

**NOTE:**

1. Attempt all questions.
2. All questions carry equal marks.
3. Draw neat labeled diagrams wherever necessary.
4. 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. Give any one example of an enzyme as a virulence factor.
  2. Define pandemic
  3. Give any one example of an opportunistic pathogen
  4. Define syndrome.
  5. Give any one example of normal flora of the urinary tract in humans.
  6. Define chronic infection.
  7. What is a convalescent carrier?
  8. Name the skin test used for the diagnosis of tuberculosis.
  9. Give any one example of the second line of drugs used for tuberculosis treatment.
  10. Define furuncle.
  11. Name any one type of toxin produced by *S.aureus*
  12. Name any one biochemical test which can be used for identification of *E.coli*.
  13. State true or false: *Streptococcus pneumoniae* are also known as diplococci.
  14. Name any one virulence factor of *S.pyogenes*.
  15. What is Vi antigen of *S.Typhi*?
  16. What is Congenital syphilis?
  17. State true or false " Shiga toxin produced by *S.shigae* is a neurotoxin"
  18. \_\_\_\_\_ is the commonly used serological test for diagnosis of enteric fever.
  19. What is the first step in pathogenesis of *Shigella* species?
  20. Which clinical samples are used for laboratory diagnosis of *Pseudomonas aeruginosa*?
- Q. 2 A Describe different mechanisms of Infection and add a note on reservoirs of infection. 08**
- Q. 2 B Define virulence factor and give a brief account on virulence factors with respect to enzymes and toxins produced by the pathogens. 07**
- OR**
- Q. 2 C Discuss epidemiology in brief and add a note on epidemiological markers. 08**
- Q. 2 D Give a brief account on normal flora. 07**
- Q. 3 A Describe in brief about *Mycobacterium tuberculosis* causative agent of tuberculosis with respect to its Characteristics, Transmission, Course of Infection, Lab Diagnosis, Management of TB. 08**

- Q. 3 B** Give a brief account on various skin infections caused by *S.aureus*. 07  
**OR**
- Q. 3 C** Describe in brief about *E.coli* and add a note on urinary tract infections caused by *E.coli* 08
- Q. 3 D** Comment on *S.pyogenes* as skin pathogen. 07
- Q. 4 A** Name the causative agent of bacillary dysentery. Add a note on (a) its general morphological and cultural characteristics (b) general prevention and control measures. 08
- Q. 4 B** What is nosocomial infection? Write a note on general properties and virulence factors of *Pseudomonas aeruginosa*. 07  
**OR**
- Q. 4 C** What are carriers? Give two types of carriers for typhoid and add a note on detection of carriers. 08
- Q. 4 D** Discuss in brief clinical manifestations for gonorrhoea. 07
- Q 5** Write Short notes on any three of the following 15
- Advantages of normal flora
  - Different types of carriers in different infections
  - Endotoxin as a virulence factor.
  - Syphilis and Ophthalmia neonatorum
  - Immunoprophylaxis for typhoid fever.