

QP CODE: 21100324

| Reg No | : | |
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| Name | : | |

B.Sc DEGREE (CBCS) EXAMINATION, FEBRUARY 2021

Fifth Semester

Core Course - BO5CRT06 - RESEARCH METHODOLOGY, BIOPHYSICS AND BIOSTATISTICS

B.Sc Botany Model I, B.Sc Botany Model II Environmental Monitoring And Management, B.Sc Botany Model II Food Microbiology, B.Sc Botany Model II Horticulture and Nursery Management, B.Sc Botany Model II Plant Biotechnology

2017 Admission Onwards

172C06EA

Time: 3 Hours

Max. Marks : 60

Part A

Answer any **ten** questions. Each question carries **1** mark.

- 1. What is abstract?
- 2. Name any two International National Journals in Life sciences.
- 3. What is LINUX?
- 4. What does Ctrl+V do?
- 5. Name the common average in MS-Excel.
- 6. What is Scitable?
- 7. Define molecular biophysics.
- 8. Name any two dyes used in electron microscope.
- 9. Name a technique ideal for the separation of DNA fragments.
- 10. Give any one example of tracking dye used in PAGE.
- 11. Define range.
- 12. Who coined the term standard deviation?

(10×1=10)

Part B

Answer any **six** questions.





Each question carries 5 marks.

- 13. What are the main characteristics of a good hypothesis?
- 14. Explain: "Interpretation is the fundamental component of research process".
- 15. How can you create a presentation using MS-PowerPoint? Mention its advantages.
- 16. Give a brief account on Open Office.
- 17. Briefly explain Beer- Lambert Law
- 18. Explain the applications of pH meter ?
- 19. Briefly describe the importance of haemocytometer in the field of medicine.
- 20. Differentiate random and non random sampling.
- 21. What is Arithematic mean? Explain with the help of an example.

(6×5=30)

Part C

Answer any **two** questions. Each question carries **10** marks.

- 22. What is IMRAD system? Explain method of preparation of research report in IMRAD system.
- 23. Mention the steps involved in creating work sheets in MS Excel . What are the different types of charts present in MS Excel? Explain.
- 24. Comment on the parts of a compound microscope.
- 25. Comment on the "importance of testing hypothesis" and explain the methods of testing hypotheses.

(2×10=20)