



NATIONAL OPEN UNIVERSITY OF NIGERIA

91 Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja

FACULTY OF EDUCATION

APRIL/MAY, 2019_1 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

QUESTION ONE:

- (a) Adduce any three reasons why science practical lessons are preferable to students than theoretical classes (6 marks)
- (b) State two importance of the Fume cupboard in the laboratory. (3 marks)
- ci) The siting of a laboratory is as important as the function it performs. List and explain any **three** factors to consider in making your decisions, justifying the rationales for doing so. (10 marks)
- cii) Enumerate and explain three dimensions of behavioral objectives to assess students' performance in the laboratory. (6 marks)

(Total 25marks)

QUESTION TWO:

- a). Explain two importance of the Preparatory room in the laboratory. (5marks)
- b). List and discuss in details any **ten** requirements for a good preparatory room

(10marks)

(Total 15marks)

QUESTION THREE:

- 3a) Enumerate any **TEN** general guidelines in storage procedures for laboratory materials (10 marks)
 - (b) List and explain any **Five** fire-fighting materials/substances in the laboratory/workshop (5marks)
- (Total marks =15, Time =38minutes)**

QUESTION FOUR:

- 4a). What are hazardous chemicals? (5 mark)

b) List and discuss FIVE classes of hazardous chemicals (10 marks) (**Total 15marks**)

QUESTION FIVE:

5. a(i.) Enumerate **any seven** general guidelines for storage of materials in the Laboratory

(**7marks**)

(ii.) Outline **three** important records that must be kept in the science laboratory (3marks)

b(i.) The Laboratory assistant / attendant is of invaluable assistance in science teaching. Outline

four duties of a Laboratory Assistant. (**4marks**)

(ii). State the primary role of a laboratory technician (**1 mark**)

(**Total marks =15, Time =38minutes**)