



UNIVERSITI KUALA LUMPUR
Malaysia France Institute

FINAL EXAMINATION
SEPTEMBER 2013 SESSION

SUBJECT CODE : FLD 30302
SUBJECT TITLE : MAINTENANCE MANAGEMENT
LEVEL : DIPLOMA
TIME / DURATION : 2 HOURS
DATE :

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. Answers should be written in blue or black ink except for sketching, graphic and illustration.
 5. This question paper consists of **TWO (2)** sections. Section A and B. Answer **ALL** question in Section A. For Section B, answer **TWO (2)** questions only.
 6. Answer all questions in English.
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THERE ARE 3 PRINTED PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A (Total: 60 marks)**INSTRUCTION: Answer ALL questions.****Please use the answer booklet provided.****Question 1**

Give the definition of maintenance and maintenance management.

(10 marks)

Question 2

Explain 4 main important roles of maintenance department.

(10 marks)

Question 3

Give the definition of TEROTECHNOLOGY?

(10 marks)

Question 4

Equipment is subject to deterioration that causes malfunction and breakdown. Give 5 implications of this phenomenon that are related to manufacturing industries.

(10marks)

Question 5

List 5 reasons of FAILURE.

(10 marks)

Question 6

XYZ SDN BHD wants to purchase a new light bulb from DEF SDN BHD. Before deciding on the purchase, XYZ SDN BHD wants to know how reliable the bulbs are. In order to determine the reliability value of the bulbs, they first must calculate the failure rate. To obtain that result, they have performed a series of life tests on ten sample bulbs. The results of the life tests are tabulated in **Table 1**. Based on the table, calculate the value of the failure rate of the bulbs.

(10 marks)

Table 1: Bulb failures data

BULBS	Hours to failure
1	400
2	350
3	450
4	400
5	400
6	600
7	300
8	300
9	300
10	500

SECTION B (Total: 40 marks)

INSTRUCTION: Answer Question 7 and choose either Question 8 or 9. Please use the answer booklet provided. All questions are based on the following CASE STUDY.

Case Study

You are working with a company that is using the full set of the DC Motors types DC180ATZ. The management team of the company has appointed you as the technician who is responsible to ensure the motors will always in good running condition to avoid failure. Given in **ATTACHMENT A** is the Installation, Operation and Maintenance Manual of DC Motors types DC180ATZ, C180ATZ and DC210ATZ.

Question 7

- a) Identify and list down 10 maintenance activities that should be performed on the motor. (10 marks)
- b) Give 2 important tools and 2 required materials that to be used to perform the maintenance tasks on the commutator of the motor. Explain their functions and purposes. (10 marks)

Question 8

Based on the answer of Question 7 (a):

- a) Determine the frequency and time required to complete each activity, and
b) Develop an annual maintenance schedule for the motor. (20 marks)

Question 9

Prepare an example of work order to instruct maintenance workers to perform the lubrication task on the motor.

(20 marks)

END OF QUESTION PAPER