

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN
BOTANY**

BOTA 801: METHODS AND TECHNIQUES IN BOTANY

STREAMS: MSC BOTA

TIME: 3 HOURS

DAY/DATE: WEDNESDAY 08/04/2020

11.30 A.M. – 2.30 P.M.

INSTRUCTIONS:

- Answer any **THREE** questions

QUESTION 1

- (a) Discuss the problems faced by conventional methods of identifying plant pathogens. (10 marks)
- (b) Discuss any five biochemical tests for the identification of bacterial pathogens. (10 marks)

QUESTION 2

Discuss serological methods used in detection of plant pathogen. (20 marks)

QUESTION 3

Discuss the process of plant DNA extraction and Gel electrophoresis. (20 marks)

QUESTION 4

- (a) Discuss the indirect methods of plant disease monitoring. (10 marks)
- (b) Discuss the types of PCR-based techniques applicable in pathological studies. (10 marks)

QUESTION 5

- (a) Discuss the technique of micropropagation in banana tissue culture. (10 marks)
- (b) Discuss the application of plant in-vitro culture techniques. (10 marks)
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