**ALLAMA IQBAL OPEN UNIVERSITY ISLAMABAD**

**(Department of Science Education)**

**Faculty of Education**

**WARNING**

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

**Course: Teaching of Chemistry (6460) Semester: Spring, 2025**

**Level: B. Ed (2.5/4 Years)**

**Please read the following instructions for writing your assignments. (AD, BS, BEd, MA/MSc, MEd) (ODL Mode).**

1. All questions are compulsory and carry equal marks but within a question the marks are distributed according to its requirements.

2. Read the question carefully and then answer it according to the requirements of the questions.

3. Avoid irrelevant discussion/information and reproducing from books, study guides, or allied material.

4. Handwritten scanned assignments are not acceptable.

5. Upload your typed (in Word or PDF format) assignments on or before the due date.

6. Your own analysis and synthesis will be appreciated.

7. Late assignments can’t be uploaded at LMS.

8. The students who attempt their assignments in Urdu/Arabic may upload a scanned copy of their handwritten assignments (in PDF format) on University LMS. The size of the file should not exceed 5MP.

**ALL QUESTIONS ARE COMPULSORY AND CARRY EQUAL MARKS**

Note:

* Response to each question should not be less than 1200 words failing which marks will be deducted accordingly.
* Please write in your own words after reading the study guides and the related material. Also, avoid irrelevant information and reproduction from any text and critically analyze the questions asked for.
* Frequently visit the website for the latest developments and sources. Provide the source while quoting any material. Use APA style. Also, develop a reference list for each question separately.
* No marks will be given for reproduction from the text or from elsewhere.
* Please write your assignment in legible handwriting.
* Please submit the assignment on or before the specified date.
* Late assignments will not be accepted in any case.

**Total Marks: 100 Pass Marks: 40**

**Assignment No.1**

**(Unit No.1-5)**

Q.1 **Examine the relationship between chemistry and other academic disciplines and critically evaluate the emerging pedagogical trends in the teaching of chemistry.**  (20)

**Q.2 Evaluate and elaborate on the most effective materials and resources for facilitating the teaching and comprehension of chemistry concepts.** (20)

**Q.3 Analyze and elucidate the role of work-based contexts in enhancing the practical learning experience in chemistry.** (20)

**Q.4 Discuss the concept of learning styles and critically distinguish between field-dependent and field-independent learning, particularly in the context of chemistry instruction.** (20)

**Q.5 Articulate a comprehensive assessment strategy for evaluating chemistry education at the secondary school level. (20)**

**Total Marks: 100 Pass Marks: 40**

**Assignment No.2**

**(Unit 6-9)**

**Q.1 Design a comprehensive lesson plan aimed at imparting the concept of "Hydrogen Bonding" to a secondary-level class. Please elaborate on the instructional strategies you would employ.** (20)

**Q.2 Explain various critical stages involved in effectively teaching the concept of "Hydrogen Bonding" to a secondary-level class.** (20)

**Q.3 Imagine you are tasked with instructing secondary-level students on the concepts of "Theoretical Yield" and "Actual Yield." What instructional approach would you implement to ensure optimal understanding and retention of these concepts? Provide a detailed rationale for your choice. (20)**

**Q.4 Instructing secondary-level students on the differentiation between organic and inorganic compounds demands a structured approach. How would you facilitate this learning process? Provide a detailed explanation of your method.** (20)

**Q.5 Identify and critically analyze potential activities that would effectively teach the principles of "Salt Formation" and "Neutralization" to a secondary-level chemistry class.** (20)

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