



NATIONAL OPEN UNIVERSITY OF NIGERIA
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Health Sciences
Department of Environmental Health Sciences
2023_2 EXAMINATIONS

Course Code: EHS 301

Course Title: Introduction to Basic Instrumentation and Use

Course Units: 2 Credit Units

Time Allowed: 1 ½ Hours

Total Score: 70 Marks

INSTRUCTION: Answer ALL the Questions

- 1a. Make a list of the safety rules that one must observed in a Laboratory (5 marks)
- b. What are the precautions to be considered in handling equipment in the laboratory? (5 marks)
- c. Itemise the hazards associated with equipment used in any research Laboratories? (4 marks)
- d. Explain the precautions to be taken to ensure the validity of results of an experiment in the laboratory. (11 marks)
- 2a. Differentiate between a single and double beam spectrophotometer (4 marks)
- 2b. Explain the principles of operation of the pH meter (6 marks)
- 2c. list the parts of a microscope and their functions (10 marks)
- 2d. State the advantages and disadvantages of an oven (5 marks)
- 3a. Describe the centrifuge and list the different types of centrifuge (5 marks)
- 3b. State the five types of air sampling methods (5 marks)
- 3c. List the four types of Barometer (4 marks)
- 3d. Explain the term Weather Balloons. (6 marks)