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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

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

COURSE NAME : SUSTAINABLE CONSTRUCTION
COURSE CODE : BPF 44103
PROGRAMME CODE : BPC
EXAMINATION DATE : DECEMBER 2018 / JANUARY 2019
DURATION : 2 HOURS 30 MINUTES
INSTRUCTION : ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

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- Q1** In order to promote energy-efficient construction and sustainable development, some related policies, including the Development of Malaysian standard MS:1525 (2001), UBBL (Uniform Building By-Law 1984) and Environmental Impact Assessment (EIA) are implemented.

Discuss those policies with regards to sustainable construction.

(15 marks)

- Q2** Indoor environment quality (IEQ) refers to the environmental quality within and around buildings and structures, especially as it relates to the health and comfort of building occupants. The importance of indoor environmental quality (IEQ) is its impacts on building energy usage, health and productivity of occupants.

Outline **SIX (6)** parameters for the determination on IEQ.

(30 marks)

- Q3** Relate the following activities either with water efficiency or water conservation.

- (a) The usage of rainwater harvesting system for water supply at construction site.

(10 marks)

- (b) Landscaping the built environment with native plants and grasses that use little to no irrigation water.

(10 marks)

- (c) Use water recycling method for housing development project.

(10 marks)

Q4 The criteria for selecting a new construction site normally include engineering, environmental and economic aspects. Usually, some of these criteria limit the choice of potential sites to a given few. The sites are then investigated further for its suitability through site visits and analysis on existing information.

(a) Explain the benefits for contractors when the selection of a new construction site follows a Green Building Index's criteria.

(5 marks)

(b) Apply **FOUR (4)** strategies of sustainable site planning for a new construction site.

(20 marks)

- END OF QUESTIONS -

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