

QP CODE: 25047449



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2025

Third Semester

M Sc BOTANY

**Core Course - BY010301 - RESEARCH METHODOLOGY, MICRO-TECHNIQUE,
BIOSTATISTICS AND BIOPHYSICAL INSTRUMENTATION**

2019 ADMISSION ONWARDS

2A7D7543

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Expand INFLIBNET and comment on its significance.
2. What is a 'title page' of a thesis?
3. What is an abstract?
4. Define microtomes, comment on rotary microtome.
5. Define staining of plant tissues.
6. Describe counter staining.
7. Explain the situation where addition theorem is applied.
8. In what kinds of fields do we prefer Latin Square Design for an experiment? What will happen if RBD is used in such a field?
9. Write down the applications of UV- Visible spectrophotometer.
10. What is the working principle of Ion exchange chromatography?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Write notes on ethics in research.
12. Explain SPSS and its significance.
13. Describe the composition and properties of common fixatives.
14. Illustrate the wholemount method using Glycerin-Xylool.





15. Describe the different methods used for the representation of data.
16. Compare and contrast between mean and median.
17. Write a short essay on AGE.
18. Explain principle and applications of NMR.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Write an essay on different types of journals with suitable examples. Comment on: (1) impact factor, h-index and (2) bibliographic databases
20. Illustrate the process of dehydration. Write the properties of important dehydrating agents and explain alcohol-xylol method of dehydration.
21. What is Chi-square test? Explain how it is used for testing the goodness of fit of a hypothesis.
22. Write an essay on different electron microscopes.

(2×5=10 weightage)

