

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY & PLANT BIO-TECH.**

FIFTH SEMESTER – NOVEMBER 2007

**PB 5401 - MEDICAL MICROBIOLOGY**

AE 8

Date : 03/11/2007  
Time : 9:00 - 12:00

Dept. No.

Max. : 100 Marks

**SECTION-A (20 marks)**

Answer all questions

**I. Choose the correct answer.**

**(5x1=5 marks)**

01. Statement A : Bacteriostatic agents kill the microbes.  
Statement B : Injury caused by them is reversible.  
a. Statement A is correct, but Statement B is incorrect  
b. Statement B is incorrect, but Statement A is Correct  
c. Both A and B are correct  
d. Both A and B are incorrect
02. The source of streptomycin is :  
a.. *Streptomyces*    b.. *Streptococcus*    c. *Streptobacillus*    d. *Myces*
03. Which one of the following is not a virulence factor?  
a. Exotoxins    b. Endotoxins    c. Capsid    d. Capsule
04. Hepatitis is an example for \_\_\_\_\_ infection.  
a. Viral    b. Bacterial    c. Fungal    d. Protozoa
05. The causal organism of syphilis is a \_\_\_\_\_ :  
a. *Diplococcus*    b. *Spirochaete*    c. *Streptomyces*    d. *Bacillus*

**II. State whether the following statements True or False.**

**(5x1=5 marks)**

06. Plasmolysis results in cell bursting.  
07. Sulphonamides are synthetic chemotherapeutic drugs.  
08. Phagocytosis comes under nonspecific immunity.  
09. Genetically engineered vaccine is available against hepatitis B.  
10. Typhus fever is caused by *Salmonella typhi*.

**III. Complete the following.**

**(5x1=5 marks)**

11. Ethylene oxide is an example of \_\_\_\_\_ .  
12. Source of Nystatin is \_\_\_\_\_ .  
13. Communicability is otherwise known as \_\_\_\_\_ of \_\_\_\_\_ .  
14. Wassermann test is a type of \_\_\_\_\_ test.  
15. The causal organism of black water fever is \_\_\_\_\_ .

**IV. Answer the following each within 50 words.**

**(5x1=5 marks)**

16. Write about the significance of phenol.  
17. Mention the source and mode of action of Penicillin.  
18. What is absolute immunity?  
19. Write any two cultural features of *Mycobacterium tuberculosis*..  
20. Name any two drugs used in the treatment of malaria.

## SECTION-B

Answer any FIVE of the following, each within 350 words only. (5x8=40 marks)

21. Write about radiation as a physical method of control.
22. What are antibiotics? Write down their properties. Mention the source, mode of action and spectrum and activity of Griseofulvin.
23. Give an outline of immunity, mentioning the salient aspects.
24. Discuss the symptoms, lab diagnosis and prevention of chicken pox.
25. Write about the causal organism, symptoms and treatment of Gonorrhoea.
26. Expand the following with a footnote each.
  - i. BCG
  - ii. SIDS
  - iii. ORT
  - iv. HAV
27. Distinguish between
  - i. Autoclave and Arnold Sterilizer
  - ii. Synthetic drug and antibiotic
  - iii. Resident flora and transient flora
  - iv. Amoebiasis and Histoplasmosis (causal organism)
28. Define the following:
  - i. Credes method
  - ii. Metabolic analog
  - iii. Septicaemia
  - iv. Tubercles

## SECTION-C

Answer the following each within 1500 words. (2x20=40 marks)

29. a. Give an account of chemical methods of control of microbes.  
or  
b. Describe the causal organism, symptoms, lab. diagnosis and treatment of cholera.
30. a. Discuss the causal organism and symptoms of AIDS. What measures could be taken to prevent AIDS.  
or  
b. Explain the following:
  - i. Filtration
  - ii. Competitive inhibition
  - iii. Transmission of disease
  - iv. Symptoms and treatment of rabies

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