



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2017/2018**

COURSE NAME : SUSTAINABLE BUILT ENVIRONMENT
COURSE CODE : BWJ 30203
PROGRAMME CODE : BWW
EXAMINATION DATE : DECEMBER 2017 / JANUARY 2018
DURATION : 3 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

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

- Q1**
- (a) Define sustainable development according to the Brundtland Report published in 1987, and identify its **THREE (3)** main pillars. (4 marks)
 - (b) Sustainable Development Goals (SDG's) came into force to mobilize efforts to end all forms of poverty, inequalities and combating climate change while ensuring no one is left behind. In your own words, discuss the importance of these goals in achieving "Our Common Future" as discussed in the Brundtland Report. (4 marks)
 - (c) Illustrate the enhanced greenhouse effect and identify **TWO (2)** of its adverse impacts on human health. (6 marks)
 - (d) Differentiate mitigation and adaptation strategies in enhancing community's resilience towards climate change. Give an example for each. (6 marks)

- Q2**
- (a) Explain how the changes in demographic patterns can affect the water demand. (2 marks)
 - (b) High energy efficiency, people oriented, preserve biodiversity and emit low pollution are among the characteristics of green city. Relate how these characteristics are being physically translated into the development of Putrajaya City. (5 marks)
 - (c) Table Q2: Air Pollution Level Index

API	Air Pollution Level
0 - 50	Good
51 - 100	Moderate
101 - 200	Unhealthy
201- 300	Very Unhealthy
+301	Hazardous

Port Klang recorded an unhealthy Air Pollutant Index (API) of 107 in 2016. Analyze the impacts of this scenario towards the local community and suggest **TWO (2)** efforts to improve the air quality.

(4 marks)

- (d) As an environmental consultant in your company, you are required to propose **THREE (3)** low carbon building strategies to be implemented in a future development project to achieve the green building index (GBI) standard. State your proposal.

(9 marks)

- Q3** (a) Explain the importance of urban trees in enhancing the quality of life of the urban dwellers.

(5 marks)

- (b) Relate how poverty can aggravate a person's condition of being socially excluded.

(5 marks)

- (c) Well designed and built, and well-connected are two of the main components of sustainable community strategies. Based on these components, construct a development plan that can help your local community to be economically, environmentally and socially healthy and resilient.

(10 marks)

- Q4** (a) Outline the stages of Environmental Impact Assessment (EIA) method and explain the importance of the 'Monitoring' stage.

(5 marks)

- (b) Illustrate with annotations the functional design of a Malay traditional house and formulate **TWO (2)** design strategies to enhance its sustainability aspect.

(10 marks)

- (c) Evaluate the existing built environment scenario in respond to the frequent flashflood incidents in major cities such as Kuala Lumpur.

(5 marks)

- Q5** (a) Distinguish the difference between "Business As Usual" (BAU) economics and Green Economics (GE).

(5 marks)

- (b) Malaysia being in the tropics is endowed with resources that can be harnessed as alternative sources of energy. Propose **TWO (2)** renewable alternative energy sources that are suitable to be invested in Malaysia and discuss both of its advantages and drawbacks of your proposal.

(10 marks)

- (c) As the world's second largest producer of palm oil, do you think Malaysia should invest more on developing its biodiesel as a one of the future fuel alternatives? Justify your answer.

(5 marks)

- **END OF QUESTIONS** -

TERBUKA