

## NATIONAL OPEN UNIVERSITY OF NIGERIA

Plot 91 Cadastral Zone, Nnamdi Azikwe Express Way, Jabi, Abuja.

FACULTY OF EDUCATION

2020 1 Semester

COURSE CODE: SED315

COURSE TITLE: Nigeria Primary/Secondary Mathematics/Science Curricula

CREDIT UNIT: 2

TIME ALLOWED: 2HOURS

INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER TWO

- 1(a) Science educators have expressed the believe that the success of the classroom interaction (teaching-learning process) is a function of the quality of lesson preparation on one hand and presentation on the other hand. Briefly justify this assertion towards the successful implementation of Mathematics/Science curriculum, citing any five relevant points. (12 marks)
- 1(b) Prepare a standard lesson note on any topic of your choice stating the relevant preliminary information and prepare a table of presentation showing the essential steps on content development, skills required at each step, teacher's activities and the corresponding learner's activities. (18 marks)

(**30** marks)

- 2(a) Present a brief and concise explanation on the assertion that "Science and mathematics curriculum can only be meaningful when students perceive them to be true to each learner; true to life and true to the subject been offered". (9 marks)
- 2(b) Highlight with brief explanation, any 3 ways on how environment can influence curriculum implementation. (9 marks)
- 2(c) State any two of the broad goals of Education as identified in the Constitution of Federal Republic of Nigeria and also stated in the National Policy on Education (2 marks)

(20marks)

- 3(a) By deploying your general understanding of the curriculum, how will you select topics for lesson in primary school mathematics and science curricula? (6 marks)
- 3(b) Briefly outline the four overall objectives of primary education in Nigeria (8 marks)
- 3(c) Briefly describe the term knowledge, comprehension and application as outlined in the cognitive domain of Bloom's Taxonomy of Educational Objective. (6 marks)

(20marks)

- 4(a) It was asserted that for learners to make the most of the learning experiences in science and mathematics, teachers must be able to select the contents in accordance with the topics to be taught for actualizing cognitive validity. What is cognitive validity in this context? (3 marks)
- 4(b) The organizers of chemistry curriculum considered major issues that dictate global development and influence the selection of content knowledge in senior secondary chemistry. Enumerate the four broad content or themes of chemistry curriculum that were selected (8 marks)
- 4(c) Define educational objective and enumerate any three of its feature? (9 marks)