



**EMBU UNIVERSITY COLLEGE**  
**(A Constituent College of the University of Nairobi)**

2015/2016 ACADEMIC YEAR

SECOND SEMESTER EXAMINATION

FOURTH YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF  
SCIENCE (HORTICULTURE)

ACH 406: FLORICULTURE 2

DATE: APRIL 11, 2016

TIME: 02:00-04:00

INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions

QUESTION ONE

- a) Lifestyle horticulture is an elitist 'culture', a preserve for the rich & famous. Is this the truth or just a myth based on mis-conception? Discuss. (5 Marks)
- b) As the population increases, the living spaces are becoming smaller and smaller, especially in the urban areas, creating concrete jungles. Describe ways in which you can create 'green' sanctuaries in such spaces. (5 Marks)
- c) Describe how to develop your own custom made hydroponic fertilizer solution for common indoor plants. (5 Marks)
- d) The leaves of your beautiful indoor plant suddenly develop chlorosis, become necrotic and the whole plant start to die off. Briefly describe how you would go about diagnosing and treating the problem, to save the plant. (5 Marks)
- e) Briefly describe **five (5)** desirable attributes of an indoor plant for minimum stress to the house occupants. (5 Marks)

- f) List **five (5)** examples of indoor plants you are likely to find in a house, restaurant or office in Urban Kenya.

(5 Marks)

### QUESTION TWO

Apart from the well documented economic and environmental benefits from esthetically pleasing plants growing within the living quarters, there are less tangible benefits to the well-being of humans. Briefly describe 10 of these wellness benefits.

(20 Marks)

### QUESTION THREE

Like all crops, indoor plants require optimum environmental conditions of moisture, light, growing media, temperature, humidity, fertilizers, potting, pests & disease control. When you are growing plants within the living quarters, the comfort of the human inhabitants take precedence over the plant requirements. Briefly describe how you would go about selecting the plants, planting and maintaining indoor plants, without affecting the human habitat 'status quo'.

(20 Marks)

### QUESTION FOUR

- a) Hydroponics is a method of growing plants using mineral nutrient solution, without soil. Briefly describe **5 (five)** production systems/cultures that apply the hydroponics principle.

(10 Marks)

- b) Hydroponic plant production systems involve the use of sterile growing media for root support during growth. Briefly describe **5 (five)** such substrates.

(10 Marks)

### QUESTION FIVE

- a) Briefly describe the **5 (five)** basic elements of design. Explain how you can incorporate indoor plants into each of these elements in interior designs, on living spaces such as residential houses, offices or restaurants.

(10 Marks)

- b) Describe **5 (five)** basic principles of design. For each principle, explain how indoor plants can be used to apply these principles in interior designs within living spaces such as residential houses, offices or restaurants.

(10 Marks)

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