

PRAVARA INSTITUTE OF MEDICAL SCIENCES  
(Deemed to be University)

First Year B. Sc. Nursing Examination, June 2018

Paper Title: Microbiology

Date: 11<sup>th</sup> June, 2018

Paper Code: NU- 105

Marks: 75

Time: 9.30 am to 12.30 pm

Instruction to the Candidates:

1. All questions are compulsory.
2. Neat diagrams must be drawn wherever necessary.
3. Answer written in illegible handwriting will not be assessed.
4. A Separate Answer sheet is provided for MCQ which will be collected after 20 minutes

Section – B

Que. 2 Answer the following (Any Three)

Marks 15  
(3x5)

- a) Robert Koch
- b) Name four killed vaccines
- c) Flagella
- d) Negative staining

Que. 3 Answer the following

Marks 15  
(3x5)

- a) Fumigation
- b) Widal test
- c) Types of infection

Que. 4 Answer the following

Marks 10

Define and classify culture media

Que. 5 Answer the following

Marks 20  
(2x10)

- a) Describe the structure and pathogenicity of HIV virus and outline the laboratory diagnosis
- b) Bacterial growth curve.

OR

- a) Classify hypersensitivity reactions; describe in detail about type I hypersensitivity reaction
- b) Mention laboratory diagnosis of pulmonary tuberculosis.

**PRAVARA INSTITUTE OF MEDICAL SCIENCES**  
(Deemed University)

**First Year B. Sc. Nursing Examination, July 2017**

**Paper Title:** Microbiology

**Date:** 19<sup>th</sup> July 2017

**Paper Code:** NU- 105

**Marks:** 75

**Time:** 09.30 am to 12.30 pm

**Instruction to the Candidates:**

1. All questions are compulsory.
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4. A Separate Answer sheet is provided for MCQ which will be collected after 20 minutes

**Section – B**

- Que. 2 Answer the following (any three)** **Marks 15**  
**(3X5)**
- a) BCG vaccine
  - b) Robert Koch
  - c) Bacterial growth curve
  - d) Importance of microbiology in nursing
- Que. 3 Answer the following** **Marks 15**  
**(3X5)**
- a) Collection and transport of specimens
  - b) Difference between exotoxins and endotoxins
  - c) ELISA
- Que. 4 Answer the following** **Marks 10**  
**(2+3+5)**
- a) Define hospital acquired infection
  - b) Discuss on routes of transmission
  - c) Explain the prevention of hospital associated infection
- Que. 5 Answer the following** **Marks 20**  
**(2X10)**
- a) Name various organisms causing sore throat, how will you diagnose it in the laboratory
  - b) Define sterilization, write in detail on chemical methods of sterilization
- OR**
- a) Define biomedical waste, discuss the steps of biomedical waste management in detail **(2+8)**
  - b) Define and enumerate the causes of pyrexia of unknown origin (PUO), and discuss the laboratory diagnosis of PUO **(4+6)**

**PRAVARA INSTITUTE OF MEDICAL SCIENCES**  
**(Deemed University)**

**First Year B. Sc. Nursing Examination, June 2016**

Paper Title: Microbiology

Date: 10<sup>th</sup> June 2016

Paper Code: NU - 105

Marks: 75

Time: 9.30 am to 12.30 pm

**Instruction to the Candidates:**

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2. Neat diagrams must be drawn wherever necessary.
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4. Answer written in illegible handwriting will not be assessed.
5. A Separate Answer sheet is provided for MCQ which will be collected after 20 minutes

**Section B**

**Que. 2 Answer the following: (any three)**

**Marks 15  
(3X5)**

- a) Standard tests for syphilis
- b) Role of normal flora
- c) Methods of anaerobic culture
- d) Coagulase test

**Que. 3 Answer the following (any three):**

**Marks 15  
(3X5)**

- a) Type I hypersensitivity reaction
- b) Live attenuated vaccine
- c) Swine flu
- d) Elek's gel precipitation test

**Que. 4 Answer the following:**

**Marks 10**

Classify mycobacteria, and discuss the laboratory diagnosis of pulmonary tuberculosis

**Que. 5 Answer the following:**

**Marks 20  
(2X10)**

- a) Enumerate the causative agents of acute pyogenic meningitis, and describe the laboratory diagnosis of acute pyogenic meningitis
- b) Discuss the pathogenesis and laboratory diagnosis of polio virus

**OR**

- a) Classify, and discuss the various culture media
- b) Discuss the methods of sterilization by moist heat

**(2X10)**



**PRAVARA INSTITUTE OF MEDICAL SCIENCES**  
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**First Year B. Sc. Nursing Examination, June 2016**

