

# BCHS-183: Laboratory Management Skills

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|------------------------|------------------------------|
| Course Code            | BCHS-183                     |
| Course Title / Subject | Laboratory Management Skills |
| Programme              | B.Sc General CBCS            |
| Medium                 | English Medium               |
| Marks                  | 100                          |
| Assignment Type        | Tutor Marked Assignment      |

This reference solution is written in simple academic language for guided study.

# Official Assignment / Syllabus Page

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## ASSIGNMENT Laboratory Management Skills Skill Enhancement Course

Course Code: BCHS-183  
Assignment Code: BCHS/TMA/2025  
Maximum Marks: 100

**Note:** Answer all the questions given below.

1. a) What is meant by scientific inquiry? List the main elements of scientific enquiry. (5)  
b) What is benching in a laboratory? Describe the types of benching arrangements. (5)
2. a) What is the significance of preparation room in a science laboratory? List the components of a preparation room. (5)  
b) What are the various ways of storing materials and other items in a laboratory? State the precautions to be kept in mind while storing different types of items in the laboratory. (5)
3. a) Write the important points that should be kept in mind while designing a store in the laboratory. List the main environmental factors required for the proper location of a store. (5)  
b) What is the purpose of memoranda in a work place? Write the memorandum headings and compare it with letters as ways of communication. (5)
4. a) List the details that are provided by the teaching staff to the laboratory staff two days in advance for the preparation of lab work. (5)  
b) Write the suggestions that should be followed for the disposal of acids and bases, alcohol, cultures and other biological material. (5)
5. a) What are the two ways of arranging the stocks in a laboratory? Describe these in brief. (5)  
b) What are the various sources of information in the laboratory? Explain the filing system for an easy retrieval of the information. (5)
6. a) Describe the useful features of MS Word in the laboratory. (5)  
b) Describe the colour codes used while wiring a plug. How the selection of proper fuse should be done? (5)
7. a) Explain what is a fire triangle and how is it helpful in managing fire in the laboratory. (5)  
b) Give a list of most common dangers in a biology laboratory. (5)
8. a) Differentiate between the unserviceable and obsolete items in a laboratory giving examples for both the types. (5)  
b) Write the first-aid procedure for electric shock. (5)
9. a) What are the occupational diseases? Write any five provisions of the Factories act. (5)  
b) What is the full form and function of IAEC? Explain. (5)
10. Write short notes on the following: (10)
  - a) Computers as tools of communication
  - b) The constant cycle system of stock control
  - c) Disposal of laboratory animals
  - d) Disposal of waste materials

## Solved Answers

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**Answer 1: a) What is meant by scientific inquiry? List the main elements of scientific enquiry. b) What is benching in a laboratory? Describe the types of benching arrangements. (ignoucollage.in)**

About 250 words

The study and understanding of **scientific inquiry? list the main elements of scientific enquiry. b) what is** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

A systematic investigation into **scientific inquiry? list the main elements of scientific enquiry. b) what is** reveals several vital characteristics and operational methods. First, it functions according to structured rules and standardized criteria that ensure consistency across varying scenarios. Second, it highlights the interdependence between foundational concepts and real-world execution, ensuring that theoretical frameworks directly support practical diagnosis and assessment. Third, careful classification of its components enables researchers to organize information logically, identify key variables, and apply systematic problem-solving steps.

In applied contexts and practical scenarios—particularly within the institutional, socioeconomic, and environmental context of India—the relevance of **scientific inquiry? list the main elements of scientific enquiry. b) what is** becomes readily apparent. Public administration, educational institutions, corporate governance, and scientific research laboratories rely heavily on these foundational principles to address complex practical challenges. For example, implementing systematic standards and evidence-based methodologies allows organizations and decision-makers to optimize resources, enhance productivity, and achieve sustainable developmental goals.

In summary, a thorough mastery of **scientific inquiry? list the main elements of scientific enquiry. b) what is** is essential for achieving complete conceptual clarity in this field. By synthesizing core theoretical frameworks with rigorous analytical classifications and real-world applications, learners develop a robust capacity for independent critical evaluation. This comprehensive approach provides the necessary groundwork for both high-level academic achievement and advanced professional practice.

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**Answer 2: a) What is the significance of preparation room in a science laboratory? List the components of a preparation room. b) What are the various ways of storing materials and other items in a laboratory? State the precautions to be kept in mind which storing different types of items in the laboratory. (ignoucollage.in)**

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The study and understanding of **significance of preparation room in a science laboratory? list the components of** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

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**Answer 3: a) Write the important points that should be kept in mind while designing a store in the laboratory. List the main environmental factors required for the proper location of a store. b) What is the purpose of memoranda in a work place? Write the memorandum headings and compare it with letters as ways of communication. (ignoucollage.in)**

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**Answer 4: a) List the details that are provided by the teaching staff to the laboratory staff two days in advance for the preparation of lab work. b) Write the suggestions that should be followed for the disposal of acids and bases, alcohol, cultures and other biological material. (ignoucollage.in)**

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**Answer 5: a) What are the two ways of arranging the stocks in a laboratory? Describe these in brief. b) What are the various sources of information in the laboratory? Explain the filing system for an easy retrieval of the information. (ignoucollage.in)**

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The study and understanding of **two ways of arranging the stocks in a laboratory? describe these in** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

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**Answer 6: a) Describe the useful features of MS Word in the laboratory. b) Describe the colour codes used while wiring a plug. How the selection of proper fuse should be done? (ignoucollage.in)**

About 250 words

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**Answer 7: a) Explain what is a fire triangle and how is it helpful in managing fire in the laboratory. b) Give a list of most common dangers in a biology laboratory. (ignoucollage.in)**

About 250 words

The study and understanding of **fire triangle and how is it helpful in managing fire in the** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

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**Answer 8: a) Differentiate between the unserviceable and obsolete items in a laboratory giving examples for both the types. b) Write the first-aid procedure for electric shock. (ignoucollage.in)**

About 250 words

The study and understanding of **unserviceable and obsolete items in a laboratory giving examples for both the** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

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**Answer 9: a) What are the occupational diseases? Write any five provisions of the Factories act. b) What is the full form and function of IAEC? Explain. (ignoucollage.in)**

About 250 words

The study and understanding of **occupational diseases? write any five provisions of the factories act. b) what** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

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**Answer 10: Write short notes on the following: a) Computers as tools of communication b) The constant cycle system of stock control c) Disposal of laboratory animals d) Disposal of waste materials (ignoucollage.in)**

About 250 words

The study and understanding of **following: a) computers as tools of communication b) the constant cycle system** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical

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A systematic investigation into **following: a) computers as tools of communication b) the constant cycle system** reveals several vital characteristics and operational methods. First, it functions according to structured rules and standardized criteria that ensure consistency across varying scenarios. Second, it highlights the interdependence between foundational concepts and real-world execution, ensuring that theoretical frameworks directly support practical diagnosis and assessment. Third, careful classification of its components enables researchers to organize information logically, identify key variables, and apply systematic problem-solving steps.

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