

AUGUST 2007

[KR 1014]

Sub. Code : 4705

B.Sc. (Nursing) DEGREE EXAMINATION.

**(New Regulation for the candidates admitted from
2006–07 onwards)**

First Year

Paper V — MICROBIOLOGY

Time : Three hours

Maximum : 75 marks

**Descriptive : Two hours and
forty five minutes**

Descriptive : 60 marks

Objective : Fifteen minutes

Objective : 15 marks

Answer ALL questions.

I. Essay :

**(1) Discuss various chemical used as
disinfectants. (15)**

**(2) Define and classify hypersensitivity and
write about anaphylaxis in detail. (2 + 7 + 6)**

II. Short notes :

(6 × 5 = 30)

- (a) Contributions of Louis Pasteur**
 - (b) Test for disinfectants**
 - (c) WIDAL test.**
 - (d) Tetanus**
 - (e) Normal flora**
 - (f) Polio.**
-

FEBRUARY 2008

[KS 1014]

Sub. Code : 4705

B.Sc. (Nursing) DEGREE EXAMINATION.

**(New Regulation for the candidates admitted from
2006-07 onwards)**

First Year

Paper V — MICROBIOLOGY

Q.P. Code : 664705

Time : Three hours

Maximum : 75 marks

**Theory : Two hours and
forty five minutes**

Theory : 60 marks

M.C.Q. : Fifteen minutes

M.C.Q. : 15 marks

Answer ALL questions.

I. Essay questions :

**(1) Write in detail about Hospital acquired
infection and Hospital infection control programme. (15)**

**(2) Classify different types of sterilization. Write
in detail about moist heat sterilization. (15)**

II. Write short notes on the following : (6 × 5 = 30)

- (a) Louis Pasteur**
 - (b) Flagella**
 - (c) Transport media**
 - (d) Candida albicans**
 - (e) Type IV Hypersensitivity**
 - (f) Polio vaccine.**
-

August-2008

[KT 1014]

Sub. Code : 4705

B.Sc. (Nursing) DEGREE EXAMINATION.

(New Regulations for the candidates admitted from
2006-07 onwards)

First Year

Paper V — MICROBIOLOGY

Q.P. Code : 664705

Time : Three hours

Maximum : 75 marks

Answer ALL questions.

I. Essay : (2 × 15 = 30)

1. (a) Classify vaccines (5)
- (b) Describe immunisation schedule. (5)
- (c) Write about BCG Vaccine. (5)

2. Classify Bacteria, write in detail about various structures of Bacterial cell. (15)

II. Write short notes on : (5 × 5 = 25)

1. Hospital Acquired Infections.
2. Grams Staining.

3. Antibodies.

4. Rabies Vaccines.

5. ELISA Test.

III. Short answer questions : (10 × 2 = 20)

1. Write any two contributions of Louis Pasteur.
2. What is iso immunization?
3. Define Nosocomial infections.
4. Mention contributions of Edward Jenner.
5. Mention two uses of Pasteurization.
6. List the diagnostic methods for tuberculosis.
7. Mention two bacteria causing gas gangrene.
8. Give two examples of latent viral infection.
9. What are the target cells and the receptors for HIV?
10. Name any four opportunistic Fungi.

February 2009

[KU 1014]

Sub. Code: 4705

B.Sc (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)
First Year
Paper V – MICROBIOLOGY
Q.P. Code : 664705

Time : Three hours

Maximum : 75 marks

Answer All questions.

I. Essays:

(2x15=30)

1. Define hypersensitivity. Classify Hypersensitivity.
Discuss in detail type IV hypersensitivity.
2. Discuss in detail the morphology, Pathogenesis and lab diagnosis of streptococci.

II. Write Short Notes on :

(5x 5 = 25)

1. Immunization schedule.
2. Hospital acquired infections.
3. Sexually transmitted diseases.
4. Ascaris worm.
5. Flagella.

III. Short Answer Questions:

(10x 2 = 20)

1. Terminal disinfection.
2. Significant bacteriuria.
3. Chickenpox.
4. Contributions of Robert Koch..
5. MMR.
6. Auto infections in enterobiasis.
7. Define normal flora.
8. What is a vaccine?
9. What is enteric fever?
10. Hydrophobia.

August 2009

[KV 1014]

Sub. Code: 4705

B.Sc (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)
First Year
Paper V – MICROBIOLOGY
Q.P. Code : 664705

Time : Three hours

Maximum : 75 marks

Answer All questions.

I. Essays: **(2x15=30)**

1. Classify various methods of sterilization. Write in detail about dry heat sterilization.
2. Name the gram positive cocci. Describe in detail about infection caused by staphylococcus aureus.

II. Write Short Notes on : **(5x 5 = 25)**

1. Rabies virus.
2. Aspergillus fumigatus.
3. Biomedical waste management.
4. Hypersensitivity – Type I.
5. Immunization schedule.

