



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2010/2011

INSTITUTIONAL BASED PROGRAMME (IBP) DECEMBER SESSION

EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

SBT 201: PLANT FUNCTION

DATE: THURSDAY 28TH APRIL 2011

TIME: 8.00 A.M -10.00 A.M

INSTRUCTIONS:

Answer ALL questions in Section A and ONE in Section B. Answer in Section B should be concise and MUST be written in the spaces provided on the question paper.

SECTION A: Short answer questions (5 marks each (Total marks 40).

1. Describe how growth curvature toward light can be demonstrated to be mediated by a plant hormone.
2. Describe conjugated proteins and give three (3) examples:

3. Describe one method used to determine water potential of a plant tissue.

4. Distinguish between aerobic and anaerobic respiration.

5. Define the following terms:-

a. Solute

b. Adsorbent

c. Saturated Solution

d. Beneficial elements

e. Saturated fatty acids

6. What do you understand by the term “ Activation Energy”?

7. What roles do water light, CO₂ and chlorophyll play in photosynthesis?

8. Describe plant growth response to nutrient concentration.

SECTION B: Essay (30 marks)

1. Write an essay on the classification of carbohydrates.
2. “Tall trees get water into their tips the aid of pumps”. Discuss the processes used.
3. Discuss the physiological effects of major plant hormones.