

UNIVERSITY

## UNIVERSITY EXAMINATIONS

## THARAKA CAMPUS

### **EXAMINATION FOR THE AWARD OF DIPLOMA OF EDUCATION**

### PECI 0122: INTRODUCTION TO SERVICE AND AGRICULTURE

**STREAMS: PECI (SB)** 

TIME: 2 HOURS

2.30 P.M. – 4.30 P.M.

DAY/DATE: TUESDAY 06/08/2019

#### **INSTRUCTIONS:**

### • Answer question ONE and any other TWO questions

#### **QUESTION 1 (30 MARKS)**

| (a) | Highlight on importance of fungi to human beings.       | (4 marks)            |
|-----|---|----------------------|
| (b) | What is the role of bacteria in nature?                 | (6 marks)            |
| (c) | Define the term environment and state its components.   | (4 marks)            |
| (d) | Suggest five solutions to air pollutions.               | (3 marks)            |
| (e) | State four properties of soil.                          | (4 marks)            |
| (f) | Discuss the characteristics of plantations agriculture. | (4 marks)            |
| (g) | State four main sources of water.                       | (4 marks)            |
| (h) | State the SI Units of the following measurements.       |                      |
|     | <ul><li>(i) Length</li><li>(ii) Electricity</li></ul>   | (1 mark)<br>(1 mark) |

## PECI 0122

# **QUESTION 2 (20 MARKS)**

| (a) | Explain the Kinetic theory of motion using Brown's movement. | (6 marks) |
|-----|--|-----------|
| (b) | Explain various types of energy with examples.               | (8 marks) |
| (c) | Differentiate between Power and Work.                        | (4 marks) |
| (d) | State what force can do to stationary object.                | (2 marks) |
|     |  |           |

# **QUESTION 3 (20 MARKS)**

| (a) | State the physical properties used to ascertain the purity of a substance. | (4 marks)  |
|-----|--|------------|
| (b) | Explain how you can treat hard water.                                      | (10 marks) |
| (c) | State three properties of hydrogen.  | (3 marks)  |
| (d) | State three uses of hydrogen.  | (3 marks)  |

## **QUESTION 4 (20 MARKS)**

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| (a)                   | Advice on how this county governments can improve on pastoral areas. | (10 marks) |  |  |  |
|-----------------------|--|------------|--|--|--|
| (b)                   | Explain factors (environmental which do influence agriculture).      | (8 marks)  |  |  |  |
| (c)                   | State any two elements which composes soil.                          | (2 marks)  |  |  |  |
| QUESTION 5 (20 MARKS) |  |            |  |  |  |
| (a)                   | Explain various causes of soil degradations.                         | (8 marks)  |  |  |  |
| (b)                   | Explain various problems created by man to the environment.          | (8 marks)  |  |  |  |
| (c)                   | How can we prevent infections of bacteria to human body?             | (4 marks)  |  |  |  |