



Reg. No. :

Name :

**V Semester B.Sc. Degree (CBCSS – OBE-Regular/Supplementary/
Improvement) Examination, November 2022
(2019 Admission Onwards)
Core Course in Botany/Plant Science
5B09BOT/PLS : RESEARCH METHODOLOGY, INSTRUMENTATION AND
BIOSTATISTICS**

Time : 3 Hours

Max. Marks : 40

Instructions : Draw diagrams wherever specified.

**PART – A
(Objective type questions)**

Answer all :

(4×1=4)

1. Improvement of a Race through heredity is called
a) Euthenics b) Cladistics c) Eugenics d) Genomics
2. Nigrosin is an example for
a) Nuclear stain b) Capsule stain
c) Endospore stain d) Negative stain
3. 5-G Cellular is an example for
a) Wireless technology b) Operating system
c) Wired technology d) Mobile display
4. A major statistical software is
a) PDB b) SPSS c) NCBI d) Statin

**PART – B
(Short Essay questions)**

Answer any eight :

(8×2=16)

5. What is meant by Mode ?
6. Define Standard error.
7. Write any 4 applications of Internet.

P.T.O.



8. Give an account of Colorimeter.
9. What is a Buffer? Give an example.
10. Explain SMPS in computer terminology.
11. Write about the functioning of Spectrophotometer.
12. Describe different types of Microtomes.
13. What is Phase-contrast microscopy ?
14. Write about Application soft-wares used in biological research.
15. Describe Arithmetic mean in detail.
16. What is meant by science ?

**PART – C
(Essay questions)**

Answer any four :

(4×3=12)

17. Differentiate between direct and indirect observations.
18. Give an account of Standard deviation.
19. Explain the term Copyrights.
20. Describe the principle and application of pH meter.
21. Explain Ultra-centrifuge with a diagram.
22. Write notes on various branches of pure and applied sciences.

**PART – D
(Long Essay questions)**

Answer any one :

(8×1=8)

23. Give an account of Ethics in science.
24. Explain the structure and functioning of electron microscope.
25. Write notes on correlation and regression.