

**UNIVERSITY OF RUHUNA
BACHELOR OF SCIENCE (GENERAL) DEGREE LEVEL I
(SEMESTER II)
EXAMINATION – JANUARY 2018**

SUBJECT: BOTANY (Plant Ecology)

COURSE UNIT: BOT 1231

Index number.....

Time: One Hour

Answerer ONLY two questions including question NO. 1

1) A) What do you mean by the following terms?

i) Autecology

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(5 Marks)

ii) Epiphytes

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(5 Marks)

iii) Community

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(5 Marks)

iv) Symbiosis

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(5 Marks)

v) Species

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(5 Marks)

B)

i) Classify the organisms according to their ‘mode of nutrition’.

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(5 Marks)

ii) Named the two major categories of ‘ ecosystem components’.

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(5 Marks)

iii) What is the significance of “drip tips” in plants of a tropical rainforest?

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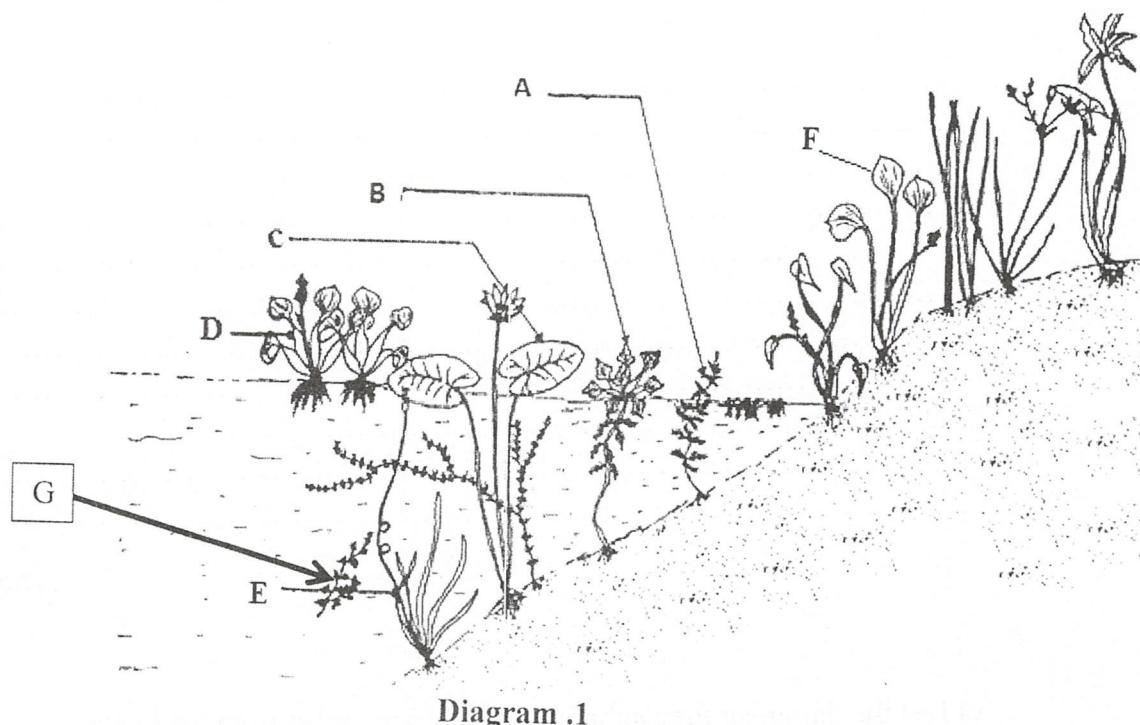
(10 Marks)

v) List the dominant Precambrian rock types recorded from Sri Lanka.

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(5 Marks)

- C) The following diagram (Diagram 1) illustrates the zonation of aquatic vegetation. Questions (i) to (iv) are based on the given diagram.



- i) Name the categories of hydrophytes, which are represented by A,B,C, D,E , F and classified based on the zonation/ habitat.

A.....

B

C

D

E

F

(12 Marks)

- ii) Highlight the ecological adaptations of the plants in the ‘category C’.

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(10 Marks)

- iii) Give an example (scientific name) for plant species which is commonly found in aquatic vegetation in each of the following categories.

C

D

E

F

(8 Marks)

- iv) *Utricularia* sp. is an example for floating plants. Briefly explains the adaptation, which helps to fulfil nitrogen requirement of that plant?

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(20 Marks)

2) Write short notes on followings

- i) Chemosynthetic autotrophs
- ii) Physical space
- iii) Cyclic changes in *Suaeda* communities

(100 Marks)

3) Describe the morphological and anatomical adaptations of plants found in different zones in a seashore vegetation.

(100 Marks)