Paper Title: Microbiology

Date: 10<sup>th</sup> June 2016

Paper Code: NU - 105

Marks: 75

Time: 9.30 am to 12.30 pm

**Instruction to the Candidates:**

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4. Answer written in illegible handwriting will not be assessed.
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**Section B**

**Que. 2 Answer the following: (any three)**

**Marks 15  
(3X5)**

- a) Standard tests for syphilis
- b) Role of normal flora
- c) Methods of anaerobic culture
- d) Coagulase test

**Que. 3 Answer the following (any three):**

**Marks 15  
(3X5)**

- a) Type I hypersensitivity reaction
- b) Live attenuated vaccine
- c) Swine flu
- d) Elek's gel precipitation test

**Que. 4 Answer the following:**

**Marks 10**

Classify mycobacteria, and discuss the laboratory diagnosis of pulmonary tuberculosis

**Que. 5 Answer the following:**

**Marks 20  
(2X10)**

- a) Enumerate the causative agents of acute pyogenic meningitis, and describe the laboratory diagnosis of acute pyogenic meningitis
- b) Discuss the pathogenesis and laboratory diagnosis of polio virus

**OR**

- a) Classify, and discuss the various culture medias
- b) Discuss the methods of sterilization by moist heat

**(2X10)**

**PRAVARA INSTITUTE OF MEDICAL SCIENCES**  
**(Deemed University)**

**First Year B. Sc. Nursing Examination, June 2015**

Paper Title: Microbiology

Date: 10<sup>th</sup> June 2015

Paper Code: NU - 105

Marks: 75

Time: 2.30 pm to 5.30 pm

**Instruction to the Candidates:**

1. All questions are compulsory.
2. Neat diagrams must be drawn wherever necessary.
3. Write answer on both sides of answer book.
4. Answer written in illegible handwriting will not be assessed.
5. A Separate Answer sheet is provided for MCQ which will be collected after 20 minutes

**Section B**

- Que. 2 Answer the following: (any five)** **Marks 15**  
**(5X3)**
- a) Importance of microbiology in nursing
  - b) Characteristics of microbes
  - c) Gram staining
  - d) Structure of HIV virus
  - e) Laboratory diagnosis of enteric fever
  - f) Enlist the names of six parasites
- Que. 3 Answer the following (any three):** **Marks 15**  
**(3X5)**
- a) Hypersensitivity reaction
  - b) Types of vaccines
  - c) Cold chain
  - d) Gas gangrene pathogenesis
- Que. 4 Answer the following:** **Marks 10**  
**(2+8)**
- a) Define immunity
  - b) Describe the immunity in detail
- Que. 5 Answer the following:** **Marks 20**  
**(2+8)**
- a) i) Define nosocomial infection  
ii) Write in detail note on biomedical waste management
  - b) i) Define sterilization **(2+8)**  
ii) Write in detail on sterilization methods
- OR**
- a) Describe the pathogenesis and laboratory diagnosis of mycobacterium tuberculosis **(10+10)**
  - b) Discuss the laboratory diagnosis of pyrexia of unknown origin and its causes

**PRAVARA INSTITUTE OF MEDICAL SCIENCES  
(Deemed University)**

**First Year B. Sc. Nursing Examination, December 2016**

**Paper Title: Microbiology**

**Date: 9<sup>th</sup> December 2016**

**Paper Code: NU - 105**

**Marks: 75**

**Time: 9.30 am to 12.30 pm**

**Instruction to the Candidates:**

1. All questions are compulsory.
2. Neat diagrams must be drawn wherever necessary.
3. Write answer on both sides of answer book.
4. Answer written in illegible handwriting will not be assessed.
5. A Separate Answer sheet is provided for MCQ which will be collected after 20 minutes

**Section B**

**Que. 2 Answer the following: (any three)**

**Marks 15  
(3X5)**

- a) Draw a labeled diagram of bacterial cell
- b) Define culture media, write short note on enrichment media
- c) Principles of microbiology applied in nursing practice
- d) Gram staining

**Que. 3 Answer the following**

**Marks 15  
(3X5)**

- a) Sterilization control
- b) Widal test
- c) Normal flora of gastrointestinal tract

**Que. 4 Answer the following:**

**Marks 10  
(2+8)**

- a) Define infection
- b) Explain the sources and methods of transmission of infection

**Que. 5 Answer the following:**

**Marks 20  
(2X10)**

- a) Describe life cycle of plasmodium vivax and write the laboratory diagnosis of malaria caused by this parasite
- b) Define medical microbiology, and explain the role and functions of infection control nurse

**OR**

- a) Define hypersensitivity, classify hypersensitivity reactions, and describe in detail on Type I hypersensitivity reactions
- b) Describe the morphology of HIV, discuss briefly about modes of transmission of HIV infection, and write the laboratory diagnosis of it