III. Short Answer Questions: **(10x 2 = 20)**

1. Write the Koch's postulates.
2. Give two important functions of bacterial capsule.
3. What is zoonosis? Give two examples.
4. List four complications of diphtheria.
5. Enumerate four live vaccines.
6. Give two examples of type III hypersensitivity.
7. Name two auto immune disease.
8. Enumerate two diseases produced by candida albicans.
9. Name two fungi causing skin infection.
10. Mention four species of genus plasmodia causing malaria.

February 2010

[KW 1014]

Sub. Code: 4705

B.Sc (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)
First Year
Paper V – MICROBIOLOGY
Q.P. Code : 664705

Time : Three hours

Maximum : 75 marks

Answer All questions.

I. Essays: **(2x15=30)**

1. Define sterilization and discuss in detail moist heat sterilization.
2. List the organisms causing enteric fever. Discuss in detail the lab diagnosis of typhoid fever.

II. Write Short Notes on : **(5x 5 = 25)**

1. Biomedical waste management.
2. Transport media.
3. Hookworm.
4. VDRL test.
5. Hepatitis B virus.

III. Short Answer Questions: **(10x 2 = 20)**

1. Give two important functions of bacterial Pili.
2. Mention two gaseous agents used in disinfection.
3. Mention any two types of filters and their uses.
4. Define cross infection and sub clinical infection.
5. Mention four different chemical methods of sterilization.
6. Mention any two Zoonotic diseases with their causative agent.
7. Mention two skin infections produced by streptococcus pyogenes.
8. Enumerate four killed vaccines.
9. Give two examples of Type IV hypersensitivity.
10. Name two fungal infections common in HIV.

February 2011

[KY 1014]

Sub. Code: 4705

B.Sc (Nursing) DEGREE EXAMINATION

(New Regulations for the candidates admitted from 2006-07 onwards)

First Year

Paper V – MICROBIOLOGY

Q.P. Code : 664705

Time : Three hours

Maximum : 75 marks

Answer All questions.

I. Essays:

(2X15=30)

1. Define Sterilization. Discuss in detail the different methods of dry heat sterilization.
2. Classify hypersensitivity. Discuss in detail Type I hypersensitivity.

II. Write Short Notes on :

(5X 5 = 25)

1. Bacterial growth curve.
2. Flagella.
3. Candida.
4. Widal Test.
5. Hospital infection control programme.

III. Short Answer Questions:

(10X 2 = 20)

1. List the characteristics of passive Immunity.
2. Define precipitation. Give examples.
3. List the contributions of Joseph Lister.
4. Mention four species of plasmodia causing malaria.
5. Name two fungi causing skin infection.
6. Give two example of Type III hypersensitivity.
7. Mention two antiseptic solutions with their recommended concentration.
8. Enumerate four intestinal nematode.
9. Name two diseases acquired through the bite of Aedes aegypti mosquito.
10. List four complication of Diphtheria.

August 2011

[KZ 1014]

Sub. Code: 4705

B.Sc (Nursing) DEGREE EXAMINATION

(New Regulations for the candidates admitted from 2006-07 onwards)

First Year

Paper V – MICROBIOLOGY

Q.P. Code : 664705

Time : Three hours

Maximum : 100 marks

Answer All questions.

I. Essays:

(2X20=40)

1. Write in detail about the bacterial anatomy with suitable diagram.
2. Name the bacterial agents causing pyrexia of unknown origin. Write pathogenesis and laboratory diagnosis of enteric fever.

II. Write Short Notes on :

(8X 5 = 40)

1. Laboratory diagnosis of urinary tract infection.
2. Bacterial capsule.
3. Hook worm infestation.
4. Protocol for safe blood transfusion.
5. Prophylaxis of Rabies.
6. Immunization schedule.
7. Swine flu.
8. Toxic shock syndrome.

III. Short Answer Questions:

(10X 2 = 20)

1. Koch's postulates.
2. Fluorescent microscope.
3. Grains stain.
4. Tantalization.
5. MMR.
6. Dengue fever.
7. List four opportunistic infections typically associated with HIV infection.
8. Malignant pustule.
9. BCG.
10. Name four dermatophytic fungi.

February 2012

[LA 1014]

Sub. Code: 4705

B.Sc (Nursing) DEGREE EXAMINATION

(New Regulations for the candidates admitted from 2006-07 onwards)

First Year

Paper V – MICROBIOLOGY

Q.P. Code : 664705

Time : Three hours

Maximum : 75 marks

Answer ALL questions.

I. Elaborate on : (2X15=30)

1. Classify Mycobacteria. Write in detail the morphology, cultural characters, pathogenesis and Lab diagnosis of Mycobacterium Tuberculosis.
2. List the bacteria that cause Diarrhoea. Discuss in detail the lab diagnosis of Cholera.

