



Question Paper Code:109

SRI DEVRAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

M.B.B.S Phase-II Degree Examination JANUARY 2018

Time:3 hours

Max Marks:100

MICROBIOLOGY Paper 1

Your answer should be specific to the question asked/Draw neat and labeled diagrams wherever necessary

LONG ESSAY

2 X 10 = 20 Marks

1. Enumerate the agents causing Sexually Transmitted infections . Describe the laboratory diagnosis of syphilis (4+6).
2. What are monoclonal antibodies? Explain the technique of production of monoclonal antibodies and list their applications. (2+5+3)

SHORT ESSAY

10 X 5 = 50 Marks

3. A 40 year old bus driver complains of low grade fever, loss of weight and cough with blood stained sputum. A clinical diagnosis of pulmonary tuberculosis was made. What are the tests done in the microbiology laboratory to confirm the diagnosis?
4. Describe the pathogenesis and laboratory diagnosis of Actinomycosis.(2+3)
5. Classify Atypical Mycobacteria and the lesions caused by them. (2+3)
6. Describe the principle and applications of Autoclave (3+2)
7. Describe the Structure and biological functions of IgA. (2+3)
8. Describe the mechanism of action and methods of detection of Diphtheria toxin. (3+2)
9. Describe the Bacterial spores with reference to structure, types and demonstration methods. (2+2+1)
10. Describe the mechanisms of innate immunity.
11. Describe the specimen collection and laboratory diagnosis of leprosy. (2+3)
12. Describe the Classical pathway of complement activation

SHORT ANSWERS

10 X 3 = 30 Marks

13. Name three agents causing non gonococcal urethritis.
14. Enumerate 3 diseases caused by Chlamydia
15. Enumerate three bacteria causing zoonotic infections
16. Enumerate any three Differences between endotoxin & exotoxin
17. Mention the different types of grafts
18. Mention the disease caused, predisposing factors and antibiotic of choice in Clostridium difficile infection. (1+1+1)
19. Name three Enrichment media with examples
20. Mention three applications of Direct immunofluorescence test.
21. Enumerate the three methods of genetic transfer in bacteria.
22. What is the position and shape of spores in Clostridium tetani, Clostridium perfringens and Clostridium tertium.



Question Paper Code:110

SRI DEVRAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

M.B.B.S Phase-II Degree Examination JANUARY 2018

Time:3 hours

Max Marks:100

MICROBIOLOGY Paper 2

Your answer should be specific to the question asked/Draw neat and labeled diagrams wherever necessary

LONG ESSAY

2 X 10 = 20 Marks

1. Describe the morphology and life cycle of *Ascaris lumbricoides*. Describe the laboratory diagnosis of Ascariasis. (2+4+4)
2. Discuss the epidemiology, pathogenesis and laboratory diagnosis and prophylaxis of Japanese B encephalitis. (3+2+4+1)

SHORT ESSAY

10 X 5 = 50 Marks

3. Describe the pathogenesis and laboratory diagnosis of neurocysticercosis. (3+2)
4. Describe the life cycle and lab diagnosis of *Trichuris trichura*. (3+2)
5. Describe the predisposing factors, clinical manifestations and lab diagnosis of Mucormycosis. (1+2+2)
6. Enumerate the tissue culture vaccines for rabies and describe the vaccination schedule (2+3)
7. Describe the laboratory diagnosis of Malaria.
8. Describe the clinical manifestations and laboratory diagnosis of Cryptococcosis (2+3)
9. Describe the laboratory diagnosis of Human Immunodeficiency Virus (HIV) infection.
10. Mention the types of Viral inclusion bodies with examples and their diagnostic importance. (2+2+1)
11. Describe the pathogenesis and laboratory diagnosis of Giardiasis. (3+2)
12. List the differences between live and killed poliomyelitis vaccines

SHORT ANSWERS

10 X 3 = 30 Marks

13. Define definitive host and intermediate host
14. Draw a neat labelled diagram of the microfilaria of *Wucheraria bancrofti*.
15. What is the pH and composition of Sabourauds Dextrose agar?
16. Enumerate three DNA oncogenic viruses and the malignancies they produce in man.
17. Name three blood flukes
18. Name three systemic mycotic infections
19. Name the tissue culture methods for viruses
20. List three agents causing zoonosis, their reservoir host and diseases in man.
21. Name 4 fungal species causing subcutaneous infections
22. How is the Bio Medical Waste segregated into colour coded containers



Question Paper Code:SDUU 109

SRI DEVRAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

M.B.B.S Phase-II Degree Examination JANUARY 2018

Time:3 hours

Max Marks:100

MICROBIOLOGY Paper 1

Your answer should be specific to the question asked/Draw neat and labeled diagrams wherever necessary

