



Reg No	:	
Name	:	

### **B.Sc DEGREE (CBCS) EXAMINATIONS, OCTOBER 2021**

### **First Semester**

# Core Course - BO1CRT01 - METHODOLOGY OF SCIENCE & AN INTRODUCTION TO BOTANY

Common to 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 Plant Biotechnology, B.Sc Botany Model II Horticulture and Nursery Management & B.Sc Botany and Biotechnology Model III Double Main

2017 Admission Onwards

4540B477

Time: 3 Hours

Max. Marks : 60

### Part A

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

- 1. What is meant by testing of hypothesis?
- 2. What do you mean by review of literature?
- 3. What are extraneous variables?
- 4. What is replication?
- 5. What is the 'theory of use and disuse'?
- 6. Which form, Kingdom Animalia stores food?
- 7. What are methanogens? Give an example.
- 8. Define karyogamy.
- 9. Define endosperm.
- 10. What is herbarium?
- 11. What is TLS?
- 12. Give an example for a stain used in cytological studies?

 $(10 \times 1 = 10)$ 

### Part B

Answer any **six** questions. Each question carries **5** marks.





- 13. With the help of a flow chart briefly describe the steps involved in scientific method.
- 14. Examine the need for Ethics in Science.
- 15. Explain with example homologous and analogous organs.
- 16. Explain Neo Darwinism.
- 17. Explain Eicheler's classification of plants.
- 18. What are the criteria choosed by Whittaker for five Kingdom classification? List out the merits.
- 19. Describe the aquatic adaptations of algae.
- 20. Describe the important characteristics of Bryophytes.
- 21. Explain the parts of a compound microscope.

(6×5=30)

#### Part C

## Answer any **two** questions.

#### Each question carries **10** marks.

- 22. Design an experiment on the topic application of growth hormones and internodal growth of plants.
- 23. Give an account on geological time scale.
- 24. How is archaea different from bacteria and eukarya?
- 25. Give a general account on killing and fixing. Explain the composition of common killing and fixing agents.

(2×10=20)