



**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER I  
SESSION 2015/2016**

COURSE NAME : PRINCIPLES OF BIODIVERSITY  
AND CONSERVATION

COURSE CODE : BWJ 10102

PROGRAMME : 1 BWW

EXAMINATION DATE : DECEMBER 2015 / JANUARY 2016

DURATION : 2 HOURS

INSTRUCTION : ANSWER **ALL** QUESTIONS

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

- Q1** (a) Give two (2) examples of species diversity and three (3) examples of ecosystem diversity (5 marks)
- (b) Explain how the first humans categorized biodiversity. (5 marks)
- (c) Compare how developing and developed countries view biodiversity and its potentials. (10 marks)
- Q2** (a) What are biodiversity hotspots? Elaborate your answer. (5 marks)
- (b) Discuss the main principle that governed the formation of Convention on Biological Diversity. (5 marks)
- (c) Illustrate the differences between the following. (10 marks)
- (i) Richness and Apportionment
  - (ii) Sympatric and Allopatric
- Q3** (a) Due to the frequently unpredictable nature of ecosystem responses and our incomplete understanding of ecosystem functioning, application of the ecosystem approach requires adaptive management techniques. Analyze how the CBD applies this principle to ensure safeguarding of biodiversity all over the world. (10 marks)
- (b) Inventory and monitoring is integral to adaptive management approach. Recommend a comprehensive technique for a successful inventory and monitoring of biodiversity. (10 marks)
- Q4** (a) Every time we lose a species, we break a life chain which has evolved over 3.5 billion years. Analyze this statement and give an example to support your answer. (5 marks)
- (b) Analyze the impacts of these threats to biodiversity. (15 marks)
- (i) Alteration of ecosystem
  - (ii) Ecosystem loss
  - (iii) Invasive species
  - (iv) Climate change
  - (v) Pollution

- Q5** (a) Conservation of biodiversity involves approaches and protocols that are implemented to achieve the most effective outcome. Analyze the steps involved in the following.  
(15 marks)
- (i) Top-down approach to conservation of biodiversity
  - (ii) Bottom-up approach to conservation of biodiversity
- (a) Given the approaches above, select an approach that you think is effective in the conservation of *Livistona endauensis* in Taman Negara Johor Endau-Rompin.  
(5 marks)

- END OF QUESTIONS -