

272  
December-25--3092

B. Sc. Nursing Sem - III Examination

December - 2025

Applied Microbiology and Infection Control including Safety

Total Marks : 75

Time : 3 Hours

- Instructions : 1. The number to the right indicated full marks.  
2. Draw diagram wherever necessary.  
3. Answer each section in the respective answer sheet only.  
4. Answer written in the inappropriate sectional answer book will not be assessed in any case.

SECTION-A (37 Marks)

1. **Multiple Choice Questions :** 06
1. The bacterial motion is also known as  
a. Mobility b. Motility  
c. Vagility d. None of above
  2. FGN stands for  
a. Fastidious gram negative bacilli b. Fast gram negative bacilli  
c. Fastidious gelatin negative bacilli d. None of the above
  3. The BCG vaccine is administered for immunity against  
a. Malaria b. Tuberculosis c. Jaundice d. Hepatitis
  4. Viruses are made up of  
a. Protein coat and nucleic acid  
b. Protein coat and mitochondria  
c. Nucleic acid and cell membrane  
d. Nucleic acid, cell wall and cell membrane
  5. The study of arthropods is known as  
a. Medical entomology b. Immunology  
c. Virology d. Nematology
  6. In gram staining iodine is used as a ?  
a. Decolorizer b. Mordant  
c. Solublizer d. Stain
2. **Essay Type Question :** 10  
Define Vaccine and Describe type & classifications and storage and handling in cold chain.
3. **Short Note : (Any Three)** 15
1. Principles of Microbiology
  2. Draw and labeled diagram of bacterial cell
  3. Immunity
  4. Principles of specimen collections
  5. Types of staining
4. **Very Short Answer :** 06
1. What are the gram positive cocci ? give one example
  2. Hypersensitivity
  3. Name any two immunoglobulins

**SECTION-B (38 Marks)**

**5. Multiple Choice Questions :**

07

1. The microorganisms that grow best in a low oxygen environment is called :
  - a. Aerobe
  - b. Anaerobe
  - c. Faculative
  - d. Microaerophile
2. ASP stands for
  - a. Antibiotic stewardship prevention
  - b. Antibiotic susceptible prevention
  - c. Antibiotic stewardship program
  - d. None of the above
3. Which of the following is used for the disinfection of blood spillage area ?
  - a. Formaldehyde
  - b. Lysol
  - c. Hypochloride
  - d. Phenol
4. Ziehl neelsen stain is used to detect ?
  - a. Spores
  - b. Capsules
  - c. Acid fast bacilli
  - d. Fungi
5. Immunoglobulin responsible for allergic reactions :
  - a. Ig G
  - b. Ig A
  - c. Ig M
  - d. Ig E
6. MRSA is resistant for
  - a. Penicillin
  - b. Methicillin
  - c. Amoxicillin
  - d. All of the above
7. Causative agent of tuberculosis
  - a. S. aureus
  - b. E. coli
  - c. M. tuberculosis
  - d. Salmonella typhi

**6. Essay type questions :**

10

Discuss various method of sterilization and disinfections.

**7. Short Notes : (Any Three)**

15

1. Antigen antibody reactions and types
2. Classification of influenza virus
3. What are insects and rodents describe the role of insects and rodents in disease transmission in humans
4. Surveillance of Hospital acquired infections and role of control team
5. Biomedical Waste Segregation-colour coding and disposal

**8. Very Short Answer : (Any Six)**

06

1. What is Culture Media and give example.
  2. Normal flora
  3. Explain Airborn Vs Droplet Infection.
-