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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION SEMESTER II SESSION 2015/2016

: BFF

: 2 HOURS

COURSE NAME

: NATURE CONSERVATION

COURSE CODE

: BFC 10202/BFC 1062

PROGRAMME CODE

EXAMINATION DATE : JUNE/JULY 2016

DURATION

INSTRUCTIONS

: ANSWER ANY FOUR (4) QUESTIONS ONLY.

THIS PAPER CONSISTS OF FOUR (4) PAGES

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Q1 (a) Relate civil engineering field of work to discuss the link between built and natural environment for one housing development.

(6 marks)

- (b) Malaysia is rich in biodiversity. Discuss how the natural and built environment can achieve sustainability according to Miller's sustainability principal:
 - (i) Nature runs on renewable energy
 - (ii) Nature recycles nutrient and wastes

(9 marks)

- (c) Discuss and suggest solutions for each of the following environmental issues:
 - (i) Unlicensed food stall discharging effluent into the river
 - (ii) Poor solid waste management by small industry

(10 marks)

Q2 (a) Describe ONE (1) issue facing the biodiversity in Malaysia.

(3 marks)

(b) Biodiversity has three important levels. Define genetic, species and ecosystem.

(6 marks)

(c) State SEVEN (7) values of biodiversity and give ONE (1) example each.

(7 marks)

- (d) Discuss and provide example on the effects of interaction between species in biodiversity as listed below:
 - (i) mutualism
 - (ii) parasitism
 - (iii) commensalism

(9 marks)

Q3 (a) Discuss briefly TWO (2) sources of soil contamination and their effect towards environment.

(6 marks)

- (b) A library will be developed as the showcase of the sustainable technologies for both the community and visitors. If you are an environmental consultant responsible for this project, what innovation would you take for managing each wastes listed below?
 - (i) Effluent from greywater
 - (ii) Yellow water
 - (iii) Stormwater

(9 marks)

(c) Discuss **TWO** (2) causes on how urban city is able to produce high level of acid rain and give their possible solutions.

(10 marks)

Q4 (a) State SIX (6) items to consider when formulating a management plan for any ecosystem.

(6 marks)

(b) Discuss briefly the importance of wetland. Illustrate and give explanation on how wetland could improve or treat wastewater effluent from a university hostel.

(9 marks)

- (c) There are two locations namely X and Y. X is a tropical rainforest with a size of 550 hectares and long and narrow in shape. There are many animals and plants species in this forest. Y is grassland with a size of 200 hectares, and circular in shape. Between the two sites:
 - (i) Compare which is easier to manage X or Y and give explanation.
 - (ii) Compare which is more important to conserve X or Y and give explanation.

(10 marks)

- Define natural disaster and discuss briefly their impact to environment. Q5 (a) (5 marks)
 - By using a diagram, illustrate your understanding of 4R-principles of (b) disaster management.

(8 marks)

Explain SIX (6) actions that need to be addressed for flood disaster. (c) (12 marks)

- END OF QUESTIONS -