

Reg. No: .....

**Third Semester B.Sc Nursing Degree Regular Examinations August 2023**  
**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

**Multiple Choice Questions**

(6x1=6)

(Choose the most appropriate answer from the options given)

1. The father of antiseptic surgery is  
a) Louis Pasteur      b) Edward Jenner      c) Robert Koch      d) Joseph Lister
2. Zeihl-neelsen staining is used to demonstrate  
a) gram positive bacteria      b) Anaerobic bacteria  
c) Candia fungi      d) Acid fast bacteria
3. Zoonotic diseases are  
a) Diseases spread from animals to man      b) Diseases spread by plants  
c) Diseases spread by contact      d) Diseases spread by air
4. Natural passive immunity is  
a) Antibodies transferred to baby by readymade antibody  
b) Antibodies transferred through injection  
c) Antibodies transferred from mother to baby by breast milk at the time of birth  
d) It's a type of innate immunity
5. Identify correct group of organisms causing dysentery  
a) Salmonella and E coli      b) Shigella and entamoeba histolytica  
c) Vibrio cholera and pseudomonas      d) Staphylococcus and shigella
6. Pandemic disease which caused pneumonia and rapid mortality in recent past is  
a) Influenza virus      b) COVID 19 virus  
c) Corona group of virus      d) Hepatitis B virus

**Essay**

(1x10=10)

7. Draw a neat labelled diagram of HIV virus. Discuss the modes of transmission and laboratory diagnosis of HIV infection (3+2+5)

**Short Notes**

(3x5=15)

8. Define and classify immunity and brief innate immunity
9. Discuss urinary tract infections, brief the sample collection
10. Laboratory diagnosis of dermatophyte infection (fungal infection of skin, hair and nail)

**Difference between the following**

(3x2=6)

11. Dengue virus vs HIV virus
12. Diarrhea vs Dysentery
13. IgG vs IgM

(PTO)

**Section B – Infection Control Including Safety****Q.P. CODE: 322010****Max. Marks: 38****Multiple Choice Questions****(7x1=7)****(choose the most appropriate answer from the options given)**

1. In biomedical waste management, white colour coded bins used for
  - a) Contaminated plastic waste
  - b) Human anatomical waste
  - c) Waste sharps including metals
  - d) chemical liquid waste
2. Spaulding classification is used to
  - a) Classify level of disinfectant
  - b) Classify article to keep inside autoclave
  - c) Its style of hypersensitive classification
  - d) Its classification of salmonella in the microbiology laboratory
3. All of the following are used to identify HIV except
  - a) Western blot test
  - b) Immuno-comb test
  - c) Real time PCR
  - d) P26 antigen
4. MMR vaccine is used for
  - a) Measles and Mumps
  - b) Mumps and Rubella
  - c) A and B are correct
  - d) None of the above
5. The following are antibiotic sensitivity techniques, except
  - a) Kirby Bauer technique
  - b) Stokes technique
  - c) Epsilometer test
  - d) Agglutination technique
6. BCG vaccine is scheduled at the age of
  - a) Immediately after birth
  - b) At the age of 9 months
  - c) At the age of 12 months
  - d) At the age of 5 years
7. Most common organism associated with burns wound infection
  - a) Entamoeba
  - b) Pseudomonas
  - c) Salmonella
  - d) Rabies

**Essay****(1x10=10)**

8. Describe in detail the various components of standard precautions

**Short notes****(3x5=15)**

9. Antimicrobial Stewardship programme
10. Mention the type of sample to be collected in extra pulmonary tuberculosis
11. Describe the principle, working and items sterilized in an autoclave

**List the following****(3x2=6)**

12. Four measures to prevent DVT (Deep Vein Thrombosis)
13. Steps of Donning
14. Four members of Hospital Infection Control Committee

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