



UTHM

Universiti Tun Hussein Onn Malaysia

**FINAL EXAMINATION
SEMESTER II
SESSION 2014/2015**

COURSE NAME : BUILDING MAINTENANCE

COURSE CODE : BFB 40903

PROGRAMME : BACHELOR OF CIVIL
ENGINEERING WITH HONOURS

EXAMINATION DATE : JUNE 2015 / JULY 2015

DURATION : 3 HOURS

INSTRUCTION : ANSWER ALL FIVE (5)
QUESTIONS PROVIDED

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THIS QUESTION PAPER CONSISTS OF FIVE (5) PAGES

Q1 Maintenance management inventories constitute the largest component of current asset in most maintenance business enterprises.

a) Explain the objectives of building maintenance inventories. (5 marks)

b) List out the flowchart of procedures for Maintenance Inventory Work. (5 marks)

c) Discuss how operation and maintenance manual development process involve in Maintenance Information System (MIS). (10 marks)

Q2 Maintenance Department is responsible and accountable for the way equipment runs and to achieve the required level of maintenance performance.

(a) If you are appointed as maintenance engineer, propose a simple organisation structure for your department in managing building maintenance. (5 marks)

(b) Explain **FIVE (5)** building maintenance policies that influence maintenance management department. (5 marks)

(c) Discuss the typical goals and objectives for a good building maintenance organization. (10 marks)

- Q3** Life Cycle Cost (LCC) is a tool to control costing in building maintenance.
- a) Explain **FIVE (5)** objectives of life cycle cost in building maintenance. (10 marks)
 - b) State and explain an equation used in analyzing life cycle cost. (10 marks)
- Q4** Over the years, there has been increasing abandonment of building projects and infrastructural facilities which has led to the dilapidation, degradation and deterioration of building structures.
- (a) Define and explain about ‘rectification of work estimation’ in building maintenance. (10 marks)
 - (b) Suggests and discuss **FIVE (5)** effective solutions on project execution and monitoring process of management on building maintenances work for cost overruns in construction projects. (10 marks)
- Q5** Contract document is a compulsory part of maintenance works where contracts need to be done between parties involved before a maintenance work is held.
- (a) Explain **FIVE (5)** types of building maintenance contract that are used in the construction industry. (10 Marks)

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- (b) **FIGURE Q5(B)**, shows a scenario happened to residential buildings after an earthquake in Katmandu, Nepal on the 27th April 2015. As a maintenance engineer, design and propose a building maintenance policy and contract to Nepal government.

(10 marks)

-END OF QUESTION-

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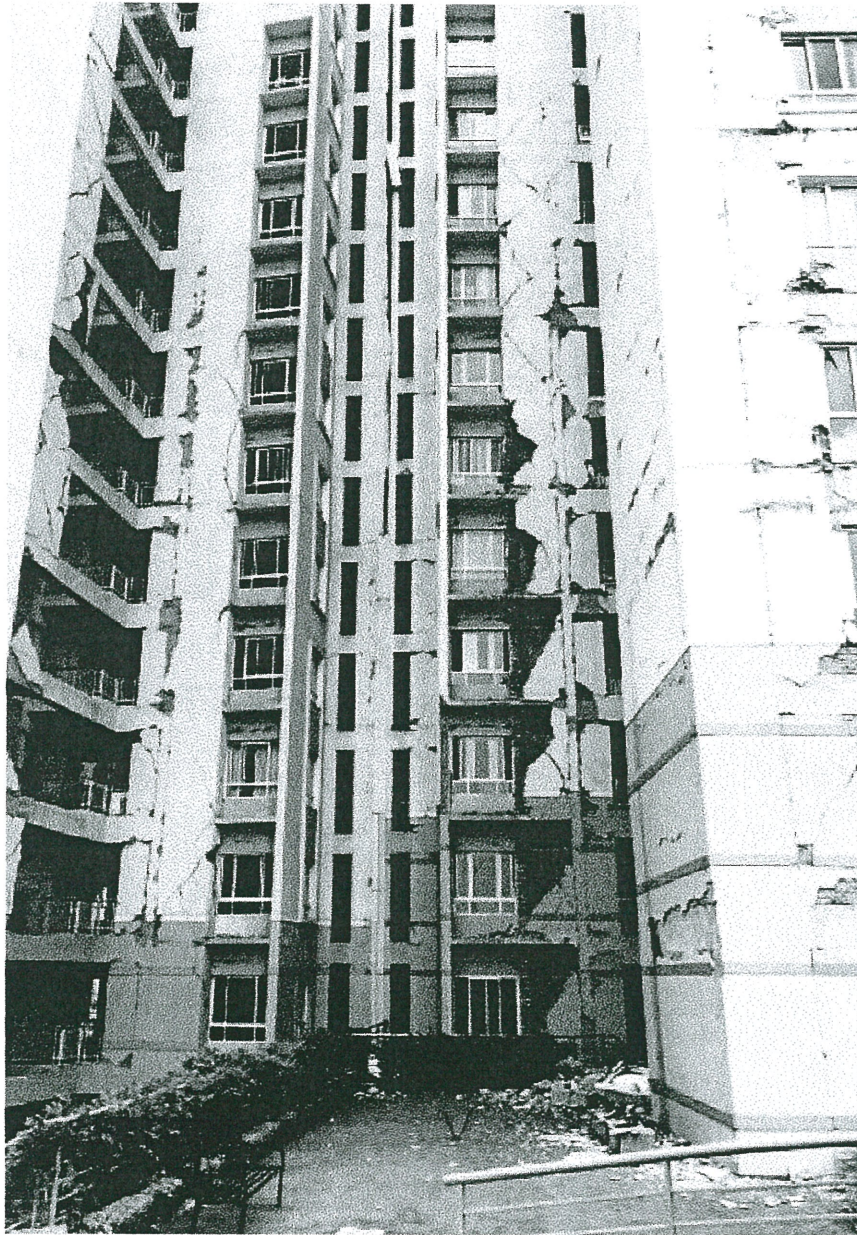


FIGURE Q5(b):

Effect of Earth Quake to residential building at Katmandu, Nepal

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