II. Write notes on : (5X 5 = 25)

1. Tyndalisation.
2. Acid fast staining.
3. Round worm.
4. Herpes virus.
5. Hospital borne Infections.

III. Short Answer: (10X 2 = 20)

1. Mention the Toxins produced by Streptococcus pyogenes.
2. Enumerate four Live vaccines.
3. What is Zoonosis? Give two examples.
4. Define Agglutination. Give examples.
5. List the characteristics of Active immunity.
6. Name two systemic fungal infections.
7. Mention four stages of life cycle of Plasmodium vivax.
8. Mention four different chemical methods of Sterilization.
9. Enumerate two blood flukes.
10. Name four viruses causing Haemorrhagic fever.

[LB 1014]

AUGUST 2012

Sub. Code: 4705

FIRST YEAR B.Sc – NURSING EXAM

Paper V – MICROBIOLOGY

Q.P. Code : 664705

Time : Three hours

Maximum : 100 marks

(180 Min)

Answer ALL questions in the same order.

I. Elaborate on:

**Pages Time Marks
(Max.) (Max.) (Max.)**

1. Define Sterilisation. List the methods of Sterilisation.

Write in detail about moist heat sterilization.

19 33 20

2. Define and classify Hypersensitivity. Write about anaphylaxis in detail.

19 33 20

II. Write Notes on:

1. VDRL test.

3 8 5

2. Universal precautions.

3 8 5

3. BCG Vaccine.

3 8 5

4. Hospital waste Treatment and disposal.

3 8 5

5. Black water fever.

3 8 5

6. Flagella.

3 8 5

7. Coagulase.

3 8 5

8. Dermatophytes.

3 8 5

III. Short Answers on:

1. Pasteurisation.

1 5 2

2. Koch postulates.

1 5 2

3. Nosocomial infections.

1 5 2

4. Name the various classes of Immunoglobulins.

1 5 2

5. Name four general properties of viruses.

1 5 2

6. Name four organisms causing pyogenic meningitis.

1 5 2

7. Name two opportunistic fungi.

1 5 2

8. Enumerate four intestinal nematodes.

1 5 2

9. Candida albicans.

1 5 2

10. List four organisms causing Urinary tract infections.

1 5 2

[LC 1014]

FEBRUARY 2013

Sub. Code: 4705

B.Sc (Nursing) DEGREE EXAMINATION

(New Regulations for the candidates admitted from 2006-07 onwards)

First Year

Paper V – MICROBIOLOGY

Q.P. Code : 664705

Time : Three hours

Maximum : 100 marks

I. Essays:

(2x20=40)

1. Define immunity and describe in detail the types of immunity
2. Define prokaryote and add a note on the factors affecting bacterial growth

II. Write Short Notes on :

(8x5=40)

1. Acid fast staining
2. Joseph Lister
3. Aspergillosis
4. Differential media
5. Hospital acquired infection
6. Autoclave
7. Mention the principles of an antigen
8. Draw a neat labeled diagram of a typical bacterial cell.

III. Short Answer Questions:

(10x2=20)

1. Four differences between active and passive immunity
2. Give at least two prophylactic methods to prevent dengue fever
3. Mention four properties of a chemical sterilant
4. List out the contributions of Alexander Fleming
5. Give four causative agents of Diarrheal infection
6. Give the immunization schedule for Polio and typhoid
7. Write four applications of microbiology in the field of nursing.
8. Define cold sterilization method
9. Mention the names of the reagents used for gram staining
10. Define agglutination and precipitation

[LD 1014]

AUGUST 2013

Sub. Code: 4705

B.Sc (Nursing) DEGREE EXAMINATION

(New Regulations for the candidates admitted from 2006-07 onwards)

First Year

Paper V – MICROBIOLOGY

Q.P. Code : 664705

Time : Three hours

Maximum : 100 marks

I. Essays:

(2x20=40)

1. Write in detail about the life cycle of Malarial parasite and complications caused by *P.falciparum*.
2. Write about the growth of bacteria in the laboratory and classify various culture media with suitable examples.

II. Write Short Notes on:

(8x5=40)

1. Widal test
2. Bacterial Growth Curve
3. Swine Flu
4. Hospital Acquired Infections
5. Anaphylaxis
6. Rh Incompatibility
7. Bacterial Conjugation
8. Bacteriophage.

III. Short Answer Questions:

(10x2=20)

1. Name four Filarial worms
2. ELISA Test
3. Name four diseases caused by Staphylococci
4. Name four agents used for skin disinfection
5. Casoni's test
6. List articles disposed under various color codes
7. Name two transport media
8. Mantoux Test
9. Mention four killed vaccines
10. Name four fungi.

