

**Rajiv Gandhi University of Health Sciences, Karnataka**  
**I Year B.Sc. Nursing (PC) Degree Examination – 06-Mar-2023**

**Time: Three Hours**

**Max. Marks: 75**

**MICROBIOLOGY (RS-3 & RS-4)**

**Q.P. CODE: 1735**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Describe the pathogenesis, clinical manifestations and laboratory diagnosis of pulmonary tuberculosis. Write a note on BCG
2. Describe the pathogenesis and laboratory diagnosis of Hepatitis B virus
3. Draw a neat labelled diagram of bacterial cell and explain about bacterial spore

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Life cycle of Hook worm
5. Differences between Endotoxins and Exotoxins
6. VDRL test
7. Dermatophytosis
8. Laboratory diagnosis of malaria
9. Define selective and enrichment media. Give two examples each
10. Widal test
11. Microfilaria
12. Gram's staining (Principle, procedure and observation)

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Draw immunoglobulin A (IgA)
14. Two methods for detection of bacterial motility
15. Two contribution of Robert Koch
16. Draw Giardia intestinalis
17. Anaerobic media
18. Ascaris egg
19. Mention two bacterial live vaccines
20. Give two examples of DNA viruses
21. Incinerator
22. Two biological vectors

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
**I Year B.Sc. Nursing (PC) Degree Examination – 27-May-2022**

**Time: Three Hours**

**Max. Marks: 75 Marks**

**MICROBIOLOGY**

**(RS3 & RS4)**

**Q.P. CODE: 1735**

Your answers should be specific to the questions asked.  
Draw neat labeled diagrams wherever necessary.

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Describe and classify hypersensitivity. Write in detail about anaphylaxis.
2. Classify mycobacterium. Explain detail about morphology and pathogenesis and lab diagnosis of pulmonary tuberculosis.
3. Define sterilization. Classify sterilization method. Explain detail about autoclave.

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Bacterial spore.
5. Widal test.
6. Life cycle of round worm.
7. Acid fast staining.
8. Nosocomial infection.
9. Differential media.
10. Prophylaxis of rabies virus.
11. Laboratory diagnosis of enteric fever.
12. Candida albicans.

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Contribution of Robert Koch.
14. Name four DNA virus and RNA viruses.
15. What is Zoonotic diseases? Give two examples.
16. Name four transport media.
17. DPT vaccine.
18. Name type of bacteria flagella.
19. VDRL test.
20. Name four gaseous disinfectants.
21. Name four species of plasmodium cause malaria.
22. Name four spore containing bacterial diseases.



# Rajiv Gandhi University of Health Sciences, Karnataka

I year B.Sc. Nursing (PC) Degree Examination – 09-Feb-2022

Time: Three Hours

Max. Marks: 80 Marks

## MICROBIOLOGY (RS2)

Q.P. CODE: 1704

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

### LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Define and classify sterilization. Add a note on sterilization by moist heat.
2. List the bacteria causing sexually transmitted diseases. Describe the pathogenesis and lab diagnosis of syphilis.
3. Describe the morphology of *Entamoeba histolytica* and discuss the lab diagnosis of intestinal amoebiasis.

### SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. Bacterial capsule
5. *Trichomonas vaginalis*
6. Life cycle of malarial parasites
7. Ziehl - Neelsen stain
8. Widal test
9. Type I hypersensitivity
10. *Candida albicans*
11. Prophylaxis for rabies
12. Hospital-borne infection
13. DPT

### SHORT ANSWERS

10 x 2 = 20 Marks

14. Draw neat, labeled diagram of IgM.
15. Name two spore-forming bacteria.
16. Name two bacteria causing food poisoning.
17. Name two gaseous disinfectants.
18. Intermediate host
19. Name two RNA viruses
20. Define antigen
21. Mention two modes of transmission of HIV infection.
22. Draw a neat, labeled diagram of hookworm ova.
23. Significant bacteriuria

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
**I Year B.Sc. Nursing (PC) Degree Examination – 04-Aug-2021**

**Time: Three Hours**

**Max. Marks: 75 Marks**

**MICROBIOLOGY – (RS-3 & RS-4)**

**Q.P. CODE: 1735**

Your answers should be specific to the questions asked.  
Draw neat labeled diagrams wherever necessary.

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Define and Classify immunity. Write about acquired immunity.
2. Discuss the source and mode of transmission of hospital infection and add a note on preventive measures.
3. What is enteric fever? Write about the Pathogenesis and Lab diagnosis of Typhoid Fever.

