# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

## B.Sc. DEGREE EXAMINATION - PLANT BIOLOGY & PLANT BIO-TECH.

### THIRD SEMESTER - NOVEMBER 2009

#### **B** 351 – **BOTANY** - **I**

Date & Time: 10/11/2009 / 9:00 - 12:00 Dept. No. Max. : 100 Marks

#### **PART A**

# Answer <u>ALL</u> questions, each within 2 or 3 sentences only: $(10 \times 2 = 20)$

- 1. Heterocyst
- 2. Wheat rust
- 3. Coralloid roots of Cycas
- 4. Capsid
- 5. Citrus canker
- 6. Symbiosis
- 7. Nitrification
- 8. Phytoplanktons
- 9. Cheese
- 10. Autoclave

#### PART B

# Answer any <u>FIVE</u> of the following each within one page only. Draw necessary diagrams. $(5 \times 8 = 40)$

- 11. Describe asexual reproduction in Aspergillus.
- 12. Explain the internal structure of *Lycopodium*.
- 13. Discuss the structure of ovule of *Cycas*.
- 14. What are viruses? Mention their salient features.
- 15. Describe nitrogen cycle.
- 16. Write about any four methods of control of microorganisms in air.
- 17. Write about microbial spoilage of food.
- 18. Discuss the types of microorganisms present in milk.

#### **PART C**

Answer any  $\underline{TWO}$  of the following, each within 3 or 4 pages only. Draw ecessary diagrams. (2×20= 40)

- 19. Describe the life history of *Ectocarpus*.
- 20. Give an account of structure of sex organs of *Funaria*.
- 21. Explain the structure of a typical bacterial cell. Mention the different types of bacteria based on the shape?
- 22. Discuss the control of microbes by physical agents.

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