[LE 1014]

FEBRUARY 2014

Sub. Code: 4705

B.Sc (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)
First Year
Paper V – MICROBIOLOGY
Q.P. Code : 664705

Time : Three hours

Maximum : 75 marks

I. Elaborate on:

(2x15=30)

1. Define and classify sterilisation. Describe the various methods of moist heat sterilisation.
2. Describe the mode of transmission, prevention and laboratory diagnosis of Human Immuno Deficiency virus.

II. Write Notes on:

(5x5=25)

1. Contributions of Robert Koch.
2. Hydatid disease.
3. Anaphylaxis.
4. Describe the laboratory diagnosis of pulmonary tuberculosis.
5. Differential staining technique.

III. Short Answer Questions:

(10x2=20)

1. What is an anaerobic medium? Give example.
2. Name two toxins produced by Staphylococcus.
3. Define pulse polio immunisation.
4. Enumerate dermatophytes.
5. Define Immunity.
6. What is ELISA?
7. Name two opportunistic fungi.
8. Mention four species of plasmodia causing malaria
9. What is candidiasis?
10. Define nosocomial infection.

[LF 1014]

AUGUST 2014

Sub. Code: 4705

B.Sc (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)
FIRST YEAR
PAPER V – MICROBIOLOGY

Q.P. Code : 664705

Time : Three hours

Maximum : 75 marks

I. Elaborate on: **(2x15=30)**

1. Describe the Morphology, Cultural characteristics, Pathogenesis and lab diagnosis of Mycobacterium tuberculosis.
2. Define nosocomial infection. Describe the sources, modes of transmission and prevention of hospital acquired infection.

II. Write Notes on: **(5x5=25)**

1. Describe the life cycle of malarial parasite.
2. Autoclave.
3. Prophylaxis of polio.
4. Bacterial spores.
5. Contributions of Louis Pasteur.

III. Short Answer Questions: **(10x2=20)**

1. Give two examples of live vaccines.
2. Name four methods of disposal of biomedical waste.
3. Name two gases used as disinfectant.
4. What is VDRL test?
5. Enumerate two diseases spread through contaminated water.
6. Name four organisms causing UTI.
7. What is zoonoses? Give example.
8. What are the uses of electron microscope?
9. What is candidiasis?
10. Name two dermatophytes.

[LG 1014]

FEBRUARY 2015

Sub. Code: 4705

B.Sc (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)
FIRST YEAR
PAPER V – MICROBIOLOGY
Q.P. Code : 664705

Time : Three hours

Maximum : 75 marks

I. Elaborate on: **(2 x 15 = 30)**

1. Classify bacteria. Describe the structure of a bacterial cell with a neat diagram.
2. Enumerate various causes of food poisoning. Describe the pathogenesis and laboratory diagnosis of *Vibrio Cholerae* infection.

II. Write notes on: **(5 x 5 = 25)**

1. Antibiotic susceptibility testing
2. Prophylaxis of rabies
3. Amoebic dysentery
4. Prophylaxis of tetanus
5. Gram staining

III. Short answers on: **(10 x 2 = 20)**

1. What are opportunistic mycoses? Name two opportunistic fungi.
2. List the characteristics of passive immunity.
3. What is an enriched media? Give example.
4. Define tyndallisation.
5. Name four viruses which are transmitted by blood.
6. Name four methods for disposal of biomedical waste.
7. What is Black water fever?
8. Name two antiseptics.
9. Name four organisms causing nosocomial infection.
10. What is anaphylaxis?

[LH 1014]

AUGUST 2015

Sub. Code: 4705

B.Sc. (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)
FIRST YEAR

PAPER V – MICROBIOLOGY

Q.P. Code: 664705

Time : Three Hours

Maximum : 75 marks

Answer ALL questions

I. Elaborate on: **(2 x 15 = 30)**

1. Define disinfection. Properties of an ideal disinfectant. Explain various chemicals used as disinfectants.
2. Define and classify hypersensitivity. Write in detail about type I hypersensitivity in detail.

II. Write notes on: **(5 x 5 = 25)**

1. Robert Koch.
2. Acid Fast Staining.
3. Food poisoning.
4. Source and mode of transmission of infection.
5. Enriched Media.

III. Short answers on: **(10 x 2 = 20)**

1. Koch Phenomenon.
2. Mention two contributions of Louis Pasteur.
3. Iatrogenic.
4. Give any two functions of pili.
5. Auto infection of Enterobiasis.
6. Name any four fungal infections common in HIV.
7. Name four arthropod borne disease.
8. Hydrophobia.
9. What is significant bacteriuria?
10. Negative staining.

[LI 1014]

FEBRUARY 2016

Sub. Code: 4705

B.Sc. (Nursing) DEGREE EXAMINATION

(New Regulations for the candidates admitted from 2006-07 onwards)

FIRST YEAR

PAPER V – MICROBIOLOGY

Q.P. Code : 664705

Time : Three Hours

Maximum : 75 Marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Classify different type of Sterilization. Write in details about moist heat Sterilization.
2. Define Enteric Fever and write in details of the Morphology, cultural characters, pathogenesis and Lab Diagnosis of Salmonella Typhi.

