

**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH  
SRI DEVARAJ URS COLLEGE OF NURSING**



**B.Sc. Nursing Second Year Semester-III  
February 2026 Examination**

**Time: 3.00 Hrs**

**[Max.Marks:75]**

**Subject: APPLIED MICROBIOLOGY**

**(Used Separate Answer Booklet Sec A & B)**

**Section: A [Max.Marks:37]**

**Q.P Code: R3055**

*(Your answers should be specific to the questions asked.*

*Draw neat labelled diagrams wherever necessary)*

**I. Multiple Choice question**

**6x1= 6 marks**

- 1. Which among the following is a live attenuated vaccine?**
  - a) BCG
  - b) IPV (injectable polio vaccine)
  - c) Covaxin (Covid-19)
  - d) Pertussis vaccine.
- 2. Staphylococcus epidermidis present on human skin, derives nutrition from it, without causing any harm to it. This is an example for?**
  - a) Pathogen
  - b) Commensal
  - c) Carrier
  - d) None of the above
- 3. Rabies is transmitted by:**
  - a) Bite of a dog
  - b) Drinking contaminated water
  - c) Sexual transmission
  - d) Inhalation
- 4. Which among the following is a DNA virus?**
  - a) HIV
  - b) Hepatitis B
  - c) Dengue virus
  - d) Covid-19 virus
- 5. Flaccid paralysis of lower limb is a complication feature of which of the following infection:**
  - a) Typhoid
  - b) Polio
  - c) Cholera
  - d) Tetanus
- 6. The largest antibody in terms of size is:**
  - a) IgA
  - b) IgM
  - c) IgG
  - d) IgE

**II. Long Essay**

**1x10=10 marks**

- 7. Describe the Bacterial cell wall with a neat labelled diagram. Discuss the difference between Gram positive and Gram negative bacteria.**

**III Short Essay**

**3x5=15marks**

- 8. Describe the pathophysiology of Type 1 Hypersensitivity.**
- 9. Enumerate the contributions of Louis Pasteur in Microbiology**
- 10. Discuss the life cycle of parasite causing malaria. Name any two tests to detect malaria**

**IV Very Short Essay**

**3x 2= 6 marks**

- 11. What is Agglutination. Name any two agglutination tests.**
- 12. Name four infections transmitted by consumption of contaminated food and water.**
- 13. What are Enriched media. Give two examples**

# Applied Infection Control including Safety

Section: B [Max.Marks:38]

Q.P Code: R3056

## I Multiple Choice questions

7x1= 7 Marks

1. Isolation precautions designed for pathogens spread through large respiratory droplets are called:
  - a) Contact precautions
  - b) Droplet precautions
  - c) Airborne precautions
  - d) Standard precautions
2. Prevention of Surgical Site Infection (SSI) includes:
  - a) Proper surgical hand scrub
  - b) Extra use of antibiotics
  - c) Avoiding sterile fields
  - d) Not using PPE
3. Central Line-Associated Blood Stream Infection (CLABSI) prevention includes:
  - a) Avoiding sterile technique
  - b) Using central lines unnecessarily
  - c) Aseptic insertion and maintenance
  - d) Reusing equipment
4. The first step in hand washing is:
  - a) Apply soap
  - b) Wet hands
  - c) Rub palms
  - d) Dry hands
5. Which of the following is essential for sample transport?
  - a) Sunlight exposure
  - b) Appropriate temperature
  - c) Re-labeling samples
  - d) No documentation
6. Staff precautions in handling specimens include:
  - a) Recapping needles
  - b) Wearing PPE
  - c) Storing samples in open areas
  - d) Collecting samples without hand hygiene
7. To prevent patient falls, nurses should do the following EXCEPT
  - a) Place the side rails
  - b) Provide non-skid footwear
  - c) Always see that attendant accompany the patient
  - d) Encourage patients to walk unattended

## II Essay Type

1x10= 10 Marks

8. Explain in detail the different types of PPE, the sequence of donning and doffing, and the role of risk assessment in selecting appropriate PPE.

## III Short Essay

3x5= 15 Marks

9. Explain the principles of specimen collection and why they are important in diagnosis.
10. Explain the waste management process and infection prevention measures.
11. Explain the role of the nurse in the patient safety audit process

## IV Very Short Answer

3x2= 6 Marks

12. Define incident reporting
13. What is the importance of improving communication in patient care
14. Define needle-stick injury