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Draw a neat labeled diagram of bacterial cell and explain cell membrane.
5. Define sterilization. Explain sterilization by hot air oven.
6. Candidiasis.
7. Serological tests for Syphilis.
8. Grams staining.
9. Varicella Zoster Virus.
10. Oral Thrush.
11. Rabies.
12. Lab Diagnosis of Pulmonary Tuberculosis.

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Define medical microbiology.
14. Define Koch's phenomenon.
15. Define anaerobic culture media.
16. Name the parasites whose ova are detected in stool microscopy.
17. Name the four phases of bacterial growth.
18. Mention any two transport media.
19. Name two gaseous disinfectants.
20. Define pasteurization.
21. Name three diseases caused by clostridium.
22. Name two diseases caused by spirochetes.

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
**I Year B.Sc. Nursing (PC) Degree Examination – 01-Dec-2020**

**Time: Three Hours**

**Max. Marks: 75 Marks**

**MICROBIOLOGY – (RS-3 & RS-4)**

**Q.P. CODE: 1735**

Your answers should be specific to the questions asked.  
Draw neat labeled diagrams wherever necessary.

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Define Sterilization. Write the principles of Sterilization. Explain detail about Dry heat method.
2. Draw a neat labelled diagram of Bacterial Cell and write about Bacterial flagella.
3. Describe the Morphology, Cultural characters, Pathogenicity and Laboratory diagnosis of Staphylococcal Aureus.

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Explain special staining method (Albert staining and Impregnation method) with examples.
5. Explain harmful effects of microorganisms.
6. Define Bio-medical waste and describe the different methods of bio-medical waste treatment.
7. Define disinfection and explain disinfection by using halogens.
8. Active Immunity.
9. Laboratory diagnosis of UTI.
10. Kala Azar.
11. Write a note about Hepatitis B.
12. Dermatophytes.

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Define negative staining.
14. Define sensitivity test.
15. Define precipitation reaction.
16. Define carrier.
17. Give two example of Aerobic bacteria.
18. Mention the use of TAB vaccine.
19. Name two DNA viruses.
20. Compound Microscope.
21. Name two acid fast bacteria.
22. Name two Agglutination tests.

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
**I Year B.Sc. Nursing (PC) Degree Examination – 11-Sep-2020**

**Time: Three Hours**

**Max. Marks: 75 Marks**

**MICROBIOLOGY**

**(RS3 & RS4)**

**Q.P. CODE: 1735**

Your answers should be specific to the questions asked.  
Draw neat labeled diagrams wherever necessary.

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Define and classify Immunity. Describe in detail active Immunity.
2. Describe the morphology and cultural characteristics of *Corynebacterium diphtheria*. Write in detail laboratory diagnosis of diphtheria.
3. Write the pathogenesis, laboratory diagnosis and Immunoprophylaxis of rabies.

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Laboratory diagnosis of enteric fever
5. Methicillin Resistant *Staphylococcus Aureus* (MRSA)
6. Tyndallization
7. Bacterial flagella
8. Immunofluorescence
9. Complement fixation test
10. *Candida albicans*
11. Bacterial toxins
12. Larva migrans

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Four agents causing sexually transmitted diseases
14. Koch's postulates
15. Ziehl Neelsen Stain
16. Draw a neatly labelled diagram of bacterial cell
17. Name two killed vaccines
18. Sterilization controls for autoclave
19. KOH mount
20. Inclusion body with an example
21. Name two parasitic infections in which Man acts as intermediate host
22. Prophylaxis for Hepatitis B

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
I Year B.Sc. Nursing (PC) Degree Examination – OCT-2019

**Time: Three Hours**

**Max. Marks: 75 Marks**

**Microbiology  
(RS-3 & RS-4)  
Q.P. CODE: 1735**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Define sterilization. Describe different methods of dry heat sterilization.
2. Describe in detail laboratory diagnosis of syphilis.
3. Describe morphology and life cycle of *Entamoeba histolytica*. Write in detail the laboratory diagnosis of intestinal amoebiasis.

