



NATIONAL OPEN UNIVERSITY OF NIGERIA
Plot 91 Cadastral Zone, Nnamdi Azikwe Express Way, Jabi, Abuja.
FACULTY OF EDUCATION
2022_2 POP EXAMINATION

COURSE CODE: SED835
COURSE TITLE: LABORATORY DESIGN AND MANAGEMENT
CREDIT UNIT: 3
TIME ALLOWED: 3 HOURS
INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER THREE

- 1a. As a Head of Department, you have been given one hundred thousand naira to run the affairs of the department concerning school laboratory. Discuss what you will consider. **(10 marks)**
 - b. Distinguish between Author Index and Subject Index as related to research report on laboratory safety and hazards **(6 marks)**
 - c. One of the most important laboratory safety rules is 'Follow the Instructions'. Why is this most important rule? **(4 marks)**
 - d. At the end of your course at National Open University of Nigeria, you will be asked to carry out research. Outline the formal general set-up of a research work. **(5 marks)**
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- 2a. Briefly explain the following laboratory safety rules **(10 marks)**
 - i. Know the location of safety equipment
 - ii. Dress for the laboratory
 - iii. Don't eat or drink in the laboratory
 - iv. Don't taste or sniff chemicals
 - v. Don't play horse play in the laboratory
 - b. Identify five (5) laboratory apparatus from the laboratory picture below **(5 marks)**



- 3a. Discuss five (5) classes of hazardous chemicals **(5 marks)**
- b. If your proposal for a new science laboratory is accepted, where would you want the laboratory sited? **(6 marks)**
- c. Write any four electrical safety in school science laboratory **(4 marks)**

- 4ai. How would you describe what a laboratory is to students? **(3 marks)**
- ii. List two places outside school where activities take place that can be called laboratory. **(2 marks)**
- b. As a science teacher, explain the procedures for any emergency case in your laboratory. **(5 marks)**
- c. State five ways of preventing laboratory equipment from damage from heat, corrosion and rust. **(5 marks)**
- 5a. Why were NISP and NSSSP projects developed for use in schools? **(5 marks)**
- b. Are the chemicals and broken glass safe to dump down the drain? If not, what do you do with them? **(5 marks)**
- c. How is computer used to locate materials for research? **(5 marks)**