

BOWEN UNIVERSITY, IWO
COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE

Environmental Management and Crop Production Unit

B. Agric. First Semester Examinations 2022 / 2023

Course Code: CRP 222

Credit: 2

Course Title: CROP ANATOMY, TAXONOMY AND PHYSIOLOGY

Instruction: Answer any four questions

1. (i) What are the functions of (a) endoplasmic reticulum, (b) nucleus, (c) Cell wall, (d) lysosomes (e) cell membrane (15 marks)
(ii) Write note on the (a) Ground tissues, (b) Vascular tissues, (c) Dermal tissues (10 marks)
2. i. Draw and properly label the structure of dicot and monocot leaves (6 marks)
ii. Highlight the different types of roots and their characteristics (12 marks)
iii. What are the functions of Stems (7 marks)
3. i. What are the 7 classifications of maize? (7 marks)
ii. Differentiate between Herbs, Shrubs and Trees (6 marks)
iii. Highlight the importance of classifying the crops (7 marks)
iv. Give the botanical name of the following crops: rice, coconut palm, oil palm, soybean, and tomato (5 marks)
4. (i) Draw and properly label the Nitrogen cycle (8 marks)
(ii) Highlight the different ways through which soils gain nitrogen (10 marks)
(iii) Explain the following processes and give the microorganisms that facilitate each process: (a) Denitrification, (b) Ammonification, (c) Nitrification (10 Marks)
5. (i) List three functions of auxin, three functions of gibberellic acid, two functions of cytokinins, and two functions of abscisic acid (10 marks)
(ii) Write note on the biosynthesis of Auxin and Ethylene (10 marks)