

FINAL  
Examination Paper

(COVER PAGE)

Session : January 2017

Programme : Diploma in Business (DIB)

Course : **MGT2100: Operations Management**

Date of Examination : 07 March, 2017 (Tuesday)

Time : 2:00pm – 4:00pm Reading Time : Nil

Duration : 2 Hours

**Special Instructions** :

Answer any **FOUR (4)** questions.

Materials permitted : Non-programmable Calculator

Materials provided : Nil

Examiner(s) : **Neo Kim Koon, Srithar, Vasanthakumar,**  
Ah Huai A/P Ah Chan, David Low

Moderator : Dr Rajendran Muthuveloo

*This paper consists of 4 printed pages, including the cover page*

DIPLOMA IN BUSINESS PROGRAMME (DIB)  
MGT2100: OPERATIONS MANAGEMENT  
FINAL EXAMINATION: JANUARY 2017 SESSION

**Instruction:** This paper consists of **SIX (6)** questions. Answer any **FOUR (4)** questions in the answer booklet provided. All questions carry equal marks.

**Question 1**

- (a) Define what is inventory and give **FIVE (5)** reasons why organizations need to maintain inventory. (6 marks)
- (b) Discuss **Two (2)** advantages and **Two (2)** disadvantages of Just-in-Time (JIT) and Material Requirement Planning (MRP). (8 marks)
- (c) (i) Given the following information:
- Annual demand = 10,000 units per year
- Ordering cost = RM8 per order
- Price per unit = RM1.00
- Carrying cost = 25 per cent of price per unit
- Calculate the economic order quantity (EOQ). (3 marks)
- (ii) Briefly explain the **FOUR (4)** types of costs that are relevant in the control of stocks in organizations. (8 marks)

**Question 2**

- (a) Explain the differences between operational efficiency and strategy. (5 marks)
- (b) Discuss **THREE (3)** issues to consider before a sourcing decision is made? (15 marks)
- (a) Calculate the productivity of a team of 5 men working 8 hours a day producing 40 chairs. (5 marks)

**Question 3**

- (a) Discuss why supply chain management is important. (10 marks)
- (c) Explain **FIVE (5)** reasons why managing extensive global supply chains can be complicated. (15 marks)

**Question 4**

- (a) Brief describe **FOUR (4)** basic types of layout. (10 marks)
- (b) Explain **FIVE (5)** reasons why would a high volume demand requires a product layout. (15 marks)

**Question 5**

- (a) What is capacity planning? Why is it important to strategy and tactical operations management? (10 marks)
- (b) Explain with an example :
- (i) What is design capacity?
  - (ii) What is effective capacity?
- (10 marks)
- (c) A hospital was assigned to give flu shots to the elderly in a large city. The design capacity is 50 seniors per hour, and the effective capacity is 44 seniors per hour. Yesterday the hospital was open for ten hours and gave flu shots to 330 seniors. Calculate the following.
- (i) The design utilization.
  - (ii) The effective utilization.
- (5 marks)

**Question 6**

- (a) Briefly explain **FIVE (5)** common definitions of quality. (10 marks)
- (b) What are the **FOUR (4)** categories of quality costs? Briefly explain with example(s) each of the quality costs. (15 marks)

~ The End ~

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