II. Write notes on:

(5 x 5 = 25)

1. Polio
2. Transport Media
3. Nosocomial Infection
4. Dermatophytes
5. Flagella

III. Short answers on:

(10 x 2 = 20)

1. Give two examples for blood parasites.
2. Use of Electron Microscope.
3. Define agglutination reaction.
4. Give two examples of Type I Hypersensitivity.
5. Name four killed viral vaccines.
6. List the clinical manifestations of infection with Streptococcus Pneumoniae.
7. Name two Multidrug - resistant Bacteria.
8. Name two vaccines recommended specifically for Health care workers.
9. Mention two bacteria causing gas Gangrene.
10. Haptens.

[LJ 1014]

AUGUST 2016

Sub. Code: 4705

B.Sc. (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)
FIRST YEAR
PAPER V – MICROBIOLOGY

Q.P. Code : 664705

Time: Three hours

Maximum : 75 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Classify antigen & antibody reactions. Describe in detail the agglutination tests and its uses in the laboratory diagnosis.
2. Write about the morphology, laboratory diagnosis, treatment and prophylaxis of Hepatitis B virus.

II. Write notes on: **(5 x 5 = 25)**

1. Robert Koch.
2. Difference between active & passive immunity.
3. Lab diagnosis of urinary tract infections.
4. Candidiasis.
5. Enriched media.

III. Short answers on: **(10 x 2 = 20)**

1. Candle filters.
2. Convalescent carrier.
3. Toxic shock syndrome.
4. Mention any four microorganisms causing pneumonia.
5. Coagulase test.
6. Western blot test.
7. KOH wet mount.
8. Mention any two species of Aspergillus.
9. Negri bodies.
10. Normal flora.

[LK 1014]

FEBRUARY 2017

Sub. Code: 4705

B.Sc. (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)
FIRST YEAR
PAPER V – MICROBIOLOGY

Q.P. Code : 664705

Time: Three hours

Maximum : 75 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the clinical findings and diagnosis of staphylococcus aureus in detail.
2. Explain the life cycle of plasmodium.

II. Write notes on: **(5 x 5 = 25)**

1. What are the different stages of disease in syphilis?
2. Anaerobic culture methods.
3. Describe the prevention of rabies.
4. Brief about chicken pox.
5. Draw picture of bacterial cell and label the parts.

III. Short answers on: **(10 x 2 = 20)**

1. What is antigen?
2. Non suppurative complications of Group A Streptococci
3. BCG vaccine.
4. Give two examples of gram negative bacilli.
5. What do you mean by incineration?
6. Name two bacteria which cause diarrhea.
7. Expand ELISA.
8. Normal flora.
9. Fever blister.
10. Casoni's test.

[LL 1014]

AUGUST 2017

Sub. Code: 4705

B.Sc. (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)
FIRST YEAR
PAPER V – MICROBIOLOGY

Q.P. Code : 664705

Time: Three hours

Maximum : 75 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Define and classify hypersensitivity. Write about type IV hypersensitivity in detail.
2. Classify bacteria. Write in detail about various structures of bacterial cell.

II. Write notes on: **(5 x 5 = 25)**

1. Contributions of Louis Pasteur.
2. Gram staining.
3. Source and mode of transmission of infection.
4. Transport media.
5. Immunization schedule.

III. Short answers on: **(10 x 2 = 20)**

1. Contributions of Alexander Fleming.
2. Mention two uses of pasteurization.
3. What is Zoonotic infection? Give examples.
4. Black water fever.
5. Define nosocomial infection.
6. Name two types of filters used for sterilization.
7. Mention four species of plasmodium causing malaria.
8. Name four opportunistic fungi.
9. Antigen.
10. Enumerate four live vaccines.

[LM 1014]

FEBRUARY 2018

Sub. Code: 4705

B.Sc. (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)
FIRST YEAR
PAPER V – MICROBIOLOGY

Q.P. Code : 664705

Time: Three hours

Maximum : 75 Marks

I. Elaborate on: (2 x 15 = 30)

1. Define immunity. Add a note on types of immunity.
2. Describe the morphology, pathogenesis, lab diagnosis of HIV.

II. Write notes on: (5 x 5 = 25)

1. Enriched media.
2. Pasteurisation.
3. Candidiasis.
4. Hospital acquired infections.
5. Ig M antibody.

III. Short answers on: (10 x 2 = 20)

1. Hide porter's disease.
2. Widal test.
3. Cold sterilization.
4. Name two bacteria causing STD.
5. ELISA.
6. Gram staining.
7. Give two examples of live vaccine.
8. Name any two helminths infecting man.
9. Name any two filamentous fungi.
10. Name two anti-tubercular drugs.

