

University of Ruhuna – Faculty of Technology

Bachelor of Biosystems Technology Degree

Level I (Semester II) Examination

September 2020

Course Unit : BST 1282 – Fundamentals in Agriculture (Theory)

Index No:

INSTRUCTIONS: Please read the instruction carefully before answering the paper.

Number of pages: Four (4)

Time allowed: One hour (1 hour)

Please ensure that you have written your **index number** in the space provided above.

Part I – Compulsory question.

Part II – There are three (3) questions. Answer two (2) questions only.

Mobile phones and calculators are not permitted.

Part I

1.

a.

i. What is 'Tillage'?

(2 marks)

ii. List five (5) objectives of Tillage?

(5 marks)

iii. List two (2) names of breeds for each of following livestock present in Sri Lanka.

(6 marks)

A. Cattle:.....

B. Goat:.....

C. Swine:.....

iv. List three (3) farms in Sri Lanka with the species of livestock reared in them. (3 marks)

- b.
i. Define "soil fertility". (2 marks)

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- ii. Briefly explain the difference between mobile nutrients and immobile nutrients. (4 marks)

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- iii. Write four (4) importance of having soil organic matter. (4 marks)

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c.

- i. Briefly explain the terms given below; (2 marks)
A. Vacuum Packaging

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- B. Modified Atmosphere Packaging (MAP) (2 marks)

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- ii. List four (04) regulatory authorities for food safety in Sri Lanka. (4 marks)

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iii. What is "Food Act, No. 26 of 1980 in Sri Lanka"?

(4 marks)

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d.

i. Write three (3) major differences between **agricultural goods** and **manufactured goods** from a marketing perspective. (6 marks)

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ii. What are the two (2) major types of market information?

(2 marks)

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iii. List four (4) market functions.

(4 marks)

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Part II

2.

- a. What are the factors influencing decisions on the selection of crops to be cultivated? (10 marks)
- b. Briefly explain above mentioned factors (2. a) with your experience in the field. (40 marks)

3.

- a. List three (3) common chemical analysis used in food industry and explain their importance (25 marks)
- b. Describe the purposes of food labelling. (25 marks)

4.

- a. Explain how excess chemical fertilizer applications affect the environment? (20 marks)
- b. Briefly explain how you would instruct a farmer on the practice of site specific fertilizer management in his farm. (30 marks)

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