LONG ESSAY

2 X 10 = 20 Marks

1. Classify Streptococci. Mention the virulence factors of Streptococcus pyogenes and the suppurative lesions caused. (3+5+2)
2. Define agglutination reaction. Enumerate different types of agglutination reactions and their diagnostic applications. (2+4+4)

SHORT ESSAY

10 X 5 = 50 Marks

3. Describe the prophylaxis of tetanus
4. Mention causative agent, pathogenesis and laboratory diagnosis of chancroid. (1+2+2)
5. A 40 year old bus driver complains of low grade fever, loss of weight and cough with blood stained sputum. A clinical diagnosis of pulmonary tuberculosis was made. What are the tests done in the microbiology laboratory to confirm the diagnosis?
6. Describe the principle and applications of Hot air oven (3+2)
7. Describe the mechanism of Type I Hypersensitivity reaction
8. Describe the mechanism of action and methods of detection of Diphtheria toxin. (3+2)
9. Draw a labelled diagram of bacterial growth curve. List the morphological and physiological changes that occur in different stages. (2+3)
10. Describe the mechanisms of innate immunity.
11. Describe laboratory diagnosis of Pneumococcal pneumonia
12. Describe the determinants of antigenicity

SHORT ANSWERS

10 X 3 = 30 Marks

13. Enumerate three bacteria causing zoonotic infections
14. Enumerate 3 infections caused by Klebsiella pneumoniae.
15. Name any three Atypical Mycobacteria and the diseases caused.
16. Name any three Nobel laureates from Microbiology and their contributions
17. Name 3 immunosuppressive agents. Give their applications.
18. Mention the causative agent, mode of transmission and description of the lesion produced in Hide porters disease: .(1+1+1)
19. Enumerate the three methods of genetic transfer in bacteria.
20. Mention the different types of grafts
21. Name three Enrichment media with examples
22. Mention the Ridley and Jopling classification of Leprosy.



Question Paper Code:SDUU 110

SRI DEVRAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

M.B.B.S Phase-II Degree Examination JANUARY 2018

Time:3 hours

Max Marks:100

MICROBIOLOGY Paper 2

Your answer should be specific to the question asked/Draw neat and labeled diagrams wherever necessary

LONG ESSAY

2 X 10 = 20 Marks

1. Describe the morphology, life cycle and pathogenesis of *Ancylostoma duodenale*. (2+4+4)
2. Classify the family Herpesviridae. Describe the pathogenesis and clinical manifestations of Varicella zoster virus infection.(3+3+4)

SHORT ESSAY

10 X 5 = 50 Marks

3. Describe the pathogenesis and complications of *Falciparum malaria*. (3+2)
4. Describe the life cycle of *Fasciola hepatica*.
5. Enumerate and describe the Dimorphic fungi and diseases caused by them. (2+1+2)
6. Describe the mode of transmission, clinical manifestations and laboratory diagnosis Chikungunya.(1+2+2)
7. Describe the life cycle of *Toxoplasma gondii*.
8. Describe the clinical manifestations and laboratory diagnosis of Cryptococcosis (2+3)
9. Describe antigenic shift and antigenic drift in Influenza virus.
10. Mention the types of Madura foot with two causative agents and describe its laboratory diagnosis . (1+2+2)
11. Describe the life cycle of *Dracunculus medinensis* and eradication strategies for guinea worm disease. (3+2)
12. Describe the laboratory diagnosis of Human Immunodeficiency Virus (HIV) infection.

SHORT ANSWERS

10 X 3 = 30 Marks

13. Classify Intestinal nematodes.
14. Draw a neat labelled diagram of an egg of *Trichuris trichura*.
15. Draw a neat labelled diagram of 3 species of *Aspergillus*
16. What is the mode of transmission, incubation period and prevention of Hepatitis A virus.
17. Name the mode of transmission, infective form and clinical manifestations of infections of *Trichomonas vaginalis*.
18. Mention the fungus producing germ tube and method of testing.
19. Draw a neat labelled diagram of embryonated egg & indicate sites of cultivation for different viruses
20. List three agents causing zoonosis, their reservoir host and diseases in man.
21. Name the types and agents causing Piedra.
22. Name the colour coded container into which the following type of waste is discarded: 1. Human tissues, 2. blood stained dressings, 3. Foley's catheter, 4. needles, 5. glass ampoules, 6. gloves



Question Paper Code:RS 109

SRI DEVRAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

M.B.B.S Phase-II Degree Examination JANUARY 2018

Time:3 hours

Max Marks:100

MICROBIOLOGY Paper 1

Your answer should be specific to the question asked/Draw neat and labeled diagrams wherever necessary

LONG ESSAY (Answer any 2)

