

Third Semester B.Sc. Nursing Examination, (Phase - III) Winter - 2023

**APPLIED MICROBIOLOGY AND INFECTION CONTROL
INCLUDING SAFETY**

Total Duration : Section A + B + C = 3 Hours

Section A Marks : 13

SECTION - A

Instructions : 1) Use **black ball point pen only.**

2) **Each question carries one mark.**

3) **Rough work should be done only on the Blank Space provided on the question paper booklet. If the rough work done is found else where other than the space provided on question paper or anywhere on answerbook such an act will be treated as an attempt to resort to Unfair means.**

1. Multiple Choice Questions :

[13×1=13]

- 1) In HIV infected patient Pneumonia is caused by ____.
 - a) Pneumocystic carini
 - b) Streptococcus Pneumoniae
 - c) Mycobacterium Tuberculli
 - d) Staphylococcus
- 2) How should you dry your hands?
 - a) In a circular motion covering all areas of the hands and wrists.
 - b) Dry your hands thoroughly
 - c) Wrists to finger tips in one direction
 - d) lightly pat and allow hands to air dry
- 3) The colour Code of plastic bag for disposing of microbial laboratory culture waste
 - a) Black
 - b) Red
 - c) Blue
 - d) White
- 4) Which of the following does not require hand washing?
 - a) Before Invasive procedure
 - b) Before and after touching wounds
 - c) Taking Blood Pressure
 - d) After touching contaminated objects

- 5) What are the steps to take if you are exposed to blood or other infectious material?
- Needle Sticks or sharps injuries should be immediately washed with soap and water
 - Irrigate eyes with an eye wash for 10 to 15 min
 - Report to incident to your supervisor and seek immediate medical treatment
 - All of the above
- 6) Sterilization by formaldehyde gas (50 cc formalin — 25g KMnO₄ per 100 Cu. Ft. Space is not done in one of the following.
- Rubber, plastic disposable, goods, disposables syringes, adhesive dressings etc.
 - Operation Theatre
 - Wards and laboratory
 - Woollen Blankets, wool and Hides.
- 7) Which cell are most infected by HIV most often?
- Null cell
 - B Cell
 - CD8+ cell lymphocytes
 - CD4+ T lymphocytes
- 8) Glutaraldehyde is example of _____.
- High level disinfectant
 - Low level disinfectant
 - Intermediate disinfectant
 - None
- 9) Koplik's spot are characteristics of which of the following infection?
- Mumps
 - Measles
 - Herpes
 - Rubella
- 10) Pneumococcal antigen in CSF can be detected by _____.
- Conglutination
 - Latex agglutination
 - Counter immune electrophoresis
 - All of the above

- 11) IgA protects the following system of the human body
- a) Body fluids
 - b) Blood stream
 - c) Body surface
 - d) All the above
- 12) Motility of spirochetes is by
- a) Flagella
 - b) Pilli
 - c) Fimbriae
 - d) Endoflagella
- 13) Toxins, ascetic fluid, serum, sugar and antibiotic solutions are sterilized by which of the following methods?
- a) Ionising Radiation
 - b) Filtration by Seitz filter/chamberland filter/membrane filter
 - c) Tyndallisation
 - d) Autoclaving (121 Degree Celsius for 15min)



SPACE FOR ROUGH WORK

Third Semester B.Sc. Nursing Examination, (Phase - III) Winter - 2023
**APPLIED MICROBIOLOGY AND INFECTION CONTROL
INCLUDING SAFETY**

Total Duration : Section A + B + C = 3 Hours Section B & C Marks :62

SECTION - B & SECTION-C

- Instructions :**
- 1) Use **black ball point pen only.**
 - 2) **Do not write anything on the blank portion of the question paper.** If written anything, such type of act will be considered as an attempt to resort to unfair means.
 - 3) **All questions are compulsory.**
 - 4) The number to the **right indicates full marks.**
 - 5) Draw diagrams **wherever necessary.**
 - 6) **Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.**
 - 7) **Use a common answerbook for section B & C.**

SECTION-B

(Applied Microbiology)

2. **Essay** [1×10=10]
Define Immunity, describe in detail the different level of immunity among the living Organisms. Write down the types & Classification of Immunity in details.
3. **Short Notes:** [3×5=15]
 - a) Define Hypersensitivity and describe the anaphylactic type.
 - b) Describe in brief about Widal Test.
 - c) Write down the Nursing intervention in vector-borne diseases control.
4. **Very Short Notes:** [3×2=6]
 - a) Details about Yeast cell
 - b) Describe Bacterial Growth Curve
 - c) Describe Classification of specimen

SECTION-C**(Infection Control Including Safety)****5. Essay****[1×10=10]**

Define Sterilization and Disinfection. Write 4 characteristics of an ideal disinfectant. Write a note on the Autoclave as a method of sterilization.

6. Short Notes:**[3×5=15]**

- a) Define Nosocomial Infection. Describe various nosocomial infections with measures of prevention of infection.
- b) Describe Universal safety Precautions.
- c) What is Antibiotic Stewardship? Explain its importance in health care settings.

7. Very Short Notes:**[3×2=6]**

- a) Write down the Principles of Specimen Collection.
- b) Describe briefly about 5S safety protocol?
- c) Enlist the steps of Hand Hygiene.

