



QP CODE: 22000841



22000841

Reg No :

Name :

M Sc DEGREE (CSS) EXAMINATION, APRIL 2022

Third Semester

Faculty of Science

M Sc BOTANY

**CORE - BY010301 - RESEARCH METHODOLOGY, MICRO-TECHNIQUE,
BIostatistics AND BIOPHYSICAL INSTRUMENTATION**

2019 ADMISSION ONWARDS

4E01B096

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Define a subject index card.
2. What is an abstract.
3. What is the purpose of proof reading?
4. Comment on Carnoy's Fluid.
5. What are neutral stains, cite an example.
6. Define whole mount.
7. What are independent events? Give one example.
8. What is the purpose of having a control in a scientific experiment?
9. Explain micrometry.
10. Comment on flow cytometry.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Explain Universal Decimal System for classification of books.





12. Briefly describe on preliminary pages of a thesis/dissertation.
13. Write the procedures of hand sectioning.
14. Describe the double staining procedures of Safranin-Fast Green.
15. Describe the various tools and methods used for the collection of data in statistics.
16. Compare and contrast between median and mode.
17. Write a short essay on electrophoresis.
18. Explain principle and applications of NMR.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Explain the categories of journals with suitable examples. Discuss about bibliographic databases.
20. Illustrate the process of dehydration. Write the properties of important dehydrating agents and explain alcohol-xylol method of dehydration.
21. With help of an example, explain how Chi-square test can be used to detect linkage in genetic experiments.
22. Explain the principles and applications of different types of chromatography.

(2×5=10 weightage)

