



ELIZADE UNIVERSITY,
ILARA-MOKIN, NIGERIA

FACULTY: BASIC & APPLIED SCIENCES

DEPARTMENT: BIOLOGICAL SCIENCES

FIRST SEMESTER EXAMINATION

2020/2021 ACADEMIC SESSION

COURSE CODE: BTH 305

COURSE TITLE: Plant Biotechnology

COURSE Unit(s): 3 Units

DURATION: hours

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18/03/2021

HOD's SIGNATURE

NAME:

MAT. No:

INSTRUCTIONS Answer any four questions

1a. What are secondary metabolites?

1b. Mention ten (10) secondary metabolites and their usage.

(20 Marks)

2a. Outline the advantages and disadvantages of Micro-propagation

2b. Define the term 'protoplast'?

2c. Explain the various methods you can use to purify protoplast.

(20 Marks)

3a. Discuss the factors affecting protoplast culture.

3b. Write short note on the followings:

i. Structural Genomics

ii. Functional Genomics

iii. Comparative Genomics

vi. Mutational genomics

(20 Marks)

4a. What are the importance of genomics?

4b. Explain the following:

(i). Organized culture;

(ii). Disorganized culture;

(iii). Hairy root culture;

(iv). Immobilized cell culture.

(20 Marks)

5. What are the problems of biotechnology in Nigeria and how can these problems be solved.

(20 Marks)

6. Outline the roles of biotechnology in agriculture, medicine and food processing industries.

(20 Marks)