



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**B.Sc. DEGREE EXAMINATION – CHEMISTRY & ADV. ZOOLOGY**

THIRD SEMESTER – APRIL 2017

**PB 3206/PB 3200 - GENERAL MICROBIOLOGY**

Date: 04-05-2017  
09:00-12:00

Dept. No.

Max. : 100 Marks

**Part - A**

*Answer the following, each within 50 words.*

**(10 x 2 = 20 Marks)**

1. What are Prokaryotes?
2. Draw and label a Bacteriophage.
3. Mention any two roles of bacterial capsule.
4. What is bacterial growth curve?
5. Define Conjugation.
6. Write notes on bacterial plasmid.
7. Give any two control measures for Tobacco Mosaic disease.
8. What is 'Necrosis'?
9. What are Diazotrophs? Give an example.
10. Comment on Biofloculation.

**Part – B**

*Answer the following, each within 500 words. Draw diagrams and flowcharts wherever necessary.*

**(5 x 7 = 35 Marks)**

11. (a) Elucidate the classification of fungi.  
Or  
(b) List out the salient features of viruses with examples.
12. (a) Explain the process of endospore formation.  
Or  
(b) Draw and describe the bacterial cell.
13. (a) Describe the structure and regulation of *Lac* Operon.  
Or  
(b) Explain the mechanism of transformation in bacteria.
14. (a) Write notes on the host, pathogen, symptoms and control measures for citrus canker.  
Or  
(b) Explain the plant disease caused by *Mycoplasma*.
15. (a) How Cheese is produced at large scale?  
Or  
(b) Give an account on the positive and negative interactions among soil microbes.

### Part – C

Answer **any three** of the following, each within 1200 words. Draw diagrams and flowcharts wherever necessary. (3 x 15 = 45 Marks)

16. Explain the characteristics and classification of Algae.
17. Describe the structure of cell wall in gram positive and gram negative bacteria.
18. Write detailed notes on generalized and specialized transduction.
19. Illustrate the life cycle of *Puccinia*. Mention its control measures.
20. Explain the steps involved in waste water treatment.

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