

**First Basic B.Sc. Nursing Examination, Summer - 2021**  
**MICROBIOLOGY**

Total Duration : 3 Hours

Total Marks : 75

- Instructions :**
- 1) Use **blue/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 all Sections.

**SECTION - "A" (40 Marks)**

1. Short answer question (**any five** out of six) : [5 × 5 = 25]
  - a) Write a short note on Sample Collection in Microbiology.
  - b) Enlist different Staining methods and describe the Steps of Gram staining.
  - c) What is virulence? Explain its determinants.
  - d) Describe Hospital Infection Control committee.
  - e) Describe the Role of Nurses in Microbiology.
  - f) Define Sterilization and Disinfection. Enlist any four chemical disinfectants used in the hospital.
  
2. Long answer question (**any one** out of two) : [1 × 15 = 15]
  - a) Classify Culture media with suitable examples of each. Describe the method of sterilization of Lowenstein Jensen (LJ) medium.
  - b) Define Enteric Fever. Describe the causative agents of Enteric fever. Explain the Laboratory Diagnosis and Prophylaxis of Enteric fever.

**SECTION - "B" (35 Marks)**

3. Short answer question (**any four** out of five): [4 × 5 = 20]
- a) Enumerate any two organisms causing Diarrhea. Describe laboratory diagnosis of cholera.
  - b) Describe growth curve of bacteria.
  - c) Write contributions of Robert Koch.
  - d) Draw a labelled diagram of Human Immunodeficiency Virus (HIV). Explain the modes of transmission of HIV.
  - e) Define Hospital Acquired Infections and measures to control them.
4. Long answer question (**any one** out of two) : [1 × 15 = 15]
- a) Define Immunity. Explain Innate and Acquired Immunity in detail.
  - b) Describe Morphological Classification of Bacteria with suitable examples. Write a note on bacterial flagella.

