



NATIONAL OPEN UNIVERSITY OF NIGERIA
91 Cadastral zone, NnamdiAzikiwe Expressway Abuja

FACULTY OF EDUCATION
2024 1 EXAMINATION

COURSE CODE: SED313
COURSE TITLE: IMPROVISATION IN INTEGRATED SCIENCE
CREDIT UNIT: 2
TIME ALLOWED: 2 HOURS

QUESTION ONE:

- a. At the planning stage of improvisation, two major attributes are required of the teacher: a good imagination and a good creative ability. Discuss the deployment of these attributes in relation to teaching methods, use of equipment and realization of learning objectives. **(8 marks)**
- b. Identify three (3) stages the improvised materials must be appropriately applied during actual presentation. **(6 marks)**
- c. Compare and contrast the constructional process with the substitution process of improvising by a science teacher. **(8 marks)**
- d. In the context of this course, distinguish immediate environments from distant environments and give three (3) examples of each. **(8 marks)**

QUESTION TWO:

- a. i. Itemize five (5) materials needed for the construction of improvised thermometer.
ii. Write out five (5) features of the improvised thermometer. **(10 marks)**
- b. Describe "egg-in-the-bottle" experiment with emphasis on
 - i. Materials needed
 - ii. Method **(10 marks)**