



ELIZADE UNIVERSITY, ILARA-MOKIN, ONDO STATE,
NIGERIA

BASIC & APPLIED SCIENCES
BIOLOGICAL SCIENCES
FIRST SEMESTER EXAMINATION
2018/2019 ACADEMIC SESSION

COURSE CODE: BTH 305
COURSE TITLE: PLANT BIOTECHNOLOGY
DURATION: 2 HOURS

HOD's SIGNATURE

NAME:

MAT. No. :.....

Instructions: Answer any four questions

1. a) List eight secondary metabolites and their usage.
b) Why do scientists need to produce secondary metabolite in the laboratory?
2. a) What are the importance of plant genomes.
b) What are the challenges of plant tissue culture in developing countries laboratories?
3. a) What is "Micropropagation"
b) What are advantages and disadvantages of micropropagation?
c) Define genomics and list the subfields in genomics.
4. a) What are the applications of biotechnology?
b) State the GMO-regulations, law and ethics guiding plant biotechnology.
c) In a tabular form, give some examples of industrial enzymes and its applications.
d) Highlight four renewable forms of biofuel and the processes involved in its production.
5. a) What is biomass?
b) Outline ten important products derived from biomass.
c) Give the processes involved in producing vegetable oil.
d) What are the advantages of microalgae over plants?
6. a) Differentiate between support growth and suspended growth system during fermentation.
b) Clearly state the important microorganisms used in industries.
c) List three commercially grown species of cotton.
d) What are the two commonly used methods of introducing DNA into plant cells?