



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – NOVEMBER 2015

PB 3206 - GENERAL MICROBIOLOGY

Date : 12/11/2015
Time : 09:00-12:00

Dept. No.

Max. : 100 Marks

PART – A

Answer the following, each in about 50 words:

(10 x 2 = 20 marks)

1. What are bacteriophages?
2. Write short notes on mycoplasma.
3. Cite any 2 functions of the capsule.
4. Define enrichment media.
5. What are nucleotides?
6. What is transformation?
7. Cite the symptoms of Citrus canker.
8. What are pure cultures?
9. Name the enzymes used in the detergents.
10. What are vaccines?

PART – B

Answer the following, each within 500 words only.

Draw diagrams and flowcharts wherever necessary:

(5 x 7 = 35 marks)

11. (a) Give a brief account on the classification of fungi.
(Or)
(b) List out any 10 vital features of viruses.
12. (a) Describe the structure of the gram – negative bacterial cell wall.
(Or)
(b) Describe briefly the nutritional requirements of culture media for microbes.
13. (a) Describe the process of conjugation.
(Or)
(b) Write short notes on transduction.
14. (a) Give a brief account of little leaf disease in brinjal.
(Or)
(b) Explain the industrial uses of microbial enzymes.
15. (a) Explain the industrial fermentation of penicillin.
(Or)
(b) Give a short account on the interactions among the soil microbes.

PART – C

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

(3 x 15 = 45 marks)

16. Give a detail account on the characteristics and classification of algae.
17. Describe the methods of measurement of microbial growth.
18. Write in detail on gene regulation in bacteria with lac operon as an example.
19. Give a detailed account on wheat rust disease.
20. Enumerate and explain the methods of waste water treatment.

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