

**PARUL UNIVERSITY**  
**FACULTY OF NURSING**

**B.Sc. Nursing (Basic), January 2020 Examination**

**Year: 1****Subject Code: 09101105****Subject Name: Microbiology****Date: 24/01/2020****Time: 10:00 am to 01:00pm****Total Marks: 75****Instructions:**

- (1) Answer to the point.
- (2) Figure to the right indicates full marks.
- (3) Write legibly.
- (4) Draw diagrams wherever necessary.
- (5) Use separate answer books for each section.

**SECTION A (37 MARKS)**

- Q-1 Long Essays (Any one out of two) (1 x 10) 10**
- 1 Define sterilization and disinfection. Explain moist heat with autoclave in detail.
  - 2 Define Agglutination and Precipitation. Explain lattice hypothesis, precipitation curve and different precipitation reaction in detail.
- Q-2 Short Essays (Any three out of six) (3 x 5) 15**
- 1 Enumerate any 10 difference between prokaryote and Eukaryote.
  - 2 Enumerate any 10 difference between cell wall of Gram positive and Gram negative bacteria.
  - 3 Classify bacteria according to their Morphology.
  - 4 Describe commonly used culture techniques.
  - 5 What is HICC? Mention important members and function of HICC
  - 6 Explain bacterial growth curve
- Q-3 Short Answers (6 x 2) 12**
- 1 Give 2 examples of Gram positive and Gram Negative bacteria each.
  - 2 Robert Koch
  - 3 Chain of infection
  - 4 What is Hanging Drop Preparation? Write its application.
  - 5 What is the difference between LF and NLF on MacConkey agar? Write down the example of LF and NLF bacteria.
  - 6 Louis Pasteur

**SECTION B (38 MARKS)**

- Q-1 Long Essays (Any one out of two) (1x 10) 10**
- 1 What is HAI? Criteria of HAI, Mention the important sites of HAI & routes of transmission of HAI and steps for prevention of Common HAI.
  - 2 Explain Laboratory diagnosis of Hepatitis B in detail.
- Q-2 Short Essays (Any four out of seven) (4 x 5) 20**
- 1 What is BMW? Describe the segregation (according to color code) of BMW.
  - 2 Write down the role of nurse in Hospital Infection Control Programme.
  - 3 Enumerate steps to diagnose the Infection.
  - 4 Typhoid fever and its lab diagnosis
  - 5 What is UTI? Types of UTI and steps of prevention for UTI.
  - 6 Define immunity. Classification of immunity
  - 7 ELISA test and its type.
- Q-3 Short Answers (4 x 2) 8**
- 1 Give two examples of Acid fast bacilli
  - 2 Enlist the bacteria causing Diarrhoea.
  - 3 Enlist the diseases caused by Staphylococcus aureus
  - 4 Describe the procedure of Gram Staining.