[LN 1014]

AUGUST 2018

Sub. Code: 4705

B.Sc. (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)

FIRST YEAR

PAPER V – MICROBIOLOGY

Q.P. Code : 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on: (2 x 15 = 30)

1. Define sterilization. Write in detail about different methods of sterilization.
2. List the bacteria that cause diarrhoea. Discuss in detail the laboratory diagnosis of *Vibrio cholera*.

II. Write notes on: (5 x 5 = 25)

1. Pasteurization.
2. Bacterial growth curve.
3. Hospital borne infections.
4. Rabies virus.
5. Mantoux test.

III. Short answers on: (10 x 2 = 20)

1. Contributions of Joseph Lister.
2. Mention four applications of microbiology in the field of nursing.
3. Give two important functions of bacterial pili.
4. Teratogenic infection.
5. Transport media.
6. Mention two gaseous agents used in disinfection.
7. Hydrophobia.
8. Two fungal infection common in HIV patient.
9. Precipitation.
10. DPT.

[LO 1014]

FEBRUARY 2019

Sub. Code: 4705

B.Sc. (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)

FIRST YEAR

PAPER V – MICROBIOLOGY

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on: (2 x 15 = 30)

1. Describe the morphology, staining, pathogenesis and lab diagnosis of *Mycobacterium tuberculosis*.
2. Classify bacteria and add a note on the factors affecting bacterial growth.

II. Write notes on: (5 x 5 = 25)

1. Robert Koch and his postulates.
2. Life cycle of Malarial parasite.
3. Selective media.
4. VDRL test.
5. Anaphylaxis.

III. Short answers on: (10 x 2 = 20)

1. Carrier.
2. Ig G antibody.
3. Give the color coding for disposal of Biomedical wastes in hospital.
4. Cross infection.
5. Mention four Modes of transmission of infection.
6. Pulse polio program.
7. Tyndallization.
8. Name two antifungal drugs.
9. Negative staining.
10. Name two fungi causing systemic infection.

B.Sc. (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)

FIRST YEAR

PAPER V – MICROBIOLOGY

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on: (2 x 15 = 30)

1. Describe the morphological features, clinical manifestation and diagnostic methods for *Corynebacterium diphtheriae*. Give a short account of Immunisation for diphtheria.
2. Define and classify hypersensitivity. Write about the anaphylactic reaction and its mechanism in detail.

II. Write notes on: (5 x 5 = 25)

1. Bio-medical Waste Management.
2. Laboratory diagnosis of Malaria.
3. Disinfectants.
4. Agglutination.
5. Amoebiasis.

III. Short answers on: (10 x 2 = 20)

1. What is significant bacteriuria?
2. Define Latent infection with example.
3. Enumerate four killed vaccines.
4. What are the functions of the structure Pili in bacteria?
5. List four organisms causing Urinary tract Infection.
6. What is anaerobic media? Give example.
7. Name two toxins produced by *Staphylococcus*.
8. Name the various classes of Immunoglobulins.
9. What are the target cells and receptors for HIV?
10. Name four dermatophytic fungi.

B.Sc. (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)

FIRST YEAR

PAPER V – MICROBIOLOGY

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on: (2 x 15 = 30)

1. Describe the morphology, pathogenesis and laboratory diagnosis of *Salmonella*? Give a short account of prevention of *Salmonella*?
2. Define nosocomial Infection. Describe the sources, mode of transmission and write about the hospital infection control programme.

II. Write notes on: (5 x 5 = 25)

1. Bacterial endospore.
2. Gram staining.
3. ELISA.
4. Universal precaution.
5. Aspergillosis.

III. Short answers on: (10 x 2 = 20)

1. Write about hanging drop method.
2. Name any two auto-immune diseases.
3. Mention about dry heat sterilization.
4. Mention any two types of filters and their uses.
5. Write about simple microscope.
6. Mention any two skin infections produced by *Streptococcus pyogenes*.
7. What is black water fever?
8. Mention any two zoonotic diseases with their causative agents.
9. Define enriched media with example.
10. Give examples for Type III hypersensitivity.

[BSCN 0321]

MARCH 2021

Sub. Code: 4705

(AUGUST 2020 SESSION)

B.Sc. (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)

FIRST YEAR

PAPER V – MICROBIOLOGY

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Write in detail about Laboratory Methods for Identification of Microorganisms.
2. Write in detail about Bio-Medical Waste Management.

II. Write notes on:

(5 x 5 = 25)

1. Antibody Structure.
2. Explain Bacterial Motility.
3. Explain Zoonoses Infection with Example.
4. Protocol for Safe Blood Transfusion.
5. Difference between Active and Passive Immunity.