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Laboratory diagnosis of cholera
5. Bacterial meningitis
6. Bacterial growth curve
7. Compare and contrast poliomyelitis vaccines
8. Agglutination reactions
9. Classify fungi with examples
10. Antibiotic susceptibility testing
11. Methods of anaerobic culture
12. Laboratory diagnosis of Cryptococcal meningitis

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Well Felix test
14. Name two bacteria causing wound infections
15. Selective media – definition with one example
16. Robert Koch
17. Herd immunity
18. Dimorphic fungi
19. Name two chemical sterilizing agents
20. Draw a neat labelled diagram of ova of hookworm
21. Name two RNA viruses
22. Methods of demonstrating bacterial motility

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
1 Year B.Sc. Nursing (PC) Degree Examination – APRIL-2019

**Time: Three Hours**

**Max. Marks: 75 Marks**

**Microbiology**  
**(RS-3 & RS-4)**  
**Q.P. CODE: 1735**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Classify immunity. Discuss in detail innate immunity.
2. Write causative agents of Sexually Transmitted Diseases. Describe morphology and laboratory diagnosis in a case of gonorrhoea.
3. Name the malarial parasites. Explain the life cycle and laboratory diagnosis of plasmodium falciparum.

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Bacillary dysentery
5. Laboratory diagnosis of Urinary Tract Infection
6. Autoclave – principle, working, uses, controls
7. Bacterial spore
8. ELISA
9. Precipitation reaction
10. Fumigation
11. Ankylostoma duodenale – life cycle and laboratory diagnosis
12. DPT vaccine

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Satellitism
14. Two bacteria causing food poisoning
15. Albert stain
16. Transport media – definition and example
17. Name two live attenuated vaccines
18. Draw a neat labelled diagram of Immunoglobulin G
19. Oral thrush
20. LPCB mount
21. Name two parasites transmitted through feco-oral route
22. Name two DNA viruses



**Rajiv Gandhi University of Health Sciences, Karnataka**  
I Year B.Sc. Nursing (PC) Degree Examination – SEP-2018

**Time: Three Hours**

**Max. Marks: 75 Marks**

**Microbiology  
(RS-3 & RS-4)  
Q.P. CODE: 1735**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Define and classify hypersensitivity reactions. Describe in detail Type I hypersensitivity reaction.
2. What is nosocomial infection? Describe different types of infection in the hospital with examples.
3. Describe the various methods of cultivation of viruses.

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Prophylaxis for tetanus.
5. Laboratory diagnosis in a suspected case of pulmonary tuberculosis
6. Hot air oven
7. Bacterial capsule
8. VDRL
9. Passive immunity
10. Dermatophytes
11. Segregation of biomedical waste
12. Laboratory diagnosis of Human Immunodeficiency Virus infection

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Coagulase test
14. Widal test
15. Gram stain
16. Enriched media-definition with one example
17. Draw the structure of Immunoglobulin M
18. ASLO
19. India Ink
20. Louis Pasteur
21. Draw a neat labelled diagram of ova of round worm
22. Draw a neat labelled diagram of Hepatitis B virus

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
I Year B.Sc. Nursing (PC) Degree Examination – ARPIL 2018

**Time: Three Hours**

**Max. Marks: 75 Marks**

**MICROBIOLOGY**  
**(RS-3 & RS-4)**  
**Q.P. CODE: 1735**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Define and classify hypersensitivity reactions. Discuss in detail type I hypersensitivity.
2. Describe the pathogenecity and laboratory diagnosis of coryne bacterium diphtheria.
3. Enumerate Hepatitis viruses. Write in detail on Hepatitis B virus.

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Fumigation
5. Gonococcal infections
6. Sterilization using dry heat
7. Innate immunity
8. Stool examination for parasitic ova and cyst
9. Nosocomial infection
10. Prophylaxis of Poliomyelites
11. Laboratory diagnosis of enteric fever
12. Universal precautions

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Write two contributions of Robert Koch.
14. Oral thrush
15. Draw a neat, labeled diagram of Immunoglobulin M (IgM) molecule.
16. Define sterilization and disinfection.
17. DPT vaccine
18. Draw a neat, labeled diagram of HIV virus.
19. Classify bacteria according to shape.
20. Name two bacteria causing zoonosis.
21. Define transport media. Give one example.
22. Name two methods of pasteurization.

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# Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Nursing (PC) Degree Examination – OCT - 2017

Time: Three Hours

Max. Marks: 75 Marks

## MICROBIOLOGY

(RS-3 & RS-4)

**Q.P. CODE: 1735**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

### LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Describe the pathogenesis, clinical features and laboratory diagnosis of enteric fever
2. Describe the morphology, pathogenesis and laboratory diagnosis of *Entamoeba histolytica*
3. Define immunity classify immunity write in detail about innate immunity

### SHORT ESSAYS (Answer any Seven)

7 x 5 = 35 Marks

4. Viral multiplication
5. Differential media with examples
6. Types IV hypersensitivity
7. Bacterial filters
8. VDRL test
9. Life cycle of *Ascaris lumbricoides*
10. Acid – fast staining
11. Prophylaxis of Rabies
12. Lab diagnosis of pulmonary tuberculosis

