



UNIVERSITI KUALA LUMPUR
MALAYSIAN INSTITUTE OF INFORMATION TECHNOLOGY

FINAL EXAMINATION
JANUARY 2016 SEMESTER

COURSE CODE : IEB 30903
COURSE NAME : OPERATIONS MANAGEMENT
PROGRAMME NAME : BACHELOR OF BUSINESS TECHNOLOGY (HONS)
(FOR MPU: PROGRAMME LEVEL) : COMPUTER ENTREPRENEURIAL MANAGEMENT
DATE : 26 MAY 2016
TIME : 9.00 am – 11.30 am
DURATION : 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES

1. Please **CAREFULLY** read the instructions given in the question paper.
2. This question paper has information printed on both sides of the paper.
3. This question paper consists of **TWO (2)** sections; Section A and Section B.
4. Answer **ALL** questions in Section A. For Section B, answer **TWO (3)** questions.
5. Please write your answers on the answer booklet provided.
6. Answer all questions in English language **ONLY**.

THERE ARE 5 PAGES OF QUESTIONS, INCLUDING THIS PAGE.

SECTION A (Total: 60 marks)

INSTRUCTION: Answer ALL questions.
Please use the answer booklet provided.

Question 1

Zara is a Spanish clothing and accessories retailer. For a long time now, Zara has been a successful and innovative firm with its competitive advantage lying in its operations. The distinctive components of their operations (e.g. responsive production, excellent logistics) have been well documented. The secret of Zara's success is its speed – four weeks for a new fashion idea to hit the shops – and the feedback that store managers send to head office, to help it fine-tune its ideas. There is also firm control from Spain, the sole logistics hub. For basic items, 34% of manufacturing is outsourced to Asia, and 14% to Europe, while for high-fashion stuff, 49% of what is sold is cut and finished in Spain. Long lead times and the co-occurring inventories are more tolerable for basic T-shirts.

Answer the following questions based on the excerpt above:

- (a) Describe the meaning of efficiency and effectiveness. Explain using the example of Zara's operations strategy mentioned in the excerpt above.
- (b) Explain the value created from the efficiency and effectiveness described above.

(15 marks)

Question 2

Straddling occurs when a firm seeks to match what a competitor is doing by adding new features, services, or technologies to existing activities. This often creates problems if trade-offs need to be made.

Explain how trade-offs occur by using **TWO (2)** examples of how other airline companies were straddling to match AirAsia Berhad.

(15 marks)

Question 3

You are working for a company that makes prepared breakfast cereals like cornflakes. Your company is planning to introduce a new hot breakfast product made from whole grains that would require some minimal preparation by the consumer. This would be a completely new product for the company.

How would you propose forecasting initial demand for this product?

(15 marks)

Question 4

An ice cream stand has a single window and one employee to serve customers. During their busy season, 30 customers arrive each hour on average. It takes 1.5 minutes on average to serve a customer.

- (a) Given the formula $\rho = \lambda/\mu$, calculate the utilisation of the employee.
 (b) How long would customers have to wait in line, on average, at the ice cream shop?
 Choose the right formula from the given list below.

Formula:

Model 1:

$$L_q = \lambda^2 / \mu(\mu - \lambda)$$

$$L_s = \lambda / (\mu - \lambda)$$

$$W_q = L_q / \lambda$$

$$W_s = L_s / \lambda$$

Model 2:

$$L_q = \lambda^2 / 2\mu(\mu - \lambda)$$

$$L_s = L_q + \lambda/\mu$$

$$W_q = L_q / \lambda$$

$$W_s = L_s / \lambda$$

Model 3:

$$L_s = L_q + \lambda/\mu$$

$$W_q = L_q / \lambda$$

$$W_s = L_s / \lambda$$

(15 marks)

SECTION B (Total: 40 marks)**INSTRUCTION: Answer only TWO questions ONLY.****Please use the answer booklet provided.****Question 5**

Explain in detail **FOUR (4)** of the following technologies by relating their purposes to operations management:

- PDM
- CAE
- RFID
- SCM
- DSS
- AGV
- Robotics
- CAD/CAM
- e-Procurement

(20 marks)

Question 6

Based on your experience or observation, describe how lean management system can work in service environments. Support your explanation with discussion on **FOUR (4)** examples.

