ALLAMA IQBAL OPEN UNIVERSITY ISLAMABAD
Faculty of Education
(Department of Science Education)

WARNING

1. **PLAGIARISM OR HIRING OF GHOST WRITER(S) FOR SOLVING THE ASSIGNMENT(S) WILL DEBAR THE STUDENT FROM THE AWARD OF A DEGREE/CERTIFICATE IF FOUND AT ANY STAGE.**
2. **SUBMITTING ASSIGNMENT(S) BORROWED OR STOLEN FROM OTHERS AS ONE'S OWN WILL BE PENALIZED AS DEFINED IN "AIOU PLAGIARISM POLICY".**

Course: General Science in School (8638) **Semester: Spring, 2026**
Level: BEd (1.5 Years) **Total Marks: 100**
Pass Marks: 50

ALL QUESTIONS ARE COMPULSORY AND CARRY EQUAL MARKS

Note:

1. Response to each question should not be less than 1200 words, failing which marks will be deducted accordingly.
2. Please write in your own words after reading the study guides and the related material. Also avoid irrelevant information, reproduction from any text, and render a critical analysis of the questions asked for.
3. Give a reference to thesource while quoting any material. Use APA style. Also develop a reference list for each question separately.
4. No marks will be given for reproduction from the course book of this course code.
5. Please write your answer clearly.
6. Please submit the assignment on or before the specified date.
7. Late assignments will not be accepted in any case.

Assignment No.1
(Unit No.1-4)

Q.1	Define the nature of science. Explain science as knowledge, process, and product with suitable examples.	(20)
Q.2	Describe the concept of scientific inquiry. Explain its different types with suitable examples. Suggest inquiry-based activities for elementary classrooms (Grades 1–8).	(20)
Q.3	Differentiate among aims, goals, and objectives. How are these three terms related to each other? Explain your answer with the help of examples from a General Science textbook at the elementary level.	(20)
Q.4	What is reflective practice? Define the concept of reflective practice. Differentiate between reflection-in-action and reflection-on-action. How can reflective practice help science teachers improve the	(20)

	effectiveness of classroom teaching and student engagement? Discuss with suitable examples.	
Q.5	Define misconceptions. Give examples of common misconceptions in Chemistry, Physics, Biology, and Mathematics. Discuss the teaching strategies that can be used to identify and address these misconceptions.	(20)

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Assignment No.2
(Unit 5-9)

Q.1	Describe the Five-E (5E) Instructional Model. Explain the role of each phase of the model in promoting students' learning of science concepts, using examples from General Science and Mathematics textbooks of any elementary grade.	(20)
Q.2	What are indigenous materials? Describe. Select one topic from the General Science textbook (of any elementary class) and design an activity for this topic using locally available materials. Providethe following information with the activity: • Topic covered by Activity • Class/Grade level • Learning objectives • Resources or Materials required • Procedure to conduct the activity • Scientific concepts covered in this activity • Safety considerations (if any)	(20)
Q.3	Describe the major purposes of assessment in science education. Explain the role of oral, written, and practical methods of assessment in assessing students' knowledge, skills, and scientific attitudes at the elementary school level.	(20)
Q.4	Explain the structure of a science lesson with the help of one example.	(20)
Q.5	Explain the concept of advance organizers. Discuss the use of advance organizers in teaching concepts with the help of examples from General Science and Mathematics.	(20)