III. Short answers on:

(10 x 2 = 20)

1. Use of Terminology.
2. Use of Electron Microscope.
3. Bacterial Colonization.
4. Mention any four Mesophilic Human Bacteria.
5. Define Nosocomial Infection.
6. Define Narrow-Spectrum Antibiotics with two examples.
7. What is Black water fever?
8. Name Four Viruses which are transmitted by blood?
9. Cold chain.
10. Define Immunity.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BSCN 1221]

**DECEMBER 2021
(FEBRUARY 2021 SESSION)**

Sub. Code: 4705

**B.Sc. (Nursing) DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2006-07 onwards)**

FIRST YEAR

PAPER V – MICROBIOLOGY

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on: (2 x 15 = 30)

1. Describe in detail the Pathogenesis, Laboratory Diagnosis and Prevention of Hepatitis 'B' infection?
2. Write in detail about the life cycle of Malarial parasite and complications caused by *P.falciparum*.

II. Write notes on: (5 x 5 = 25)

1. Difference between active and passive immunity.
2. Draw in detail about the Bacterial Anatomy.
3. Comparison of viral and Bacterial Infection.
4. Explain superficial Fungi with example.
5. Brief about Rh Incompatibility.

III. Short answers on: (10 x 2 = 20)

1. Contribution of Robert Koch.
2. Contributions of Joseph Lister.
3. Bacterial Locomotion.
4. Swine flu.
5. Define Autoclave.
6. Define Antibiotic Susceptibility Testing.
7. What is Scalded Skin Syndrome?
8. Use of Electron Microscope.
9. Define antigen and Antibody Reaction.
10. Define Pulse Polio Immunization.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[BSCN 0622]

**JUNE 2022
(FEBRUARY 2022 SESSION)**

Sub. Code: 4705

**B.Sc. (Nursing) DEGREE EXAMINATION
(Regulations for the candidates admitted from 2006-07 onwards)**

**FIRST YEAR
PAPER V – MICROBIOLOGY**

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on: (2 x 15 = 30)

1. Classify bacteria describe the factors affecting bacterial growth.
2. Define gas gangrene. Write about the morphology, culture characters, pathogenesis and lab diagnosis of clostridium.

II. Write notes on: (5 x 5 = 25)

1. Gram staining.
2. Culture method.
3. Collection of sputum for tuberculosis diagnosis and sampling methods.
4. Antibiotic sensitivity test.
5. Principles of microbiology to be followed by the nurse

III. Short answers on: (10 x 2 = 20)

1. Shape of bacteria
2. CSF.
3. Thermophile.
4. Benefits of bacteria as normal flora.
5. Magnification in light microscope
6. Focal infection.
7. Mention any four characters of virus.
8. Types of antigen.
9. Non pyogenic complications of S.pyogenes.
10. Polio vaccine.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[BSCN 1122]

**NOVEMBER 2022
(AUGUST 2022 EXAM SESSION)**

Sub. Code: 4705

**B.Sc. (Nursing) DEGREE EXAMINATION
(Regulations for the candidates admitted from 2006-07 onwards)**

**FIRST YEAR
PAPER V – MICROBIOLOGY**

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on: (2 x 15 = 30)

1. Define and classify hypersensitivity. Write in detail about type I hypersensitivity.
2. Define sterilization and write in detail about physical methods of sterilization.

II. Write notes on: (5 x 5 = 25)

1. Acid fast staining.
2. Sugar medium.
3. CSF- collection procedure.
4. Electrophoresis.
5. Cultivation of virus.

III. Short answers on: (10 x 2 = 20)

1. Anaerobic medium.
2. Hide porter's disease.
3. WIDAL test cut off value for O & H antigen.
4. Tyndallisation.
5. Name two toxins produced by clostridium tetani.
6. Germ tube test.
7. Any four factors affecting growth of bacteria.
8. Vaccine.
9. Draw the structure of rabies virus.
10. Mention any two method of staining done for fungus.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[BSCN 0523]

MAY 2023

Sub. Code: 4705

(FEBRUARY 2023 EXAM SESSION)

**B.Sc. (Nursing) DEGREE EXAMINATION
(Regulations for the candidates admitted from 2006-07 onwards)**

**FIRST YEAR
PAPER V – MICROBIOLOGY**

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Classify Streptococci and write elaborately about the Lab diagnosis and Pathogenicity of Streptococcus Pyogenes.
2. Describe the mode of transmission, prevention and laboratory diagnosis of Human Immuno Deficiency Virus.

II. Write notes on:

(5 x 5 = 25)

1. Koch's postulate.
2. Flagella.
3. Bio-medical Waste Management.
4. Candidiasis.
5. Principles of preparation and uses of vaccines in Immunization.

III. Short answers on:

(10 x 2 = 20)

1. Contributions of Alexander Fleming.
2. Write four applications of Microbiology in the field of Nursing.
3. Mention the names of the reagents used for Gram staining.
4. Give examples of Type III Hypersensitivity.
5. Mention four different Chemical methods of Sterilization.
6. Name any four Opportunistic fungi.
7. Define Precipitation. Give example.
8. Write the different mode of Transmission of Infection.
9. Define Nosocomial infection.
10. What are the various phases in Bacterial growth curve?

