

First BASIC B.SC. NURSING, Winter 2014

Microbiology

Total Duration: Section A+B = 3 Hours

Section - A & Section - B

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 answer book for all section.

Section "A" (40 Marks)

(5x5=25)

1. Short answer question (**any five** out of six) :

- a) scope of Microbiology in Nursing practice
- b) Define Immunity and Differentiate between Active and Passive Immunity.
- c) Pathogenesis of Salmonella typhi
- d) Universal Safety precautions
- e) Describe the procedure of Gram staining and write down the names of 2 Gram Positive and Gram Negative organisms each
- f) Hospital Infection Control

2. Long answer question (**any one** out of two) :

(1x15=15)

- a) Classify Culture Media. Describe each type of culture media with one example of each.
- b) Define biomedical waste. Describe Biomedical waste management in detail.

Section "B" (35 Marks)

(4x5=20)

3. Short answer question (**any four** out of five) :

- a) Enumerate Koch's Postulates
- b) Define sterilization and classify various methods of sterilization.
- c) Classify viruses and explain the various methods of cultivation of viruses.
- d) Describe various antigen antibody reactions and give example of each.
- e) Write classification of bacteria based on their shape and give examples of each.

4. Long answer question (**any one** out of two) :

(1x15=15)

- a) Describe factors affecting growth of bacteria. Draw, label and explain the bacterial growth curve.
- b) Describe various modes of transmission of infection with examples of each.