

NATIONAL OPEN UNIVERSITY OF NIGERIA

Faculty of Education

Department of Science Education

JULY EXAMINATION 2017\_1

COURSE CODE: SED 422

TITLE: Integrated Science Curriculum Design and Implementation

UNIT: 2

DURATION: 2 Hours

INSTRUCTION

Answer **Question One (1)** and *any other* **three(3)**questions. (Question 1 is compulsory) Total number of questions to be attempted = 4.

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| --- | --- | --- | --- |
| 1. | (a) |  | Give concise definition of Curriculum, according to the following authorities: |
|  |  | i. | Saylor and Alexander (1974) [3 marks] |
|  |  | ii. | Fafunwa (1997)[3 marks] |
|  |  | iii. | Dada (1999) [3 marks] |
|  |  |  |  |
|  | (b) |  | List and explain any **three (3) misconceptions** about curriculum [3 marks] |
|  |  |  |  |
|  | (c) | i. | Explain the term Curriculum Design [4 marks] |
|  |  | ii. | Enumerate **five (5)** categories of Curriculum Design [5 marks] |
|  |  | iii. | What **four (4)** elements constitute components of a good integrated science curriculum? [4 marks] |
|  |  |  | Total score for **Question 1** (25 marks) |
|  |  |  |  |
| 2. | (a) |  | Explain the **three (3)** main sources of ‘Aims and Objectives’ in curriculum planning? [3 marks] |
|  |  |  |  |
|  | (b) |  | Classify curriculum objectives into three main Domains and their levels (Bloom 1956) using the format below: |
|  |  |  | |  |  |  |  | | --- | --- | --- | --- | | Domain  Level | A | B | C | |  | : | : | : | |  | : | : | : | |  | : | : | : | |
|  |  |  | [12 marks] |
|  |  |  |  |
| 3. | (a) | i. | Explain the term *‘learning experience’* when planning an Integrated Science curriculum. [3 marks] |
|  |  | ii. | What **six (6)** criteria would an Integrated Science curriculum expert employ in selecting learning experiences when planning curriculum for junior secondary school? [6 marks] |
|  |  |  |  |
|  | (b) |  | Complete this table for a sample curriculum unit for Integrated Science |
|  |  |  | |  |  |  |  |  | | --- | --- | --- | --- | --- | | **CONTENT** | **OBJECTIVE** | **LEARNING EXPERIENCE** | **MATERIALS** | **EVALUATION** | | **Pollution**   * Air pollution | [2 marks] | [1 marks] | [1 marks] | [2 marks] | |
|  |  |  |  |
| 4. | (a) | i. | Explain the meaning and need for an Integrated Science Curriculum Development. [4 marks] |
|  |  | ii. | Tabulate **five (5)** diffferences in thinking of the Essentialist and Progressice schools on curriculum development. [5 marks] |
|  |  |  |  |
|  | (b) |  | Enumerate **six (6)** rationale for an integrated science curriculum development [6 marks] |
|  |  |  |  |
| 5. | (a) | i. | List **five (5)**  factors that guide curriculum development by experts. [5 marks] |
|  |  | ii. | Name **five (5)** Curriculum Development Agencies in Nigeria. [5 marks] |
|  |  |  |  |
|  | (b) |  | Explain **two (2)** fuctions of **any two** of the agencies listed in **(a) ii** above. [4 + 1 marks] |
|  |  |  |  |
| 6. |  |  | Explain the role played by the Science Teachers Association of Nigeria (STAN) in the emergence of the Integrated Science Curriculum in Nigeria. [10 marks] |
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