# University of Ruhuna- Faculty of Technology

Bachelor of Biosystems Technology Honours Degree Level 4 (Semester I) Examination, July 2023 Academic year 2020/2021

Course Unit: BSTE 4142 Built Environment Design (T) Duration: 1 Hour & 30 Minutes

• Answer all four questions.

### **Question One**

- A. State five examples of built environments. (5 Marks)
- B. What are the main attributes should you consider when conserving resources in a built environment? (3 Marks)
- C. Sate <u>three</u> advantages of using daylighting in a factory with intensive labor involvement.

  (3 Marks)
- D. State <u>three</u> reasons for why should you use materials with low energy requirements when designing a built environment. (3 Marks)
- E. State <u>four</u> measures you could take in order to conserve materials during pre-building phase of a building. (4 Mark)
- F. State <u>two</u> actions you can take for the preservation of natural conditions when constructing a farmhouse. (4 Marks)
- G. List three outputs (Downstream materials) in a building ecosystem. (3 Marks)

#### **Question Two**

- A. State <u>four</u> key factors you should consider in terms of ventilation, when designing a farmhouse for animals. (10 Marks)
- B. Explain briefly the importance of proper ventilation in housing animals. (15 Marks)

## **Question Three**

- A. Write <u>four</u> situations/occasions where you would require a facility constructed for activities related to crops or any bioproduct? (10 Marks)
- B. State <u>five</u> factors to be considered when constructing a housing facility for bioproducts. (05 Marks)
- C. Explain briefly the challenges you might face if you are assigned to construct a warehouse to store perishable fruits and vegetables. (10 Marks)

## **Question Four**

Discuss the present status, gaps and possible changes you suggest with regard to a building premises you have visited in Matara town. (25 Marks)

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