### SHORT ANSWERS

10 x 2 = 20 Marks

13. Draw a neat labelled diagram of HIV virus
14. Mention any two RNA viruses
15. Name 2 gram positive and 2 gram negative bacteria
16. Name the antibodies
17. MMR vaccine
18. Name any two wound infection causing bacteria
19. Mention any two bacterial sexually transmitted diseases
20. Draw a neat labelled diagram of *Giardia intestinalis*
21. Mention any two urinary tract infections causing bacteria
22. Name any two viral sexually transmitted diseases

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
I Year B.Sc. Nursing (PC) Degree Examination – April 2017

**Time: Three Hours**

**Max. Marks: 75 Marks**

**MICROBIOLOGY**  
**(RS-3 & RS-4)**  
**Q.P. CODE: 1735**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Classify Mycobacteria, Describe the laboratory diagnosis of pulmonary tuberculosis and add a note on RNTCP
2. Define viruses. Classify viruses. Write in detail about cultivation of viruses.
3. Define sterilization. Mention different physical methods of sterilization. Explain in detail about autoclaving

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Candida albicans
5. Hepatitis A
6. Bacterial flagella
7. Gram's staining – principle and procedure
8. Innate immunity
9. Taenia solium – life cycle, clinical features and laboratory diagnosis
10. Laboratory diagnosis of Typhoid fever
11. Trichomonas vaginalis
12. Type IV Hypersensitivity

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Write any two Enrichment media
14. Test for HIV
15. Mention any two gaseous disinfectants
16. Name any two bacteria causing food borne illness
17. Tyndalization
18. What is passive immunity
19. Name the antibodies
20. Define vaccine
21. Name any two Rabies vaccines
22. Mention any two zoonotic diseases

**Rajiv Gandhi University of Health Sciences, Karnataka**  
I Year B.Sc. Nursing (PC) Degree Examination – SEP 2016

**Time: Three Hours**

**Max. Marks: 75 Marks**

**MICROBIOLOGY**  
**(RS-3 & RS-4)**  
**Q.P. CODE: 1735**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Describe the morphology, life cycle and laboratory diagnosis of *Entamoeba histolytica*.
2. Classify streptococci. Describe the pathogenicity and laboratory diagnosis of streptococci pyogens.
3. Define and classify Immunity. Describe Innate Immunity.

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Autoclave
5. Hepatitis B virus
6. Bacterial spore structure and functions.
7. Gram staining – principle and procedure
8. Differences between Bacteria and viruses
9. *Ascaris lumbricoides* – life cycle, clinical features and lab diagnosis
10. Laboratory diagnosis of pulmonary tuberculosis
11. Write a note on Koch's postulates
12. ELISA and its uses

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Write any two dermatophytes
14. Name any two bacterial filters
15. Name any two neurotropic viruses
16. Draw a neat labeled diagram of viruses
17. What are Antibodies?
18. Name any two tapeworms
19. Define Hypersensitivity
20. Define chemotherapy
21. Name any two transport media
22. Mention any two zoonotic bacterial diseases

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
I Year B.Sc. Nursing (PC) Degree Examination – MAY 2016

**Time: Three Hours**

**Max. Marks: 75 Marks**

**MICROBIOLOGY**  
**(RS-3 & RS-4)**  
**Q.P. CODE: 1735**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Classify immunity. Describe innate immunity.
2. Classify hepatitis viruses. Describe the pathogenecity and laboratory diagnosis of Hepatitis B virus.
3. List the malarial parasites. Describe the life cycle and laboratory diagnosis of *P.falciparum*.

**SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. Cell mediated immunity
5. Blood culture
6. Widal test
7. Bacterial toxin
8. Laboratory diagnosis of post streptococcal sequelae
9. Bacterial growth curve
10. Anaphylaxis
11. Laboratory diagnosis of fungal infections
12. Prophylaxis in Rabies

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

13. Name 2 methods of pasteurization.
14. Name 2 bacteria causing wound infection.
15. Hapten
16. Name the hospital infectious diseases.
17. Name 2 methods for cultivation of viruses.
18. Draw a neat and labeled diagram of IgG.
19. Draw a neat and labeled diagram of *A lumbricoides* ova.
20. Name 2 opportunistic fungal infections.
21. Name 2 protozoal parasites causing diarrhea.
22. Name the different genera of dermatophytes.

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