



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
(ONLINE)
SEMESTER II
SESSION 2020/2021**

COURSE NAME : OPERATION MANAGEMENT
COURSE CODE : MPA 10203
PROGRAMME CODE : MPA
EXAMINATION DATE : JULY 2021
DURATION : 3 HOURS
INSTRUCTION : ANSWERS ALL QUESTIONS
OPEN BOOK EXAMINATION

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

TERBUKA
CONFIDENTIAL

- Q1** Best Buy's failure to manage its inventory was not only detrimental to sales, it also eroded the customer trust that is central to any retailer's success. With numerous articles with titles such as "How Best Buy Stole Christmas", the negative publicity was overwhelming. According to Lee Resources Inc. 91% of unhappy customers will not willingly do business with a company they had a bad experience. The nature of online business means that customers can move their business over to Amazon with the mere click of a button - which many did after this fiasco.

Although Best Buy never released the details of what happened, it's clear that information mismatch is to blame for Best Buy's inability to deliver. Their solution of cancelling orders rather than delaying shipping seems to indicate that they oversold products that they didn't have in stock. It's unlikely though that Best Buy would intentionally set out to disappoint their customers. However, the inability to deliver in the busiest season of the year directly plays into the narrative already on the minds of many consumers - that Best Buy could no longer adapt to market conditions, and that it was on its way down.

Source: Ruoshan Tao, 'Inventory Management Stockouts Case Study', Intuit Inc. 2014

Based on Best Buy Case Study above, answer the following questions:

- (a) Discuss **THREE (3)** factors which contribute to inventory stockouts. (15 marks)
- (b) Propose **TWO (2)** inventory management control process which will eliminate similar inventory stockout problem. (10 marks)
- Q2** Nigella loves to bake cake as a hobby. She normally bake and sell the cakes ordered by close family, relatives and friends during her free time and special occasions such as wedding and birthday events. After 20 years of working, she finally decided to retire as a lecturer and turns her hobby into a full time business. She is contemplating on the right operation model between 'Push' and 'Pull' systems for her new business start-up.
- (a) Differentiate **TWO (2)** advantages and **TWO (2)** disadvantages of both operation models as in the scenario above. (16 marks)
- (b) Propose the right operation model for Nigella business. (9 marks)

Q3 Gardenia plan to set-up a new factory in Johor to supply bread in the major cities in the state. Table **Q3** summarizes the location coordinates and actual customer consumption load for each city.

Table Q3: City Location and Customer Consumption

Retail Location (Customer)	X-Coordinate (Km)	Y-Coordinate (Km)	Load, L (Consumption in Kg per week)
Johor Bahru	60	20	50
Segamat	45	70	150
Batu Pahat	20	50	100
Pontian	30	30	200

- (a) Compute the optimal location coordinate (X_n and Y_n) for the new Gardenia bread factory using Centre-of-Gravity method. (10 marks)
- (b) Analyze **FIVE (5)** factors that influence the location decision of the new factory or facility. (20 marks)

Q4 Harley Davidson is founded in Milwaukee USA in 1903. It has strong competition with German and Japanese motorcycle companies for many years. As part of management’s lean manufacturing effort, Harley groups production of parts that require similar process together. The result is work cells which perform in one location all the operations necessary for production of a specific module. This process strategy is known as ‘Repetitive Focus Modular’.

(Source: Jay Heizer and Barry Render, ‘Operations Management’, 11th Edition Pearson 2014)

Compare between Repetitive Focus process and other manufacturing process strategies based on its strengths and weaknesses. Focus on **TWO (2)** strengths and **TWO (2)** weaknesses only.

(20 marks)

-END OF QUESTIONS-