# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



**M.Sc.** DEGREE EXAMINATION – **ZOOLOGY** 

FOURTH SEMESTER – APRIL 2016

Part A

# **ZO 4811 - MICROBIOLOGY**

Date: 15-04-2016 Time: 09:00-12:00 Dept. No.

Max.: 100 Marks

(10×2=20 Marks)

# Answer ALL the questions

- 1. Microorganism arise from spontaneously Justify.
- 2. Differentiate acidophilic from basophilic stain.
- 3. Differentiate Obligate from facultative growth.
- 4. What is intoxication? Give two examples.
- 5. Mention the proteins involved in DNA replication.
- 6. What is specialized gene transfer?
- 7. What is  $\beta$ -Lactam and give an example?
- 8. Write the salient features of Bifidobacterium.
- 9. Differentiate chemostat from thermostat.
- 10. Comment on bioaugmentation.

#### Part B

# Answer any FOUR questions

- 11. Write two important scientists contribution to microbiology.
- 12. Describe the microscopical methods to study microorganism.
- 13. Give an account on gram staining.
- 14. Describe the anatomy and structure of prokaryotes.
- 15. Explain the human diseases caused by bacteria and Fungi.
- 16. Give an account on food microbiology.

# Part C

# **Answer any TWO questions**

- 17. Discuss different theories on origin of microbes.
- 18. What are types of replication? And explain the mechanism of DNA replication in prokaryotes.
- 19. Write an essay on pathogenicity of microorganism and epidemiology of infectious disease.
- 20. Write an essay on sterilization methods.

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(4×10=40 Marks)

(2×20=40 Marks)