

QP CODE: 25047404



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2025

Third Semester

M Sc MOLECULAR BIOLOGY AND GENETIC ENGINEERING

ELECTIVE - BS860301 - ELECTIVE PAPER - 1, CONCEPTS AND METHODS OF RESEARCH

2019 ADMISSION ONWARDS

E7DEEF19

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. Define research methodology.
2. What is exploratory research design?
3. What is meant by pilot survey?
4. Give the relationship between mean, median and mode in the case of a symmetrical (normal) distribution.
5. What is meant by standard deviation?
6. What is Yate's correction?
7. What are the different forms of poisson distribution?
8. Write a shortnote on impact factor?
9. Name 2 software tools to detect plagiarism.
10. Suggest a software for thesis formatting.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Differentiate between deductive and inductive theory.
12. Differentiate between qualitative and quantitative research.
13. What is the importance of a research design?
14. What are the steps to be followed for testing a hypothesis?





15. How two way ANOVA differs from one way ANOVA?
16. What is the significance of review of literature?
17. What are the contributions of a research supervisor and scholar in a research project and resultant thesis?
18. How can you maximise the impact of the findings in your thesis ?

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. What are the basic principles of experimental designs.
20. How t-test is used for the comparison of paired as well as unpaired samples? Explain?
21. Discuss on how to select a journal for your research paper.
22. Discuss the qualities of a good thesis? Discuss the planning aspect and tools for a good thesis?

(2×5=10 weightage)

