



25022422

QP CODE: 25022422

Reg No :

Name :

M.Sc DEGREE (CSS) SPECIAL REAPPEARANCE EXAMINATION, APRIL 2025

Third Semester

M.Sc BOTANY

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

2019 ADMISSION ONWARDS

9A1BFE2F

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. What is an author index card?
2. What is IMRAD System?
3. Write any four examples of research funding agencies.
4. What is dehydration? Cite two examples of dehydrants.
5. What are natural stains, cite and example
6. What are mounting media?
7. Define standard deviation.
8. Differentiate between positive correlation and negative correlation.
9. Write the principle of pH meter.
10. What are the uses of TLC?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Identify a research problem in Botany, define the problem and formulate the hypothesis.
12. How will you present your research findings in a seminar?
13. Write the merits and demerits of microtome sectioning.





14. Describe any two methods of maceration used in microtechnique.
15. Describe the different methods used for the representation of data.
16. Giving a suitable example, explain how the probability for the occurrence of one of two or more mutually exclusive events determined.
17. Write a short essay on AGE.
18. Explain principle and applications of spectrophotometer.

(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. Write an essay on killing and fixing. Elaborately mention the properties and techniques, fixation images, composition and usages of common fixatives.
21. What are the basic principles of experimental design? Write an account on the different types of experimental designs.
22. Write an essay on different electron microscopes.

(2×5=10 weightage)

