ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD

(Department of Science 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 ASSIGNMENTS BORROWED OR STOLEN FROM OTHER(S) AS ONE'S OWN WILL BE PENALIZED AS DEFINED IN "AIOU PLAGIARISM POLICY".**
3. **EXAMPLES COPIED FROM THE COURSE BOOK WILL CARRY NO MARKS.**

Course: Laboratory Organization Management and Safety Methods (698)
Level: M.Ed. **Semester: Autumn, 2013**
Total Marks: 100 **Pass Marks: 40**

Note: Attempt all questions, each question carries 10 marks. Please write the answers in your own words. Assignments copied from the book will not be accepted.

ASSIGNMENT No. 1

(Unit: 1-4)

Q. 1 Explain the importance of laboratory design in the teaching of sciences at school level. **(10)**

Q. 2 Explain the principles of management of science laboratory at school level. To what extent these principles help in laboratory teaching and learning? **(10)**

Q. 3 Explain glass working skills. What type of conditions will be suitable for glass working? **(10)**

Q. 4 What are the barriers to be changed for effective science teaching in the low-income countries? **(10)**

Q. 5 How aims and objectives will be use for effective science teaching and learning? **(10)**

Q. 6 Explain the role of practical work in Science Teaching. **(10)**

Q. 7 Discuss the role of teacher in laboratory teaching. **(10)**

Q. 8 Compare the designs of laboratories in Pakistan and Malaysia. **(10)**

Q. 9 Why inspection and maintenance of laboratories equipment are important? Explain. **(10)**

Q. 10 How the present practice of teaching in laboratory can be improved? Give suggestions. **(10)**

ASSIGNMENT No. 2

(Unit: 5-9)

Total Marks: 100

Note: Attempt all questions, each question carries 10 marks. Please write the answers in your own words. Assignments copied from the book will not be accepted.

Q. 1 Write a comprehensive essays on; **(5 + 5)**
- a) Controlled exercises
- b) Research projects

Q. 2 Define pre-laboratory activities approach. How can we use this approach for effective laboratory learning at secondary school level? **(10)**

Q. 3 Define post-laboratory activities approach. Explain the different types of post-laboratory approaches. **(10)**

Q. 4 What are the most suitable assessment techniques used by the teachers to assess the students outcomes? Write down their characteristic features. **(5 x 2)**

Q. 5 Explain the followings: **(5 x 2)**
- a) Chemical Hazards
- b) Biological Hazards

Q. 6 Explain that how the laboratory course should be sequenced? **(10)**

Q. 7 Explain the science laboratory safety rules and techniques. **(10)**

Q. 8 What are the steps in a course of action for a person first aid. **(10)**

Q. 9 Explain your views about the practical work at secondary school level in Pakistan. **(10)**

Q. 10 Explain the idea that, "Laboratories are one of the characteristic features of education in the sciences at all levels". **(10)**

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