

B.Sc. NURSING III SEMESTER EXAMINATION, APRIL - 2026
APPLIED MICROBIOLOGY & INFECTION CONTROL INCLUDING SAFETY

[Time allotted: Three hours]**[Max Marks: 75]****Note:** Attempt both sections in the same answer booklet provided.

Draw suitable diagrams wherever necessary.

SECTION – A

(APPLIED MICROBIOLOGY) (37 Marks)

Q.1. Multiple Choice Questions:**(6x1=6)**

1. Penicillin was discovered by:
 - a. R. Koch
 - b. Landsteiner
 - c. Fleming
 - d. E. Jenne
2. Following is an inborn immunity
 - a. Artificial active immunity
 - b. Natural passive immunity
 - c. Innate immunity
 - d. Acquired immunity
3. IgE is also called as
 - a. Reagin
 - b. Immunogen
 - c. Hapten
 - d. None of the above
4. The smallest unit of an antigen responsible for antigenicity is:
 - a. Adjuvant
 - b. Epitope
 - c. Partial Antigen
 - d. Antibody
5. Haptens are
 - a. Incomplete antigens
 - b. Complete antigens
 - c. Toxins
 - d. All of the above
6. Dose of BCG vaccine is:
 - a. 0.1 ml
 - b. 0.05 ml
 - c. 0.2-0.3 ml
 - d. 0.32 – 0.5 ml

Q.2. Write essay on ANY ONE of the following:**(1x10=10)**

- a. Define immunity. Explain different type of immunity in detail. (2+8=10)
- b. Define growth. Explain the phases of bacterial growth curve with suitable diagram. (2+8=10)

Q.3. Write short notes on ANY THREE of the following:**(3x5=15)**

- a. Importance of microbiology in nursing
- b. Acid fast staining
- c. Cold chain
- d. Immunization schedule

Q.4. Write very short notes on the following:**(3x2=6)**

- a. Vaccine
- b. Parasite
- c. Antigen

SECTION – B

(INFECTION CONTROL INCLUDING SAFETY) (38 MARKS)

Q.5. Multiple Choice Questions:

(7x1=7)

1. Gloves are discarded in:
 - a. Yellow bin
 - b. Blue bin
 - c. Red bin
 - d. Black bin
2. Broken glassware and metallic body implant should be disposed in ----- bin.
 - a. Yellow bin
 - b. Blue bin
 - c. Red bin
 - d. Black bin
3. Perform oral care by using a swab moistened with chlorhexidine and water is recommended
 - a. Once in a shift
 - b. Every 4 to 6 hrly
 - c. Whenever necessary
 - d. Every other day
4. As per CDC CLABSI definition is
 - a. Central line for more than 7 days
 - b. Central line remaining in situ for more than 2 calendar days
 - c. Remaining for one day
 - d. Remaining for 48hrs
5. Which of the following is the optimal skin preparation?
 - a. Povidone-iodine
 - b. Iodine
 - c. Chlorhexidine
 - d. Alcohol-based scrub
6. VAP stands for:
 - a. Ventilator associated pneumonia.
 - b. Ventricular associated pneumonia.
 - c. Vesicle associated practice
 - d. Ventilator associated prevention
7. A nurse caring a ventilated patient is required to wash hands
 - a. Before oral and ETT suctioning
 - b. After oral and ETT suctioning
 - c. Before and after oral / ETT suctioning
 - d. Not recommended

Q.6. Write essay on ANY ONE of the following:

(1x10=10)

- a. Define bundle approach. Explain the prevention of CLABSI bundle care.
- b. Explain in detail International patient safety goals.

(2x8=10)

(10)

Q.7. Write short notes on ANY THREE of the following:

(3x5=15)

- a. Corrective and Preventive action
- b. Improve safety of high alert medicine
- c. Discuss 5s of safety protocol
- d. Role of a nurse in times of disaster

Q.8. Write very short notes on the following:

(3x2=6)

- a. Annual Health Checkup
- b. Emergency codes
- c. Communication barrier
