

**UNIVERSITY OF RUHUNA**

**BACHELOR OF SCIENCE (SPECIAL DEGREE) LEVEL I (SEMESTER II)  
EXAMINATION – January 2018**

**SUBJECT: BOTANY**

**COURSE UNIT: BOT4072 Economic Botany & Entrepreneurship**

**Time: 2.0 hrs**

**Answer for all 04 questions**

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(1)

- (a) What do you understand by “crop wild relatives (CWR)”?
- (b) Discuss the importance of *in situ* conservation of crop wild relatives.
- (c) State five threats to the maintenance of crop wild relatives in the field.
- (d) Briefly explain the importance of crop wild relatives in agriculture.

(2)

- (a) Briefly discuss the challenges contributing to the decline of plant-derived natural products as a source of drug discovery.
- (b) Explain the relationship between heating and cooling herbs with ‘vata, pitta and kapha’ according to the traditional medicinal system.

(3)

- a. What do you understand by the term “Marginal Utility”? (10 Marks)
- b. Briefly explain the change in your utility ( $\Delta$ Utility) as a result of a change in the level of consumption ( $\Delta$ Q) of a particular good. (25 Marks)
- c. Examine the specific areas need to be focused on, for Increasing business and entrepreneurial potential. (25 Marks)
- d. Discuss the importance of innovation to achieve the tasks of Entrepreneurship. (40 Marks)

(4)

- i) List the major economic importance of sea weeds. ( 12 marks)
- ii) Filling the blanks of the following table. ( 12 marks)

Algae species	Chemical Product derived
<i>Laminaria</i> sp.	
<i>Macrocystis</i> sp.	
<i>Euchemia</i> sp.	
<i>Gracilaria</i> sp.	
<i>Botryococcus braunii</i>	
Diatoms	.....

- iii) What are the health benefits of *Chlorella* sp.?. (06 marks)
- iv) What are the factors to be concerned prior to establishment of an algae farm? (05 marks)
- v) Briefly describe the “Off-bottom” method of *Euchema* cultivation (15 marks)
- vi) Explain the extraction methods of essential oils. (50 marks)

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