(20 marks)

Question 7

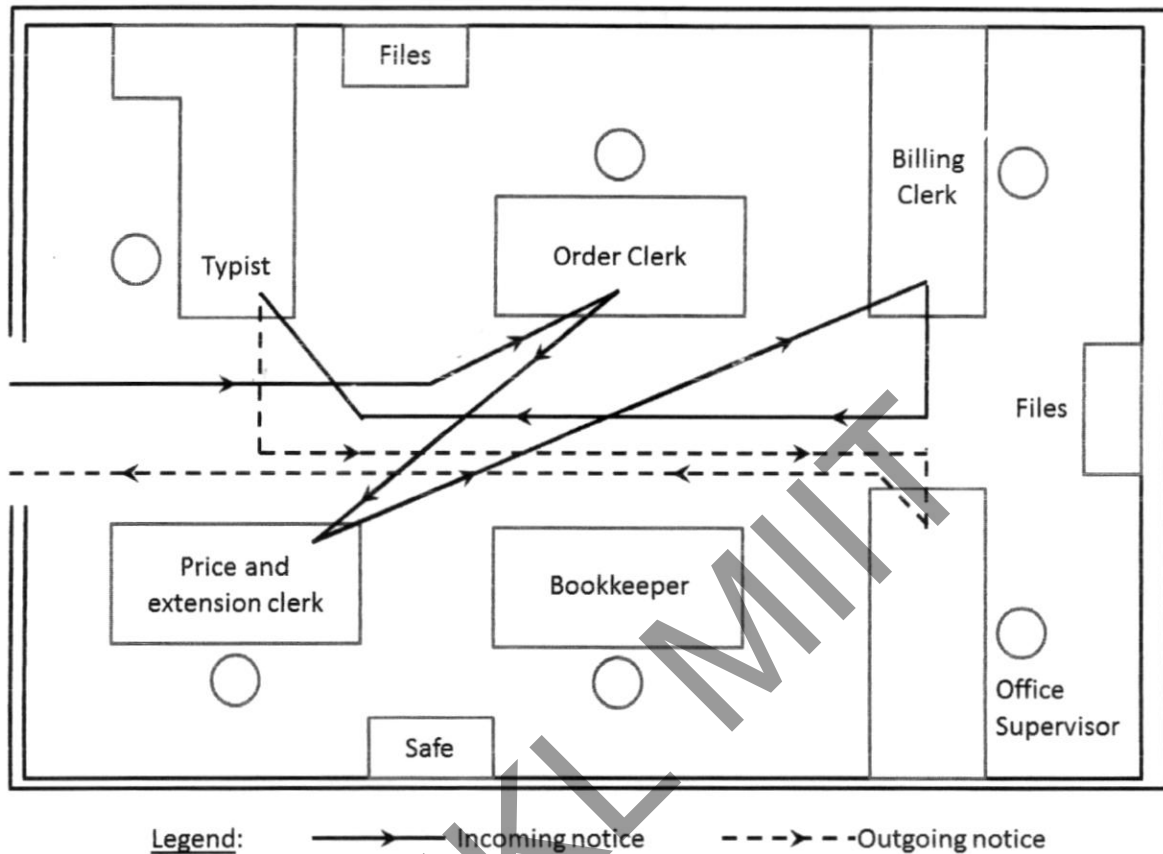


Figure 1

SweetTangerine Sdn Bhd ships a high volume of individual orders for oranges to South East Asia. The paperwork for the shipping notices is done in the layout shown in Figure 1. As an Operation Manager, you are required to revise the layout to improve the flow and conserve space if possible, by answering the following questions.

- Illustrate the routing matrix based on the flow of notice.
- Illustrate the proposed layout and show the improvement made on the flow.
- Provide detail explanation to support your suggestion on the proposed layout.

(20 marks)

END OF EXAMINATION PAPER