

# **UNIVERSITI SAINS MALAYSIA**

**First Semester Examinations  
Academic Session 2000/2001**

**September/Oktober 2000**

**BSF 101/3 - Biodiversity in the Tropics**

**Time : [3 hours]**

Answer **FIVE** out of **SIX** questions.

**Each questions carries 20 marks.**

1. Name an animal for each of the following phylum:

- i. Chordata
- ii. Annelida
- iii. Arthropoda
- iv. Porifera
- v. Mollusca

(10 marks)

(b) Describe **FIVE** characteristics of a terrestrial arthropod.

(10 marks)

2. With suitable local examples, define and discuss *in situ* and *ex situ* animal conservation programmes.

(20 marks)

3. Write short notes on the following:

- (a) torsion in molluscs
- (b) metamorphosis in insects
- (c) stick insects
- (d) Elasmobranchii

(20 marks)

...3/-

4. With the aid of labelled diagrams describe the isomorphic and triphasic alternation of generation in Algae.

(20 marks)

5. Write short notes on

- (a) a typical sequence of red tide event (growth explosion of planktonic dinoflagellates)

(8 marks)

- (b) major characters used in the classification of Bryophytes

(6 marks)

- (c) an example of Malaysian epiphytic fern (Pteridophyta)

(6 marks)

6. (a) Give four examples of Malaysian plant species that have medicinal properties. State the type of ailment that can be cured by each plant species.

(8 marks)

- (b) Briefly discuss the commercial and domestic importance of *Nypa fruticans* and *Oncosperma tigillarum* (Palms) in Malaysia.

(12 markah)