

Reg. No:

**Third Semester B.Sc Nursing Degree Regular/Supplementary
Examinations April 2025**

Paper I – Applied Microbiology and Infection Control including Safety

Time: 3 Hrs

Total Marks: 75

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers
- Indicate the question number correctly for the answer in the margin space • Answer all parts of a single question together
- Leave sufficient space between answers • Draw table/diagrams/flow charts wherever necessary
- Write section A and section B in separate answer books (32 Pages). Do not mix up questions from section A and section B.

Section A – Applied Microbiology

Q.P. CODE: 321010

Max. Marks: 37

1. Multiple Choice Questions

(6x1=6)

(Choose the most appropriate answer from the options given)

The Answers to MCQ questions (Q.No. i to Q.No. vi) shall be written continuously on the first writing sheet (ie Page No.3) only

- Who is known as the “father of antiseptic surgery”
a) Robert Koch b) Edward Jenner c) Louis Pasteur d) Joseph Lister
- The cell wall of gram negative bacilli has
a) Teichoic acid b) Thick Peptidoglycan
c) Lipopolysaccharide. d) Mycolic acids
- Which of the following is used in negative staining
a) India ink b) Carbol fuchsin c) Crystal violet d) Sulphuric acid
- What is the mode of transmission of hookworm
a) Bite of mosquito
b) Penetration of skin by larva
c) Inhalation of spores
d) Ingestion of contaminated food and water
- Which of the following is a yeast-like fungi
a) Cryptococcus b) Candida c) Rhizopus d) Aspergillus
- Contact dermatitis is an example for which type of hypersensitivity
a) Type I b) Type II c) Type III d) Type IV

Essay

(1x10=10)

- Discuss the morphology, modes of transmission and laboratory diagnosis of Human immunodeficiency virus.

(2+3+5)

Short Notes

(3x5=15)

- Describe the structure, properties and functions of IgM antibody.
- Discuss the laboratory diagnosis of pulmonary tuberculosis.
- Discuss Gram staining.

Difference between the following

(3x2=6)

- Amoebic Dysentery and Bacillary dysentery.
- Active immunity and Passive immunity.
- OPV and IPV (Oral polio vaccine and Injectable polio vaccine).

(PTO)

Section B – Infection Control Including Safety

Q.P. CODE: 322010

Max. Marks: 38

1. Multiple Choice Questions

(7x1=7)

(choose the most appropriate answer from the options given)

The Answers to MCQ questions (Q.No. i to Q.No. vii) shall be written continuously on the first writing sheet (ie Page No.3) only

- i. Which of the following is NOT a moist heat sterilization method
 - a) Incineration
 - b) Inspissation.
 - c) Autoclaving
 - d) Tyndallisation
- ii. Which of the following is NOT present in care bundle for Ventilator Associated Pneumonia (VAP)
 - a) Daily assessment of readiness to extubate
 - b) Daily oral care with chlorhexidine
 - c) Elevate the foot end of the bed between 30 to 45 degrees
 - d) Prophylaxis of peptic ulcer disease
- iii. Post exposure prophylaxis for HIV should be started within
 - a) 72 hours
 - b) 96 hours
 - c) 5 days
 - d) 1 week
- iv. The emergency code for bomb/suspicious bag is
 - a) Code black
 - b) Code purple
 - c) Code blue
 - d) Code red
- v. Yellow colored biohazard bag is used to segregate
 - a) Food waste
 - b) Anatomical waste
 - c) Sharps
 - d) Catheter tubings.
- vi. The protective anti-HBs antibody titre is more than or equal to
 - a) 0.1 mIU/mL
 - b) 1 mIU/mL
 - c) 5 mIU/mL
 - d) 10 mIU/mL
- vii. What is MRSA
 - a) Methicillin resistant Staphylococcus aureus
 - b) Most resistant Staphylococcus aureus
 - c) Methicillin requiring Staphylococcus aureus
 - d) Multidrug resistant Staphylococcus aureus

Essay

(1x10=10)

2. Define disinfection. Classify disinfectants with examples. Discuss any three classes of disinfectants.
(1+3+6)

Short notes

(3x5=15)

3. Discuss hand hygiene in detail
4. Describe the importance of antibiotic stewardship
5. Enumerate the international patient safety goals. Discuss any one of them.

List the following

(3x2=6)

6. Three best ways to protect oneself from radiation exposure
7. Two articles sterilized in hot air oven
8. Two measures to prevent DVT (Deep Vein Thrombosis)
