



UNIVERSITI KUALA LUMPUR
Malaysia France Institute

FINAL EXAMINATION
JANUARY 2010 SESSION

SUBJECT CODE : FIB 36402
SUBJECT TITLE : PRODUCTION AND OPERATION MANAGEMENT
LEVEL : BACHELOR
TIME / DURATION : 4.00pm – 6.00pm
(2 HOURS)
DATE : 27 APRIL 2010

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
 2. This question paper is printed on both sides of the paper.
 3. Please write your answers on the answer booklet provided.
 4. Answer should be written in blue or black ink except for sketching, graphic and illustration.
 5. This questions paper consists of TWO (2) sections. Section A and B. Answer ALL questions in section A. For section B, answer THREE (3) questions only.
 6. Answer ALL questions in English.
 7. Table for specific weight and density of common liquids and gases are appended.
-

THERE ARE 3 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A (Total: 40 marks)

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

Question 1

Briefly identify the various tactics included within the scope of operations management. (5 marks)

Question 2

What is time series analysis and when should it be used? (5 marks)

Question 3

What is a continuous process? Give examples of goods produced in a continuous process. (5 marks)

Question 4

What is a flexible manufacturing system? (5 marks)

Question 5

Define Inventory. (5 marks)

Question 6

Define loading. What is the importance of loading? (5 marks)

Question 7

What information do Gantt charts provide? (5 marks)

Question 8

What are EOQ and ELS? How are they different? (5 marks)

SECTION B (Total: 60 marks)**INSTRUCTION: Answer only THREE questions.****Question 9**

Data for the cost of failures of a certain aircraft at a local military base during the last 4 periods are as below. Using the exponential smoothing generate forecast for Feb, March and April. Use $\alpha = 0.1$ and $\beta = 0.2$, and the TAF of RM.850K for January.

Month	Actual
Dec	RM900K
Jan	RM890K
Feb	RM800K
Mar	RM825K
Apr	

(20 marks)

Question 10

A large bakery buys flour in 25kg bags. The bakery uses an average of 4860 bags a year. Preparing an order and receiving a shipment of flour involves a cost of RM10 per order. Annual carrying cost is RM75 per bag.

- Determine the economic order quantity. (5 marks)
- What is the average number of bags on hand? (5 marks)
- How many orders per year will there be? (5 marks)
- If ordering cost were to increase by RM1 per order, how much would that affect the minimum total annual cost? (5 marks)

Question 11

Construct a product tree diagram and develop a material requirement plan that will yield 400 units of product P at the start of week 7 based on the information given.

Item	Parent	Qty for 1 Parent	Currently on Hand	Schedule Receipt	Lead Time (week)	Order Qty
P	-	-	-	-	1	Lot for lot
A	P	1	100	0	1	Lot for lot
B	P	1	0	0	1	450
C	A,B	1,2	90	100 (wk2)	2	600
D	B	2	50	80 (wk2)	2	Lot for lot

(20 marks)

Question 12

As a supermarket manager, how would you go about evaluating the criticality of an inventory shortage?

(20 marks)

END OF QUESTIONS