

AP-481

(c) Explain :

(i) Antibiotics

(ii) MIC.

4

OR

(d) Enlist major antimicrobial agents against bacteria and fungi. Explain any one in detail. 4

(e) Discuss agar dilution method of antimicrobial susceptibility testing. 4

(f) Give characteristics of ideal chemotherapeutic agent. 4

B.Sc. (Part-II) Semester-IV Examination
4S : MICROBIOLOGY
(Medical Microbiology)

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) All questions are compulsory.

(2) Draw well labelled diagrams, wherever necessary.

1. (A) Fill in the blanks :

2

(i) Infection which is initiated by physician is called as _____.

(ii) The causative agent of Typhus fever is _____.

(iii) The long form of ELISA is _____.

(iv) _____ test is performed for serological diagnosis of typhoid fever.

(B) Choose the correct alternative : 2

(i) Streptolysin O is a oxygen _____ haemolysin.

- (a) Stable
- (b) Labile
- (c) Mobile
- (d) Stagnant

(ii) Germ tube is produced in _____.

- (a) Rickettsia
- (b) Candida albicans
- (c) Staphylococcus
- (d) Vibrio cholerae.

(iii) Immunity acquired by foetus from mother is called as _____.

- (a) Herd Immunity
- (b) Species Immunity
- (c) Transplacental Immunity
- (d) Racial Immunity

(e) Explain in brief IgA. 4

(f) Explain monoclonal antibodies in brief. 4

5. Describe morphology, pathogenicity, lab-diagnosis and prophylaxis of **Mycobacterium Tuberculosis**. 12

OR

Describe morphology, pathogenicity, lab-diagnosis and prophylaxis of **Vibrio Cholerae**. 12

6. Describe in detail Polio Virus. 12

OR

What is AIDS ? Describe in detail pathogenicity, lab diagnosis and prophylaxis of its causative agent. 12

7. (a) Discuss broth dilution method of antimicrobial susceptibility testing. 4

(b) Explain mechanism of action of Rifampicin with its clinical use. 4

(iv) Allergic reactions are caused by _____.

- (a) Ig G antibodies
- (b) Ig M antibodies
- (c) Ig A antibodies
- (d) Ig E antibodies

(C) Answer in one sentence :

4

- (1) What is attenuation ?
- (2) Define pathogenicity and virulence.
- (3) Define nosocomial infection.
- (4) What is carrier ?

2. (a) Differentiate between Exotoxin and Endotoxin. 4

(b) Discuss normal flora of respiratory tract. 4

(c) What is Epidemiology ? Give its classification. 4

OR

(d) Explain air-borne transmission of diseases. 4

- (e) Explain microbial enzymes as virulence factor. 4
- (f) How diseases can be controlled by blocking the channels of airborne transmission ? 4
- 3. (a) Explain in brief Spleen. 4
- (b) Explain Active Immunity. 4
- (c) Explain Type-II Hypersensitivity. 4

OR

- (d) Differentiate between Active and Passive Immunity. 4
- (e) Explain Delayed type of Hypersensitivity. 4
- (f) Explain T-Cell in brief. 4
- 4. (a) Explain in brief ELISA. 4
- (b) Explain the structure of IgG. 4
- (c) Define antigen. Explain factors determining antigenicity. 4

OR

- (d) Explain in brief agglutination reaction. 4