LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

DEGREE EXAMINATION - PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

FIFTH SEMESTER - NOVEMBER 2016

PB 5405 - MEDICAL MICROBIOLOGY

Date: 09-11-2016 Dept. No. Max. : 100 Marks
Time: 09:00-12:00

Part - A

 $(10 \times 2 = 20 \text{ Marks})$

Answer the following, each within 50 words.

- 1. Mention the contributions of Robert Koch.
- 2. Comment on thymine dimerization.
- 3. Give the importance of β -lactam ring.
- 4. What is chemotherapy?
- 5. Write short notes on agglutination reaction.
- 6. Give the roles of natural killer cells.
- 7. Write about the symptoms of histoplasmosis.
- 8. Mention the salient features of *Mycobacterium tuberculosis*.
- 9. Expand ELISA. Mention its applications.
- 10. Mention the pathogen that causes AIDS.

Part - B

 $(5 \times 7 = 35 \text{ Marks})$

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

11. a) Explain the principles and applications of radiation in sterilization.

Or

- b) Enumerate the contributions of Louis Pasteur and Joseph Lister.
- 12. a) Give the functions of sulpha drugs with illustration.

Or

- b) Write notes on antibiotic sensitivity tests.
- 13. a) Write notes on normal microflora of intestine.

Or

- b) Elaborate on any 2 immunological techniques used in disease diagnosis.
- 14. a) Mention the pathogen and explain the symptoms and control of hepatitis.

Or

- b) Write about the pathogen, disease cycle and control measures of skin diseases.
- 15. a) Cite the pathogen, symptoms and control measures of tetanus.

Or

b) Mention about the pathogen, disease cycle and control measures of cholera.

Part – C $(3 \times 15 = 45 \text{ Marks})$

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

- 16. Write detailed notes on the alcohols and phenols in the control of microbial growth.
- 17. Mention the sources, structure, mode of action and uses of streptomycin.
- 18. Explain about natural defense mechanism in the human body.
- 19. Describe the pathogen, symptoms, diagnosis and control of syphilis.
- 20. Give details on the life cycle of malarial parasite. Add a note on its diagnosis.
