



EDO UNIVERSITY, IYAMHO, EDO STATE
FACULTY OF SCIENCE
DEPARTMENT OF BIOLOGICAL SCIENCES
First Semester Examination, 2015/2016 Session

Course Title: INTRODUCTORY PLANT BIOLOGY AND BIOTECHNOLOGY

Course Code: PBB 111

ANSWER ANY FOUR QUESTION. ALL QUESTION CARRY EQUAL MARKS (20 MARKS EACH)

1. Define the following terms briefly:
 - i. Biology
 - ii. Algology
 - iii. Lichenology
 - iv. Bryology
 - v. Cytology
- 1b. Define these terms
 - i. Anatomy
 - ii. Taxonomy
 - iii. Plant pathology
 - iv. Phytomedicine
 - v. Plant morphology
2. Discuss any type of biotechnology giving the definition and areas of application.
- 2b. Discuss ways to better feed the world by year 2050 with reference to biotechnological applications. Points should include genetically modified crops, land use acts, better farming practices, government involvement etc.
- 3a. Give an account of the history of cell discovery stating the contributions of the different scientists. State the cell theory.
- 3b. Draw and label appropriately any one of the earliest microscopes invented.
- 4a. Draw a detailed plant cell showing the location of the following parts:
 - i. Cell wall
 - ii. Plasma membrane
 - iii. Mitochondrion
 - iv. Golgi apparatus





- v. Endoplasmic reticulum
 - vi. Vacuole
 - vii. Chloroplast
 - viii. Nucleus
 - ix. Nucleolus
 - x. Cytoplasm
- 4b. Write out the functions of each of the parts listed above.
- 5a. What is a 'plant habit'?
- 5b. Write short notes on the various plant habits giving specific examples.
- 6a. Explain the following modes of nutrition with specific examples of organisms that practice them:
- i. Saprobiontic nutrition
 - ii. Holozoic nutrition
 - iii. Symbiotic nutrition
- 7a. Outline four importance of the classification of plants into different groups.
- 7b. Write short notes on the five taxonomic kingdoms of the living world, giving specific examples.

