



UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2013/2014**

COURSE NAME : SUPPLY CHAIN MANAGEMENT
COURSE CODE : BPB 32303
PROGRAMME : 3BPA/4 BPB
EXAMINATION DATE : DECEMBER 2013 / JANUARY 2014
DURATION : 3 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

- Q1** The manufacturing company uses 700 units of the components annually, the annual carrying cost is RM14 per unit and the ordering cost is RM275. The manufacturer uses Table **Q1** for all unit discounts pricing schedule provided by the supplier.

Table Q1 : Discount pricing

Order quantity	Price (RM)
1- 199	65
200- 599	59
600 +	56

- (a) Calculate Economic Order Quantity (EOQ). (4 marks)
- (b) Determine the total cost with the basic EOQ model. (5 marks)
- (c) Analyze whether the firm should take advantage of the discount or order the basic EOQ order size. (11 marks)

- Q2** (a) Describe **TWO (2)** factors determining the appropriate level of safety inventory. (4 marks)
- (b) SARA fashion stocks a muslim hijab. Assume that weekly demand for hijab at SARA fashion is normally distributed, with a mean of 5500 and standard deviation of 500. The manufacturer takes three weeks to fill an order placed by the SARA fashion manager. The store manager currently orders 15,000 pieces hijab when the inventory on hand drops to 4000 pieces.
- Construct:
- (i) Safety inventory. (3 marks)
- (ii) Cycle Inventory. (2 marks)
- (iii) Average Inventory and flow time. (5 marks)
- (c) Compare the decision policies between continues review and periodic review in determining when and how much to order. (6 marks)

- Q3** (a) Differentiate modes of transportation between package carriers, pipeline and intermodal. (9 marks)
- (b) Company A is looking for the suitable design options for a transportation network. The requirement for the network includes eliminate of intermediate warehouse, simplicity of operation and coordination, directly shipment and shorten delivery time from supplier to buyer.
- (i) Describe the suitable network for Company A. (2 marks)
- (ii) Illustrate the transportation network. (3 marks)
- (c) Discuss **TWO (2)** main risk to be considered in the transportation. (6 marks)
- Q4** (a) Describe the role of sourcing in supply chain. (2 marks)
- (b) Demonstrate **THREE (3)** benefits of effective sourcing decisions. (9 marks)
- (c) Analyze **THREE (3)** factors that influence the outsourcing decision. (9 marks)
- Q5** (a) Compare the importance of Information Technology (IT) in supply chain. (5 marks)
- (b) Distinguish **THREE (3)** categories that increased sustainability in a supply chain. (6 marks)
- (c) Propose **THREE (3)** opportunities that improved sustainability in supply chain drivers. (9 marks)

-END OF QUESTION-