



NATIONAL OPEN UNIVERSITY OF NIGERIA
91 Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi, Abuja
FACULTY OF EDUCATION
DEPARTMENT OF SCIENCE EDUCATION
2025_2 EXAMINATIONS

COURSE CODE: SED 329
COURSE TITLE: INTEGRATED SCIENCE WORKSHOP
CREDIT UNIT: 2
TIME ALLOED: 2 HOURS
INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER TWO

Question 1 (30 marks)

- a. Differentiate between (i) woodworking tool and (ii) metalworking tool (5mk)
- b. Briefly explain the two kinds of carpentry (5mks)
- c. Define glass and state component of glass (5mks)
- d. Define colour harmony and state the characteristics of colour. (5mks)
- e. Outline the uses of the following metals (i) Copper, and (ii) Aluminium (5marks)
- f. Name any five (5) devices in electrical workshop (5mks)

Question 2 (20 marks)

- a. Name and describe four (4) components of electronic device. (4mks)
- b. State four (4) functions of entrepreneur (4mks)
- c. Explain the concepts (i) skill acquisition and (ii) apprenticeship (6mks)
- d. Describe the Procedure for constructing test-tube rack apparatus (6mks)

Question 3 (20 marks)

- a. Explain precisely lettering as a concept (4mks)
- b. List four (4) effects of crystal structure on the properties of metal (4mks)
- c. State the properties of materials used in fabrication (6mks)
- d. Define welding and discuss three welding techniques (6mks)

Question 4 (20 mark)

- a. Identify and describe the two (2) electronic components (3mks each)
- b. Briefly describe five (5) personal safety gears found in a workshop (5mks)
- c. List four fundamental safety rules and regulations in workshop (4mks)
- d. Explain the structural materials commonly use in metal work (5mks)