

CONFIDENTIAL



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

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

TERBUKA

COURSE NAME : SUSTAINABLE BUILT ENVIRONMENT
COURSE CODE : BWJ 30203
PROGRAMME CODE : BWW
EXAMINATION DATE : DECEMBER 2016 / JANUARY 2017
DURATION : 3 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

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

CONFIDENTIAL

- Q1** (a) Define sustainable development and explain how this concept is different from the traditional view of the community. (5 marks)
- (b) Explain how the concept sustainable development is applied in built environment. (5 marks)
- (c) Hydroelectric power generation is one alternative source of energy. However, this can also cause impact to the environment. Outline two possible impacts of hydropower and demonstrate how these impacts are caused. (10 marks)
- Q2** (a) The growth of population is linked to the society's level of technological development.
- (i) Explain briefly the **FOUR (4)** stages of demographic transition theory. (4 marks)
- (ii) Illustrate how technology holds the key to population control. (6 marks)
- (b) Urban ecology is the study of the link between the physical and social dimensions of cities. Outline **TWO (2)** main factors considered in urban ecology study and conclude why such factors are significant in an urban ecology study. (10 marks)
- Q3** (a) Illustrate **FIVE (5)** key components of the Sustainable Community Development model. (5 marks)
- (b) The quality of Environmental Impact Assessment (EIA) depends on the output, which is the Environmental Impact Statement (EIS). Many EIA fails to meet the minimum standard which led to the lack of EIA quality and efficiency. Analyze this scenario. (5 marks)
- © TESCO supermarket has been proposed to be developed in Parit Raja, Batu Pahat mainly to enhance the socio-economic status of the local community. As a project consultant, you are required to prepare an EIA report that may convince the stakeholders on the sustainability of this project. Design a project guideline to which your EIA report is based. (10 marks)
- Q4** (a) Outline the stages of Environmental Impact Assessment (EIA) method and explain the importance of the 'Auditing' stage. (5 marks)

TERBUKA**CONFIDENTIAL**

- (b) Flood is a common occurrence whether the community is inland or near water bodies like rivers and sea. Design a flood risk adaptation strategy appropriate to low lying areas.
(10 marks)
- (c) Justify why the traditional Malay house is considered as a sustainable design.
(5 marks)
- Q5** (a) Compare between passive design strategy and active design energy in achieving optimum energy efficiency.
(5 marks)
- (b) Malaysia being in the tropics is endowed with resources that can be harnessed as alternative sources of energy. Propose one alternative source of energy for Malaysia and discuss both advantages and disadvantages of your proposal. [Note: Do not repeat **Q1(c)** in your answer].
(10 marks)
- (c) “*Energy liberated in nuclear reactions is roughly a million times greater per unit mass of fuel that is liberated in a chemical process*”. Given this statement, should Malaysia propose a nuclear power plant a renewable source of energy? Justify your answer.
(5 marks)

- END OF QUESTIONS -