CONFIDENTIAL

SET B

UNIVERSITI KUALA LUMPUR
Malaysia France Institute

FINAL EXAMINATION

JANUARY 2011 SESSION

SUBJECT CODE	:	FVB 40103
SUBJECT TITLE	:	OPERATING MANAGEMENT
LEVEL	:	BACHELOR
TIME / DURATION	:	9.00am – 12.00pm (3 HOURS)
DATE	:	05 MAY 2011

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. This question paper consists of FIVE (5) questions. Answer FOUR (4) questions only.

5. Answer all questions in English.

THERE ARE 5 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

INSTRUCTION: Answer FOUR (4) questions only.

Total Marks: 100 Marks

Question 1 (25 marks)

(a) Identify the **THREE (3)** major functional areas of business organizations and briefly describe how they interrelate.

(6 marks)

(b) Define the following terms:

    i.   Lead Time

(2 mark)

    ii.   Craft Production

(2 mark)

    iii.   Mass Production

(2 mark)

(c) How can global operations improve the supply chain?

(2 marks)

(d) Explain the term time-based strategies and give **THREE (3)** examples.

(5 marks)

(e) A firm cleans chemical tank cars in the Bay Sg. Chua area. With standard equipment, the firm typically cleaned 70 chemical tank cars per month. They utilized 10 gallons of solvent, and two employees worked 20 days per month, 8 hours a day. The company decided to switch to a larger cleaning machine. Last April, they cleaned 60 tank cars in only 15 days. They utilized 12 gallons of solvent and the two employees worked 6 hours a day.

    i.   What was their productivity with the standard equipment?

(2 marks)

    ii.   What is their productivity with the larger machine?

(2 marks)

    iii.   What is the change in productivity?

(2 marks)

Question 2 (25 marks)

(a) Describe the **THREE (3)** phases of project management

(6 marks)

(b) What are the key success factors of project management?

(5 marks)

(c) What is the basic difference between PERT and CPM?.

(2 marks)

(d) Distinguish between utilization and efficiency.

(4 marks)

(e) A network consists of the activities in the following list. Time given is in weeks (Table 1).

Activity	Preceding	Time
A	--	8
B	--	3
C	A	7
D	A,B	3
E	C	4
F	D	6

Table 1

　　i.　　Draw the network diagram.

(2 marks)

　　ii.　　Calculate the ES, EF, LS, LF, and Slack for each activity.

(5 marks)

　　iii.　　What is the project completion time?

(1 mark)

Question 3 (25 marks)

(a) Identify **FIVE (5)** factors that effect location decisions at the site level.

(5 marks)

(b) Define the following terms:

    i.   Performance

(1 mark)

    ii.   Special feature

(1 mark)

    iii.   Conformance

(1 mark)

    iv.   Aesthetics

(1 mark)

(c) List **ALL** the steps in Capacity Planning Process

(8 marks)

(d) What is it called when competing companies are located next to each other? Why do they do this?

(3 marks)

(e) An executive conference center has the physical ability to handle 1,100 participants. However, conference management personnel believe that only 1,000 participants can be handled effectively for most events. The last event, although forecasted to have 1000 participants, resulted in the attendance of only 950 participants. What are the utilization and efficiency of the conference facility?

Design Capacity = 1,100 participants
Effective Capacity = 1,000 participants
Actual Output = 950 participants

(5 marks)

Question 4 (25 marks)

(a) Identify **SEVEN (7)** steps involved in forecasting.

(7 marks)

(b) List the specific weaknesses of each of these approaches in developing a forecast:

    i.   Consumer surveys

    ii.   Salesforce composite

    iii.   Committee of managers or executives

(6 marks)

(c) What are the difference between quantitative and qualitative forecasting methods?

(4 marks)

(d) Weekly sales of ten-grain bread at the local organic food market are in the table below. Based on this data, forecast week 9 using a five-week moving average (Table 2).

Week	Sales
1	415
2	389
3	420
4	382
5	410
6	432
7	405
8	421

Table 2

(2 marks)

(e) By referring to the following data in Table 3,

Period	Number of Complaints
1	60
2	65
3	55
4	58
5	64

Table 3

Prepare a forecast using each of these approaches:

    i.   The appropriate naïve approach

                                                                 (1 mark)

    ii.   A three-period moving average

                                                                 (2 marks)

    iii.   A weighted average using weights of 0.50 (most recent), 0.3 and 0.2

                                                                   (3 marks)

Question 5 (25 marks)

(a) List **ALL** the **FIVE (5)** steps of DMAIC.

                                                                (5 marks)

(b) Identify the major concepts of TQM.

                                                                  (6 marks)

(c) What is the difference between conforming quality and target-oriented quality?

                                                                 (4 marks)

(d) Explain how just-in-time processes are related to the quality of an organization's.

                                                                  (6 marks)

(e) Based on your own experience, construct a cause-and-effect diagram showing why a student might be dissatisfied with the cafeteria.

                                                                 (4 marks)

END OF QUESTION