



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2016/2017**

COURSE NAME : GREEN BUILDING TECHNOLOGY
COURSE CODE : BNB 40703
PROGRAMME : 4 BNB
EXAMINATION DATE : DECEMBER 2016 / JANUARY 2017
DURATION : 3 HOURS
INSTRUCTION : ANSWER **FOUR (4)** QUESTIONS ONLY

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

- Q1**
- (a) Differentiate the terminologies below:
 - (i) Green Building
 - (ii) Green Materials
 - (iii) Green Technology

(9 marks)
 - (b) Discuss the correlation between Green Building, Sustainable Development and Climate Change in order to provide occupants live in a healthy and coziness environment.

(10 marks)
 - (c) Recommend **THREE (3)** green tips that we can support to decrease climate change risk.

(6 marks)

- Q2**
- (a) Define Green Building Index (GBI).

(2 marks)
 - (b) Match **THREE (3)** worldwide country with green building rating standards.

(3 marks)
 - (c) Categorize and briefly explain **SIX (6)** main assessment criteria's in GBI and state **TWO (2)** examples for each criteria.

(18 marks)
 - (d) List **TWO (2)** advantages if a building is classified under GBI rating.

(2 marks)

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- Q3** Nowadays, green building represents one of the most significant and exciting opportunities for sustainable growth on both a national and a global scale. The design of built environment impacts us all, as well as our economies and the natural environment and Green Building Council are driving its transformation towards sustainability.
- (a) Briefly discuss **THREE (3)** main process in Green Building Technology.

(9 marks)
 - (b) Sketch and design a residential house towards to green building and sustainability. In your sketches, label minimum **SIX (6)** elements effected on economies and natural environment.

(11 marks)
 - (c) From conventional building construction, recognize **FIVE (5)** environmental impacts of buildings.

(5 marks)

- Q4**
- (a) List out **FIVE (5)** common environmental issues at construction site. (5 marks)
 - (b) Classify **FIVE (5)** legislative requirements for Green Practices in Building Construction Work and give an example for each legislative. (15 marks)
 - (c) From answer Q4 (b), investigate the solutions for answer Q4 (a). (5 marks)
- Q5** Implementation of Green Practices ordinarily towards environmental Best Management Practices (BMP).
- (a) Interpret Industrialized Building System (IBS) and BMP. (5 marks)
 - (b) List and sketch **FIVE (5)** groups of IBS system commonly used in Malaysia. (10 marks)
 - (c) Differentiate between BMP for systems and On-site BMP. (10 marks)

- END OF QUESTIONS-

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