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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2019/2020**

COURSE NAME : SUSTAINABLE MANAGEMENT OF
NATURAL RESOURCES

COURSE CODE : BWJ 40303

PROGRAMME CODE : BWW

EXAMINATION DATE : DECEMBER 2019 / JANUARY 2020

DURATION : 3 HOURS

INSTRUCTION : ANSWERS ALL QUESTIONS

TERBUKA

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

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- Q1** (a) Define renewable and non-renewable resources and give **ONE (1)** example for each. (4 marks)
- (b) Explain **TWO (2)** goals of Sustainable Development Goals (SDGs) that are related to natural resource. (4 marks)
- (c) By using **ONE (1)** example of natural resource, analyze the current conflict, issues and management of the particular resource in Malaysia. (5 marks)
- (d) (i) Ecosystem management is a human construct, like multiple-use management or other public land management systems or philosophies. Explain attitudes, beliefs and values of human in relation to ecosystem management. (6 marks)
- (ii) Human attitudes to management of natural resource is important to every stakeholders as it will dictate the approach and creativity in managing these resources. By assuming that a particular stakeholder has negative attitude towards management and conservation of biodiversity, demonstrate how we can improve and change these attitudes to be positive. (6 marks)
- Q2** (a) (i) Demonstrate the impacts of human domestication on ecosystem. (4 marks)
- (ii) The selective pressures exerted by indirect human impact reinforce species extinctions and create deeper asymmetries and gaps in downsized communities. Analyze **THREE (3)** components of human activity that reinforce these selective pressures. (6 marks)
- (b) Outline the **FOUR (4)** main components of sustainable agricultural systems. (8 marks)
- (c) If the well-being of the world's less advantaged people is to improve in any lasting sense, long-range concerns about food security and the health of natural resources must be addressed in planning future economic and social development. Do you agree with this statement? Outline **THREE (3)** ways that you as a researcher can contribute to this issues. (7 marks)
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- Q3** (a) River restoration has become necessary where river systems have degraded to the point that they can no longer provide the services required of them. There are two methods of river restoration, which are passive and active methods. Distinguish between passive and active methods of river restoration. (4 marks)

- (b) One of the threats to the freshwater ecosystem is water pollution which occurs very often due to human activities. As a consumer, suggest **THREE (3)** ways you can do in order to control the water pollution in the river ecosystem.
(6 marks)
- (c) Irrigation is defined as the process of supplying water by artificial means to agricultural fields for crop production. Like an agriculture system that changes according to the urbanization of the world, similar processes occur in the management of the irrigation system. Differentiate **FOUR (4)** characteristics of traditional and modern management of irrigation.
(8 marks)
- (d) Pot irrigation method is one example of a modern method in irrigation management. This method has been proven to conserve water efficiently. However, this method also has some weaknesses. Compare **THREE (3)** advantages and disadvantages of this method.
(6 marks)
- (e) One of the factors affecting the health of the watershed is the impervious cover. Define the *impervious cover*.
(1 mark)

- Q4** (a) Give **ONE (1)** example of non-renewable energy and explain briefly **ONE (1)** disadvantage of this non-renewable energy.
(4 marks)
- (b) Analyze **FOUR (4)** reasons why renewable energy is growing in importance and popularity.
(6 marks)
- (c) For centuries, entrepreneurs have been free to exploit the environment with impunity without thought of sustainability. However, the thought has changed nowadays with the increase of the awareness to conserve the resources among the entrepreneurs. Compare **THREE (3)** characteristics of industrial entrepreneurs and sustainable entrepreneurs.
(6 marks)
- (d) There are four types of governance for protected areas, which are government protected area, co-managed protected area, private protected area, and community conserved areas. Distinguish **ONE (1)** characteristics of these types of governance for protected areas.
(8 marks)
- (e) State **ONE (1)** role of Totally Protected Area (TPA) in Sarawak.
(1 mark)

– END OF QUESTIONS

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