



**UNIVERSITY COLLEGE TATI (UCTATI)**

**FINAL EXAMINATION QUESTION BOOKLET**

COURSE CODE	: DTG 2053
COURSE	: OPERATION MANAGEMENT
SEMESTER/SESSION	: 1-2022/2023
DURATION	: 3 HOURS

**Instructions:**

1. This booklet contains **5** questions. Answer **ALL** questions.
2. All answers should be written in answer booklet.
3. Write legibly and draw sketches wherever required.
4. If in doubt, raise your hand and ask the invigilator

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO**  
**THIS BOOKLET CONTAINS 4 PRINTED PAGES INCLUDING COVER PAGE**

**QUESTION 1**

- a) Define operation management. (2 Marks)
- b) Explain the relationship of operation activities with: (12 Marks)
- i. Accounting
  - ii. Information technology
  - iii. Management
  - iv. Marketing
  - v. Finance
  - vi. Purchasing

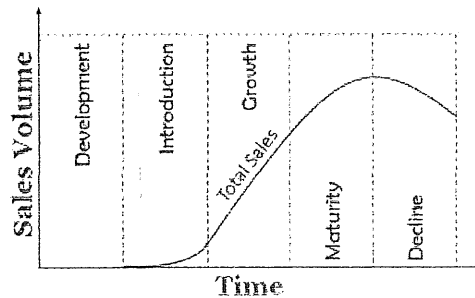
**QUESTION 2**

- a) Explain **THREE (3)** reasons business needs to forecast. (6 Marks)
- b) Sales for a product for the past three months has been 200, 350 and 287.
- i. Use three months average to calculate a forecast for the fourth month. (4 marks)
  - ii. Use three months average to calculate for the month 5 if the actual demand for month 4 turns out to be 300. (4 marks)

**QUESTION 3**

- a) Patzura, owner of Pedas-Pedas manufacturing, is considering to produce a new product. Patzura estimates it's carrying cost at 20% of cost and its ordering costs at RM50.00 per order. The estimated weekly demand is 240 units at a price of RM15.00 per unit. Lead time is 2 weeks. Total working weeks is 52 weeks.
- i. Calculate the most economical units to order. (6 Marks)
  - ii. Calculate reorder point. (6 marks)
  - iii. Calculate total ordering cost. (6 marks)

- b) Based on sketch below, explain demand characteristic in each stage of product life cycle. (10 Marks)



**QUESTION 4**

- a) Amy, the owner of Hari-Hari Hypermarket is interested to investigate his business inventory effectiveness. Last year, cost of goods sold was RM3,000,000. The average inventory cost was RM250,000. Demonstrate:
- i. The inventory turnover for Hari-Hari Hypermarket. (4 Marks)
  - ii. The weeks of supply, assume Hari-Hari Hypermarket operates 52 weeks per year. (4 Marks)
  - iii. The day of supply, assume that Hari-Hari Hypermarket operates 5 days per week. (4 Marks)
- b) Cendol Soojook is a food truck business that is deciding to locate its new business. The annual fixed costs and variable costs for each site under consideration as belows. Predict which location is the best if expected daily sales to be 200 packs. (10 marks)

Location	Fixed Costs	Variable Costs
A	RM 7,000	RM 1.00
B	RM 3,400	RM 5.00
C	RM 2,000	RM 8.00

- c) Poor record management will result in unsmooth stock handling. Describe **THREE (3)** effects of poor stock record. (6 marks)

## QUESTION 5

- a) Describe **TWO (2)** advantages and **TWO (2)** disadvantages globalization. (8 Marks)
- b) Explain **FOUR (4)** impact of poor location decisions for a business. (8 Marks)

-----End of question-----

Formula :

Economy Order Quantity  $EOQ = \sqrt{\frac{2DS}{H}}$

Reorder Point  $R = dL$

Total Annual ordering Costs  $\left(\frac{D}{Q}S\right) + \left(\frac{Q}{2}H\right)$

Inventory Turnover  $\frac{\text{Annual COGS}}{\text{Average inventory cost}}$

Week of Supply  $\frac{\text{average inventory cost}}{\text{Average week usage}}$

Day of Supply  $\frac{\text{Average inventory cost}}{\text{Average daily use}}$