

QP CODE: 20100324



Reg No	:	
Name		

BSc DEGREE (CBCS) EXAMINATION, FEBRUARY 2020

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

86A46683

Time: 3 Hours Maximum Marks :60

Part A

Answer any **ten** questions.

Each question carries **1** mark.

- 1. What is a sample in an experiment?
- 2. Give any one source of secondary data.
- 3. Write down the shortcut key for 'find' in MS-Word.
- 4. What is histogram?
- 5. Name a search engine.
- 6. What is DNAi?
- 7. Define resolution of a microscope.
- 8. Name any two embedding materials used in electron microscope.
- 9. Name any two laws associated with spectrophotometry.
- 10. What is counting chamber?
- 11. What is primary data?
- 12. What is frequency?

 $(10 \times 1 = 10)$



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Part B

Answer any six questions.

Each question carries 5 marks.

- 13. Explain the role of hypothesis in research.
- 14. What is a research design?
- 15. How to prepare a histogram using MS-Excel?
- 16. Give a brief account on LibreOffice.
- 17. Briefly describe the importance of biophysics in the field of life sciences.
- 18. Briefly describe the different methods of centrifugation?
- 19. What is the basic principle of chromatography.
- 20. Calculate mean and median from the following ungrouped data relating to Haemoglobin percent in g/100 ml. 6.5, 6.0, 7.5, 8.2, 8.5, 8.7, 8.8, 8, 9, 9 and 9.5
- 21. Explain binomial distribution.

 $(6 \times 5 = 30)$

Part C

Answer any two questions.

Each question carries 10 marks.

- 22. Discuss the importance and purpose "Review of literature" in research and briefly mention the various literature sources.
- 23. Briefly explain the steps involved in the preparation of a presentation based on biological topic in MS-Power Point.
- 24. Briefly explain the principle, procedure and applications of PAGE.
- 25. Briefly explain the step by-step procedure for testing your hypothesis and calculating Chisquare.

 $(2 \times 10 = 20)$