2 X 10 = 20 Marks

1. Enumerate 6 Clostridial species of medical importance. Describe the pathogenesis and laboratory diagnosis of tetanus (3+4+3).
2. Enumerate antigen – antibody reactions. Describe the principle, and diagnostic applications of agglutination reactions with suitable examples. (4+3+3)
3. Describe the methods by which bacteria acquire resistance to drugs and give suitable examples for each. How do you prevent acquisition of drug resistance? (4+3+3)

SHORT ESSAY (Answer any 10)

10 X 5 = 50 Marks

4. Mention any 4 sites of Extra pulmonary tuberculosis and their laboratory diagnosis.(2+3)
5. Describe the lesion, modes of transmission and laboratory diagnosis of Malignant pustule. (1+1+3)
6. Describe the specimen collection and laboratory diagnosis of leprosy. (2+3)
7. Describe the Structure and biological functions of IgM. (2+3)
8. Classify Atypical Mycobacteria and the lesions caused by them. (2+3)
9. Describe the Classical pathway of complement activation
10. Describe the Bacterial spores with reference to structure, types and demonstration methods. (2+2+1)
11. Describe the laboratory diagnosis of cholera
12. Describe the working principle of hot air oven with a diagram. List the sterilization controls used in the hot air oven. (2+2+1)
13. Describe the mechanism and clinical importance of Arthus reaction.(3+2)
14. Describe the methods of sample collection and laboratory diagnosis of Urinary tract infection. (2+3)
15. Describe the laboratory diagnosis of syphilis

SHORT ANSWERS (No choices)

10 X 3 = 30 Marks

16. Mention the contents and schedule of administration Diphtheria Pertussis Tetanus (DPT) vaccine : (1+2)
17. Enumerate 3 cultural characteristic features of Bacillus anthracis.
18. Enumerate any three clinical manifestations caused by Pseudomonas aeruginosa.
19. Mention the Epithelial surfaces of the body involved in innate immunity.
20. What are X & V factors?
21. Mention the different types of grafts
22. List three contributions of Louis Pasteur
23. Name 3 immunosuppressive agents.Give their applications.
24. What is XDR TB?
25. Enumerate 3 diseases caused by Chlamydia



Question Paper Code:RS 110

SRI DEVRAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

M.B.B.S Phase-II Degree Examination JANUARY 2018

Time:3 hours

Max Marks:100

MICROBIOLOGY Paper 2

Your answer should be specific to the question asked/Draw neat and labeled diagrams wherever necessary

LONG ESSAY (Answer any 2)

2 X 10 = 20 Marks

1. Describe the life cycle of Plasmodium vivax in man and mosquito with suitable diagrams. Describe the laboratory diagnosis of vivax malaria. (4+4+2)
2. Classify the family Herpesviridae. Describe the pathogenesis of genital herpes and its laboratory diagnosis.(3+3+4)
3. Enumerate the viruses causing Hepatitis. Name the markers of Hepatitis B virus infection and indicate their interpretation. How is Hepatitis B virus infection prevented? (2+2+3+3)

SHORT ESSAY (Answer any 10)

10 X 5 = 50 Marks

4. Describe the lifecycle and pathogenesis by Diphyllbothrium latum. (3+2)
5. Describe the agent, its transmission and lesion of cutaneous leishmaniasis. (1+1+3)
6. Describe the morphology, modes of transmission of Human Immunodeficiency Virus (HIV). (2+3)
7. Describe the mode of infection and lifecycle of Naegleria fowleri. (2+3)
8. Describe the mode of transmission, clinical manifestations and laboratory diagnosis of Chikungunya.(1+2+2)
9. Describe the predisposing factors, clinical manifestations, and laboratory diagnosis of candidosis (1+2+2)
10. Describe the morphology of Trichomonas vaginalis and laboratory diagnosis of Trichomoniasis. (2+3)
11. Describe the life cycle and lab diagnosis of Enterobius vermicularis.(3+2)
12. Enlist any two causative agents of eumycotic mycetoma and describe its pathogenesis and laboratory diagnosis(1+2+2)
13. Draw a neat labelled diagram of Hydatid cyst, its distribution and diagnosis.
14. Describe the life cycle of Toxoplasma gondii.
15. Mention the types of Viral inclusion bodies with examples and their diagnostic importance. (2+2+1)

SHORT ANSWERS (No choices)

10 X 3 = 30 Marks

16. What is cysticercus cellulosae and name two common sites where it can be found in man.
17. Name three parasites found in blood and the diseases they produce.
18. Draw a neat labelled diagram of embryonated egg & indicate sites of cultivation for different viruses
19. What is visceral larva migrans and name two parasites causing it.
20. Enumerate three infections caused by Adenoviruses.
21. Mention the fungus producing germ tube and method of testing.
22. List three agents causing zoonosis, their reservoir host and diseases in man.
23. Enumerate three DNA oncogenic viruses and the malignancies they produce in man.
24. How is the Bio Medical Waste segregated into colour coded containers
25. Mention the schedule and route of administration of MMR vaccine.