



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – ZOOLOGY

FOURTH SEMESTER – APRIL 2017

ZO 4811- MICROBIOLOGY

Date: 18-04-2017
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

Part A

Answer ALL the questions

(10×2=20 Marks)

1. Define spontaneous generation theory.
2. What is "Endosymbiotic Theory"?
3. Comment on inclusion bodies.
4. Differentiate synthetic media from natural media.
5. Mention the proteins involved in DNA replication.
6. Comment on type IV secretion.
7. What are the phases of infectious diseases?
8. Comment on river blindness.
9. Diseases can emerge or re-emerge? – Justify.
10. Define bioleaching.

Part B

Answer any FOUR questions

(4×10=40 Marks)

11. Give an account on staining methods for microorganisms.
12. Describe Whittaker's five kingdom classification.
13. Describe microbial growth.
14. What are the types of RNA? And describe the role of RNA in biosynthesis.
15. Write notes on antimicrobial chemotherapy.
16. Give an account on sterilization.

Part C

Answer any TWO questions

(2×20=40 Marks)

17. Write an essay on DNA repair mechanism.
18. Explain the human diseases caused by virus, bacteria, Fungi and protozoan.
19. Write an essay on industrial microbiology.
20. What is horizontal gene transfer? Explain with suitable examples.

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