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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

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

COURSE NAME : ARCHITECTURE AND BUILDING
TECHNOLOGY

COURSE CODE : BNB 30103

PROGRAMME : BNB

EXAMINATION DATE : DECEMBER 2014 / JANUARY 2015

DURATION : 3 HOURS

INSTRUCTION : ANSWER ALL QUESTIONS

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

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- Q1** (a) Building services are divided into three main categories: mechanical services, electrical services and building operations. For each category, state **THREE (3)** types of building services system. (9 marks)
- (b) Select **ONE (1)** appropriate example of the above building services systems; explain why the system is essential to a building. (7 marks)
- (c) Propose **TWO (2)** types of building services systems that you think are necessary for an examination hall and state why you choose those systems. (4 marks)
- Q2** (a) Differentiate between **FOUR (4)** types of plan drawing in working drawings. (10 marks)
- (b) With the aid of sketches, describe the method to draw the vertical section of a building. (6 marks)
- (c) Building setback refers to the distance between the boundaries lines of the building, reserves or other buildings where no construction is allowed. Justify why the building setback is needed. (4 marks)
- Q3** (a) Historically, the role of building services technologies would have been to install all the services within the space allocated but a new focus on sustainable development in buildings has changing the job responsibility. Based on the above statement, discuss the roles and responsibilities of building services technologies today. (8 marks)
- (b) Nowadays, the design of the building services systems is supported by a range of tools. Outline **FIVE (5)** typical building services design tools. (5 marks)
- (c) With the aid of diagram, create the process of brief and design development for building services. (7 marks)

- Q4**
- (a) Classify the **THREE (3)** acts adopted for the purpose of planning and preparing a development?
(3 marks)
 - (b) Define the meaning of development and show in detail the **THREE (3)** development needs.
(7 marks)
 - (c) Summarize the stage, purpose of work and decisions to be reached, task to be done and people directly involve in the process of development
(10 marks)
- Q5**
- (a) With appropriate examples, compare the following concepts:
 - (i) Building alteration.
 - (ii) Building preservation.
 - (iii) Adaptive reuse.(15 marks)
 - (b) Specifically, under the revised Acts, the Professional Architect or Professional Engineer or Registered Building Draughtsman of a project who submits the building plans (PSP) will have to issue the Certificate of Completion and Compliance (CCC) before owners can take possession of their properties and live in them. Briefly, indicate **FIVE (5)** responsibilities of Principle Submitting Person (PSP) under CCC.
(5 marks)

- END OF QUESTION -