TB 141020	Reg. No
	Name:

B.Sc. DEGREE (C.B.C.S.S) EXAMINATION, NOVEMBER 2014

B.Sc. BOTANY – FIRST SEMESTER

CORE COURSE

BOT1MPIP – METHODOLOGY AND PERSPECTIVES OF SCIENCE AND AN INTRODUCTION TO THE WORLD OF PLANT DIVERSITY

Time: Three Hours Maximum: 60 Marks

Part A -Short Answer Questions Answer all questions Each question carries 1 mark

- 1. Why green plants are called primary producers?
- 2. Which is the controlling centre of a cell?
- 3. Expand DNA.
- 4. Name a unicellular alga.
- 5. List the basic units of measurements
- 6. What is a patent?
- 7. Define variables of experiments.
- 8. What are the principles of experimentation?

(8 x1=8 marks)

Part B (Brief Answer Questions) Answer any six questions Each question carries 2 marks

- 9. Explain the need of control in experimentation.
- 10. Name a medicine obtained from plants.
- 11. What is meant by hypha?
- 12. What are the advantages and disadvantages of scientific method of experimentation?
- 13. Which are the components of lichens?
- 14. What is the importance of searching literature in experimentation?
- 15. Discuss the contributions of Louis Pasteur.
- 16. What are the ethical issues in science research?
- 17. What is pomology?
- 18. Define heterotrophs. Give an example?

 $(6 \times 2 = 12 \text{ marks})$

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Part C (Problems/Derivations)

Answer any four questions Each question carries 4 marks

- 19. Differentiate between dicotyledons and monocotyledons?
- 20. Give an account of pigments in algae
- 21. Explain thallus organization in fungi
- 22. What is meant by testing hypothesis?
- 23. Outline the essential steps involved in preparing research design
- 24. What are the methods of analysis of data?

 $(4 \times 4 = 16 \text{ marks})$

Part D (Long answer/ Problem questions) Answer any two questions Each question carries 12 marks

- 25. Explain the different types of life cycle patterns in Pteridophytes with the help of schematic sketches.
- 26. Give an account of different types of bacteria with the help of diagrams.
- 27. Explain with an example the stages of experiment from a question to an experimental design.
- 28. Write an essay on research hypothesis.

(2 x 12 = 24 marks)