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[BSCN 1023]

**OCTOBER 2023
(AUGUST 2023 EXAM SESSION)**

Sub. Code: 4705

**B.Sc. (Nursing) DEGREE EXAMINATION
(Regulations for the candidates admitted from 2006-07 onwards)**

**FIRST YEAR
PAPER V – MICROBIOLOGY**

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on: (2 x 15 = 30)

1. Write in detail about Hospital Acquired Infection and method of its prevention.
2. Draw and explain complete life cycle of *Entamoeba histolytica*. Write down its pathogenicity and laboratory diagnosis.

II. Write notes on: (5 x 5 = 25)

1. Joseph Lister.
2. Bacterial capsule.
3. Define Incineration with examples.
4. *Aspergillus fumigatus*.
5. VDRL Test.

III. Short answers on: (10 x 2 = 20)

1. What are the functions of the structure Pili in bacteria
2. Mention two uses of Inspissation.
3. Negative staining.
4. Mention four mode of Transmission of Infection.
5. Write about Hanging drop method.
6. Define Immunity.
7. Write about Simple Microscope.
8. DPT.
9. Define Hospital Acquired Infection.
10. Demonstrate the steps in Hand washing.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[BSCN 0224]

FEBRUARY 2024

Sub. Code: 4705

**B.Sc. (Nursing) DEGREE EXAMINATION
(Regulation 2006-2007 onwards)**

**FIRST YEAR
PAPER V – MICROBIOLOGY**

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. What is Infection? What are the types of infection? Describe the sources and mode of transmission of infection.
2. Enumerate the viruses causing Hepatitis. Describe the morphology, clinical features, pathogenicity, laboratory diagnosis and prevention of Hepatitis B virus.

II. Write notes on: **(5 x 5 = 25)**

1. Write a note on influenza causing virus.
2. Explain the features and infection mechanism of the disease Candidiasis.
3. The Life cycle of Malaria.
4. Immunoglobulins - types and function.
5. Pathogenesis of *Pseudomonas aeruginosa*.

III. Short answers on: **(10 x 2 = 20)**

1. Enumerate organisms causing sore throat.
2. McIntosh filter Jar.
3. Define normal flora.
4. Elek Gel test.
5. Eukaryote.
6. What is L-form bacteria?
7. BCG.
8. Give two examples of Blood Parasites.
9. Water borne diseases.
10. How will you collect specimen for blood culture?

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[BSCN 0824]

AUGUST 2024

Sub. Code: 4705

**B.Sc. (Nursing) DEGREE EXAMINATION
(Regulation 2006-2007 onwards)**

**FIRST YEAR
PAPER V – MICROBIOLOGY**

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on: (2 x 15 = 30)

1. Classify bacteria and add a note on the factors affecting bacterial growth.
2. Describe the morphology, clinical manifestation and diagnostic methods for *Corynebacterium diphtheriae*. Write a note on Immunization for diphtheria.

II. Write notes on: (5 x 5 = 25)

1. Louis Pasteur and his contribution.
2. Antibiotic resistance.
3. Amoebiasis.
4. ELISA.
5. Difference between Active and Passive Immunity.

III. Short answers on: (10 x 2 = 20)

1. Negative staining.
2. Carrier.
3. Ig G antibody.
4. Name two toxins produced by staphylococcus.
5. Selective media.
6. Name any two auto-immune diseases.
7. Haptens.
8. Mention any two types of filters used for sterilization.
9. Give examples for Type III hypersensitivity.
10. Water borne diseases.

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[BSCN 0825]

AUGUST 2025

Sub. Code: 4705

**B.Sc. (Nursing) DEGREE EXAMINATION
(Regulation 2006-2007 onwards)**

**FIRST YEAR
PAPER V – MICROBIOLOGY**

Q.P. Code: 664705

Time: Three Hours

Maximum : 75 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Classify Hypersensitivity. Discuss the various phases and types of Hypersensitivity.
2. List the organisms causing acute diarrhoeal diseases and describe the laboratory diagnosis of *Vibrio Cholerae*.

II. Write notes on: **(5 x 5 = 25)**

1. Write briefly on Poliomyelitis and discuss the prophylaxis.
2. Explain about *Cryptococcus neoformans*.
3. Write a short note on Rabies.
4. Widal test.
5. BCG vaccine.

III. Short answers on: **(10 x 2 = 20)**

1. Mention the Auto infections in Enterobiasis.
2. What is a growth curve? How many phases are there?
3. What is a dark field microscope?
4. Bio-medical Waste Management.
5. Wool sorter disease.
6. List out the four species of parasite that cause Malaria.
7. Describe the Hydatid cyst.
8. Mention the organisms causing food poisoning.
9. Germ tube test.
10. What is Terminal disinfection?
