



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – ZOOLOGY

FOURTH SEMESTER – APRIL 2015

ZO 4811 - MICROBIOLOGY

Date : 15/04/2015
Time : 09:00-12:00

Dept. No.

Max. : 100 Marks

Part A

Answer ALL the questions:

(10×2=20 Marks)

1. Define on pasteurization.
2. Comment on Whittaker's classification.
3. List out the factors influencing microbial growth.
4. How will you differentiate defined media from differential media?
5. Comment on horizontal gene transfer.
6. Write the salient features of *Lactobacillus* and *Bifidobacterium*.
7. Differentiate intrinsic factor from extrinsic factor affecting the food.
8. Comment on type IV secretion.
9. What is River blindness?
10. Define biodegradation.

Part B

Answer any FOUR questions:

(4×10=40 Marks)

11. Explain the available staining methods of microorganisms.
12. Describe Whittaker's five kingdom classification.
13. Illustrate the cell wall and cytoplasmic membrane of the prokaryotes.
14. Explain the relationship of human with microorganism.
15. What are the types of RNA? And describe the role of RNA in biosynthesis.
16. Give an account on applied microbiology.

Part C

Answer any TWO questions:

(2×20=40 Marks)

17. Discuss different theories on origin of microbes.
18. Explain microbial nutrition.
19. Write an essay on industrial microbiology.
20. Explain horizontal gene transfer process.
