)

32. ~~Total~~ Marginal Utility (~~TU~~ M) = Changes in TU / Changes in Q

33. Marginal Utility (MU) / Price (P) = 1

34. % Change = $\dfrac{(\text{New Number} - \text{Original Number})}{\text{Original Number}} \times 100\%$

35. Per Capita GDP = $\dfrac{\text{GDP}}{\text{Population}}$

36. Unemployment Rate (UR) = $\dfrac{\text{Number of Unemployed}}{\text{Labor Force}} \times 100\%$

37. CPI = $\dfrac{\text{CPI new- CPI old}}{\text{CPI new}}$

38. Percentage change = $\dfrac{\text{Change}}{\text{Original Number}} \times 100\%$

39. Elasticity Price: $E_p = \dfrac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$

40. Elasticity Price: $E_p = \dfrac{Q2 - Q1}{Q2 + Q1} \times \dfrac{P2 + P1}{P2 - P1}$

41. Elasticity Income: $Ei = \dfrac{\text{Percentage change in quantity demanded}}{\text{Percentage change in income}}$

42. Elasticity Cross: $E_{AB} = \dfrac{\text{Percentage change in } Q_A \text{ demanded}}{\text{Percentage change in price of B}}$