**PRAVARA INSTITUTE OF MEDICAL SCIENCES**  
(Deemed University)

**First Year B. Sc. Nursing Examination, December 2015**

Paper Title: Microbiology

Date: 9<sup>th</sup> December 2015

Paper Code: NU- 105

Marks: 75

Time: 09.30 am to 12.30 pm

**Instruction to the Candidates:**

1. All questions are compulsory.
2. Neat diagrams must be drawn wherever necessary.
3. Answer written in illegible handwriting will not be assessed.
4. A Separate Answer sheet is provided for MCQ which will be collected after 20 minutes

**Section – B**

- Que. 2 Answer the following (any three)** **Marks 15**  
**(3X5)**
- a) Koch's Postulates
  - b) Polio vaccine
  - c) Normal bacterial flora of skin
  - d) Immunization schedule
- Que. 3 Answer the following (any three)** **Marks 15**  
**(3X5)**
- a) Coagulase test
  - b) Difference between active and passive immunity
  - c) Properties of ideal disinfectant
  - d) Enumerate the causes of diarrhea
- Que. 4 Answer the following** **Marks 10**
- What is bacterial colony? Write in detail about growth and nutritional requirements of bacteria
- Que. 5 Answer the following** **Marks 20**  
**(2X10)**
- a) Describe the laboratory diagnosis of infections cause by hepatitis B virus
  - b) Define sterilization? Write in detail on autoclave

**OR**

- a) What is the role of nurse in controlling and preventing hospital infections
- b) Describe the life cycle of plasmodium vivax, and write the laboratory diagnosis of malaria caused by this parasite

**PRAVARA INSTITUTE OF MEDICAL SCIENCES**  
(Deemed University)

**First Year B. Sc. Nursing Examination, December 2014**

Date: 10<sup>th</sup> December 2014

Paper Title: Microbiology

Paper Code: NU - 105

Time: 2.30 pm to 5.30 pm

Marks: 75

**Instruction to the Candidates:**

1. All questions are compulsory.
2. Neat diagrams must be drawn wherever necessary.
3. Answer written in illegible handwriting will not be assessed.
4. A separate answer sheet is provided for MCQ which will be collected after 20 minutes

**Section B**

**Que. 2 Answer the following (any three)**

- a) Inoculations
- b) Koch's postulates
- c) Contribution of Louis Pasteur to microbiology
- d) Enriched media

Marks 15  
(3X5)

**Que. 3 Answer the following**

- a) Sterilization by radiation
- b) Antigen
- c) Acquired immunity

Marks 15  
(3X5)

**Que. 4 Answer the following**

Name the various classes of immunoglobulins. Describe the structure and properties of IgG

Marks 10

**Que. 5 Answer the following**

- a) List down the bacteria's causing urinary tract infection and discuss laboratory diagnosis of urinary tract infection
- b) Discuss the staining procedure used in microbiology

Marks 20  
(2X10)

**OR**

- a) Discuss hospital waste management
- b) Define hospital acquired infection. Enumerate the microorganisms causing it. What are the factors contribute in development of hospital acquired infection



**PRAVARA INSTITUTE OF MEDICAL SCIENCES**  
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**First Year B. Sc. Nursing Examination, June 2014**

Paper Title: Microbiology

Date: 11<sup>th</sup> June 2014

Paper Code: NU-105

Marks: 75

Time: 2.30 pm to 5.30 pm

**Instruction to the Candidates:**

1. All questions are compulsory.
2. Neat diagrams must be drawn wherever necessary.
3. Answer written in illegible handwriting will not be assessed.
4. A Separate Answer sheet is provided for MCQ which will be collected after 20 minutes

**Section - B**

**Que. 2 Answer the following (any three)**

Marks 15  
(3X5)

- a) Bacterial cell wall
- b) Live attenuated vaccines
- c) Bacterial growth curve
- d) Hot air oven

**Que. 3 Answer the following**

Marks 15  
(3X5)

- a) Morphology of HIV
- b) Role of normal microbial flora
- c) Flagella

**Que. 4 Answer the following**

Marks 10

Define hospital acquired infection, enumerate the microorganisms causing it, and write what are the factors which contribute in development of hospital acquired infections

**Que. 5 Answer the following**

Marks 20  
(2X10)

- a) Define sterilization and disinfection, add a note on principle and functioning of autoclave
- b) Describe in detail the laboratory diagnosis of enteric fever

**OR**

- a) Describe the morphology and pathogenesis of *C. Diphtheriae* and discuss the laboratory diagnosis of Diphtheria
- b) Discuss the staining procedures used in microbiology