

BOWEN UNIVERSITY, IWO
COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE
PURE AND APPLIED BIOLOGY PROGRAMME
2022/2023 FIRST SEMESTER EXAMINATION
BLY 305: LABORATORY PRACTICE IN BIOLOGY

Answer ALL questions

Time: 2hrs

1.
 - a. Describe briefly how you will operate a fire extinguisher in putting out a fire outbreak.
 - b. Describe the critical steps in the operation of an autoclave in the sterilization process
(10 marks)

2. Write brief notes on the following:
 - a. General guidelines for effective plant collections on the field (5 marks)
 - b. Basic information on a standard herbarium label (5 marks)

3.
 - a. Briefly describe the stages involved in zoological specimen processing with the reagents/ materials needed for each stage. (8 marks)
 - b. List **four (4)** reasons for preserving zoological specimens. (2 marks)

4.
 - a. Define each of the following (5 marks)
 - i). Hydrates
 - ii). Molality
 - iii). Saturated Solution
 - iv). Solution
 - v). Supersaturated Solution
 - b. Highlight five (5) steps involved in the collection of microbiology specimens (5 marks)

5. Comment on the following:
 - a. Simple random sampling (2 marks)
 - b. Numerical data (2 marks)
 - c. Three common statistical tools (6 marks)