

FINAL ALTERNATIVE ASSESSMENT

Examination Paper

(COVER PAGE)

Session : April 2021

Programme : Diploma in Business (DIB)

Course : **MGT2100: Operations Management**

Date of Examination : July 30, 2021 (Friday)

Time : 4.00pm – 6.30pm Reading Time : Nil

Duration : 2 Hours : 30 Minutes

Note: 30 minutes is added into the duration of the examination to factor in any connectivity matters and for you to scan and upload your scripts.

Special Instructions :

This paper consists of **FOUR (4)** questions. Answer **ALL** questions. All answer needs to be handwritten.

Materials permitted : Nil

Materials provided : Nil

Examiner(s) : **Amirudin Bin Awang**, Fauziah Binti Din and
Kathleen Elanie Bagah

Moderator : Nanthakumar Karuppiah

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

DIPLOMA IN BUSINESS (DIB)
MGT2100: OPERATIONS MANAGEMENT
FINAL ALTERNATIVE ASSESSMENT: APRIL 2021 SESSION

Instruction: This paper consist of **FOUR (4)** questions. Answer **ALL** questions. All answers needs to be **HANDWRITTEN**.

QUESTION 1

- (a) Samsung store has a demand for 2,500 smart phones per year. The store operates a 250-day working year. On average delivery of an order takes 4 working days, but has been known to take as long as 5 days. Compute the reorder point;
- i. Without safety stock (4 marks)
 - ii. With a one-day safety stock. (4 marks)
- (b) Tonwood Electrics Sdn. Bhd. purchases 10,000 blower motors each year as components in electric boiler. The unit cost of each blower is RM 45 and the holding cost of one blower for a year is RM 10, ordering cost is RM 125 per order. Assume that Tonwood operates on a 240 - day working year.

Required:

- i. Compute the Optimal Order Quantity (5 marks)
- ii. Compute the expected number of orders placed each year (4 marks)
- iii. Compute the expected time between orders and how does the time between orders work. (4 marks)
- iv. Compute the total cost (4 marks)

QUESTION 2

There are seven concepts for an effective Total Quality Management (TQM) program. Demonstrate with examples any **FIVE (5)** concepts of TQM.

(25 marks)

QUESTION 3

- (a) In most cases, fast food companies strictly does not allow their franchises to seek and opt for local supplier as it would cause inconsistency in food quality. This could be a major issue especially for those franchises who are located in a different continent. For different continents, what are the **TWO (2)** optimal solutions for supplies delivery?
- i. Produce **FOUR (4)** comparison for both methods of delivery (16 marks)
 - ii. Choose the best solution for the scenario above. (1 mark)
- (b) Toyota Motor Corporation in Japan would like to ship a customer order from Malaysia. The customer has purchased a total of 200 assorted models of cars. Each car fits perfectly into a container. Below are the details of the shipment;

Items	Details	Charge
A	Export custom to Malaysia	US\$ 300
B	Haulier services to port from origin	US\$ 40 per container
C	Unloading of haulier	US\$ 20 per container
D	Carriage to port of import	US\$ 120 per container
E	Insurance	US\$ 80 per vehicle
F	Haulier services	RM 1500 per container
G	Import duties	RM 230 per container
H	Unloading and inspection at Destination	RM 165 per container
I	1US\$	RM 4.10

Based on the details above, compute the cost that are bourne by seller for;

- i. Carriage, Insurance and Freight (CIF) (4 marks)
- ii. Delivered at Place (DAP) (4 marks)

QUESTION 4

The Bullwhip effect causes members of the supply chain to overreact to the changes in demand at retail level. With relevant examples, show in detail **FOUR (4)** factors of Bullwhip effect and **FOUR (4)** ways to counteract the Bullwhip effect.

(25 marks)

~ The End ~

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