



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY & CHEMISTRY

THIRD SEMESTER – APRIL 2016

PB 3206 - GENERAL MICROBIOLOGY

Date: 04-05-2016
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

PART A

Answer the following, each within 50 words only

(10 x 2 = 20)

1. What are microbes?
2. List any 4 features of viruses.
3. Cite any 2 functions of bacterial pili.
4. Define enrichment media.
5. List any 4 features of the DNA.
6. Define transformation.
7. Name the causal organism of Citrus canker and Wheat rust.
8. What is mycoplasma?
9. What are trickling filters?
10. List any 2 roles of antibiotics.

PART B

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

(5 x 7 = 35)

11. (a) Outline the classification of bacteria based on cell shape and flagellation.

Or

- (b) Give an account on the classification of algae.

12. (a) Describe the parts of a bacterial cell.

Or

- (b) Write notes on the nutritional requirements of bacteria.

13. (a) Write a short note on bacterial replication.

Or

- (b) Describe the process of conjugation.

14. (a) Give a brief account on Citrus Canker.

Or

- (b) List out the causal organism, symptoms and control measures of Little leaf of Brinjal.

15. (a) Give a short account on the microbial spoilage of food.

Or

- (b) Write notes on microbiology of wastewater treatment.

PART C

Answer any THREE of the following, each within 1200 words. Draw diagrams and flowcharts wherever necessary

(3 x 15 = 45)

16. Give an account on the classification and general characteristics of fungi.
17. Discuss the different methods for measurement of microbial growth.
18. Explain the process of gene regulation using lac operon as an example.
19. Write in detail on the red rust disease of *Puccinia*.
20. Give an account on microbial enzymes and their applications in industry.
