

17/11/18

BSc (Biotech)

Paper / Subject Code: 79003 / Medical Microbiology

Q. P. Code: 33971

2 ½ Hours

Total Marks: 75

1. Attempt all questions.
2. All questions carry equal marks.
3. Draw neat labeled diagrams wherever necessary.
4. Use of log tables and non-programmable calculator is allowed.
5. For Q.2, Q.3 and Q.4 attempt A and B OR C and D.

Q.1 Do as directed (Any fifteen)

15

1. Define virulence.
2. What is asymptomatic infection?
3. State the importance of Koch's postulate.
4. Give one example of exotoxin.
5. Give one word for: It is the ability of microorganisms to produce toxins.
6. Boil in an example of _____ type of infection.
7. Define a true pathogen.
8. Name any one agent added in culture media to inhibit swarming of *Proteus species*.
9. Fill in the blank: Acid fast staining is employed for detection of _____ from sputum samples.
10. What is furuncle?
11. Name one culture medium for isolation of *S. pneumoniae*
12. State true or False: ETEC is responsible for Traveller's diarrhoea.
13. State use of LJ medium.
14. Name the causative agent for Scalded Skin Syndrome.
15. Give any one example of pathogenic *Shigella* species.
16. _____ is the scientist discovered *Salmonella* bacteria.
17. Give any one example of pathogenic *Salmonella* species.
18. Name the antibiotic effective in treating gonorrhoea for many years.
19. Define chancre.
20. State the significance of Reagin-type antibodies.

- Q. 2 A Discuss different patterns of infection with suitable examples for each. 08
 Q. 2 B Give a brief account on acquisition and transmission of infectious agents. 07

OR

- Q. 2 C Give a brief account on sign and symptoms of disease and inflammation. 08
 Q. 2 D What are bacterial toxins? Give differential characteristics of bacterial exotoxins and endotoxins. 07
 Q. 3 A Give an account on various virulence factors of *S. aureus*. 08
 Q. 3 B Discuss laboratory diagnosis & treatment of respiratory infections caused by *S. pneumoniae*. 07

OR

- Q. 3 C Elaborate on EHEC. 08
 Q. 3 D Describe laboratory diagnosis of urinary tract infections 07

- Q. 4 A Diagrammatically explain the sequence of infection of the intestinal wall in Shigellosis. 08
 Q. 4 B Discuss the laboratory diagnosis and treatment of Gonorrhoea. 07

OR

- Q. 4 C Give an account of gastrointestinal infection by *Salmonella*. 08
 Q. 4 D Enlist salient features and virulence features of *Pseudomonas aeruginosa* and its role in nosocomial infections. 07

- Q. 5 Write Short notes on any three of the following 15
 a. Zoonosis.
 b. Normal flora of skin.
 c. Skin infections caused by *S. pyogenes*.
 d. Prophylaxis and control of TB.
 e. Different Stages of clinical manifestation of *Syphilis*.