



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2018/2019**

COURSE NAME : BUILDING SERVICES AUDIT
AND INSPECTION

COURSE CODE : BNB 41203

PROGRAMME CODE : BNB

EXAMINATION DATE : DECEMBER 2018 / JANUARY 2019

DURATION : 2 HOURS 30 MINUTES

INSTRUCTION : ANSWER ALL QUESTIONS

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THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

- Q1** (a) An audit team should be established to organize and manage the process. The team should include the building owner, facility manager and environmental and maintenance staff. The capabilities of these staff members should help determine the necessity of hiring outside experts. Specifically, justify why and when outside expertise is needed to perform the building services audit?
(15 marks)
- (b) An efficient building services auditor must possess certain “qualities” besides statutory qualification, so that he/ she can carry out his/ her work efficiently and smoothly. Discuss the “qualities” required with appropriate examples.
(10 marks)
- Q2** (a) The electrical services is one of the most critical elements of any building. It’s also one that can be the most dangerous if material defects exist. The scope of an inspector is to find and note defects, so this part of an inspection is one where a lot of attention to detail is required. Based on your capacity as a building services inspector, discuss in detail the electrical components to be considered for the inspection.
(10 marks)
- (b) There are many reasons behind the necessity of getting an electrical inspection done. In brief, state the reasons?
(8 marks)
- (c) An electrical inspection refers to the thorough checkup of the electrical components, connections and wiring installed in the buildings. For some reason, failure may occur. How to prevent different problems during electrical inspection?
(7 marks)
- Q3** (a) Mechanical equipment can break down at any time when it is in service, which can lead to delays in operation, increasing costs and liability. To prevent these situations from occurring, it is important to schedule inspections periodically. This will ensure the equipment has been installed, operated, and maintained properly. With a suitable examples, explain on how this periodic inspections is performed.
(15 marks)
- (b) The time between periodic inspection and testing of installations should be based on a risk assessment with the intervals dependent on a number of parameters. Describe those parameters and the relationship with periodic inspections.
(10 marks)

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- Q4** (a) Inspection of a building damages can be as simple as a recording visual condition of the structure or a more complicated one, such as a forensic study of an incident or catastrophe in order to find out about the origin and nature of deterioration and degradation. Describe the steps in the assessment procedure for evaluate damages in a building. (15 marks)
- (b) Explain the various causes for deterioration of building fabrics. (10 marks)

- END OF QUESTION -

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