

Question Paper Code: U2051

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)
MBBS Phase II Examination February 2021

Time: 180 Minutes

Marks: 100

Microbiology Paper I

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

Long Essay

10 × 2 = 20 Marks

1. Draw a neat labelled diagram of the bacterial cell. Describe the structure, types, functions and demonstration methods of flagella. (3+2+2+1+2)
2. Mention the source and mode of infection of enteric fever. Describe the pathogenesis and laboratory diagnosis of Enteric fever. (1+1+4+4)

Short Essay

5 × 10 = 50 Marks

3. Draw a labelled diagram of bacterial growth curve. List the morphological and physiological changes that occur in different stages. (2+3)
4. Describe the working principle of hot air oven with a diagram. List the sterilization controls used in the hot air oven. (2+2+1)
5. Describe the Structure and biological functions of IgM.
6. Describe laboratory diagnosis of meningococcal meningitis
7. Mention any 4 sites of Extra pulmonary tuberculosis and their laboratory diagnosis. (2+3)
8. Describe the mechanism of Type IV hypersensitivity reaction with examples. (3+2).
9. A 30 year old man presented with a painless, indurated circumscribed, superficially ulcerated lesion on the genitalia a. What is the probable diagnosis? b. Name the methods of laboratory diagnosis of the disease in various stages. (1+4)
10. Blood culture: Indications and Procedure (2.5+2.5)
11. Endocarditis: Aetiological agents and Laboratory diagnosis (2+3)
12. A patient presented with crush injury and was diagnosed clinically as Gas gangrene. Describe the Laboratory diagnosis. (5)

Short Answer

3 × 10 = 30 Marks

13. List 3 complications of diphtheria.
14. Name three cellwall acting antibiotics.
15. Enumerate 3 bacteria causing Neonatal meningitis
16. Name three agents causing non gonococcal urethritis.
17. Enumerate 3 bacteria causing Genital ulcer.
18. Enumerate three characteristic features of the members of the family Enterobacteriaceae.
19. Define sterilization, disinfection and antisepsis.
20. Whooping cough: causative agents and prophylaxis. (1+2)
21. Enumerate three agents causing Bacillary dysentery.
22. Enumerate the clinical forms of Actinomycosis.



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

MBBS Phase II Examination February 2021

Time: 180 Minutes

Marks: 100

Microbiology Paper II

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

Long Essay

10 × 2 = 20 Marks

1. Enumerate any four protozoa causing gastroenteritis. Describe the pathogenesis and laboratory diagnosis of amoebic dysentery. (2+4+4)
2. Describe the morphology, antigenic variation, pathogenesis and the laboratory diagnosis of influenza virus. (2+2+3+3)

Short Essay

5 × 10 = 50 Marks

3. Describe the pathogenesis and laboratory diagnosis of Giardiasis. (3+2)
4. Name the genera, microscopic morphology and diseases caused dermatophytes (1+2+2).
5. Describe the predisposing factors, clinical manifestations and lab diagnosis of Mucormycosis. (1+2+2)
6. Name the causative agent, sources, lesions produced and treatment Cryptococcosis. (1+1+2+1)
7. Describe the pathogenesis and laboratory diagnosis of Dengue fever. (1+2+2)
8. Describe the laboratory diagnosis of Rabies. (1+2+2)
9. Describe the source, mode of transmission and life cycle of Ascaris lumbricoides. (1+1+3)
10. Enumerate the agents causing Malaria. Describe the laboratory diagnosis of cerebral malaria. (2+3)
11. Describe the predisposing factors, clinical manifestations, and laboratory diagnosis of candidosis (1+2+2)
12. Describe the pathogenesis and complications of mumps (3+2)

Short Answer

3 × 10 = 30 Marks

13. Name three agents producing Mycotoxins and diseases caused by them.
14. Draw a labelled diagram of LD bodies.
15. Name any three viral diseases transmitted by mosquitoes.
16. What is the mode of transmission, incubation period and prevention of Hepatitis A virus.
17. Differentiate between amoebic and bacillary dysentery.
18. Mention three parasites found in blood.
19. Name the mode of transmission, infective form and clinical manifestations of infections of Trichomonas vaginalis.
20. List the differences between OPV and IPV.
21. Draw a labelled diagram of Penicillium marneffi.
22. What is NIH swab and against which parasite is it used for?



15/02/2021

Question Paper Code: RS109

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

MBBS Phase II Examination February 2021

Time: 180 Minutes

Marks: 100

Microbiology Paper I

Your answer should be specific to the question asked

Draw neat and labeled diagrams wherever necessary

Long Essay (Answer any two)

10 × 2 = 20 Marks

1. Draw a neat labelled diagram of the bacterial cell. Describe the structure, types, functions and demonstration methods of flagella. (3+2+2+1+2)
2. Define and classify hypersensitivity reactions. Describe the mechanism, pharmacological mediators and outcome of type I hypersensitivity. Outline the treatment. (1+2+3+2+1+1)
3. Describe the pathogenesis and laboratory diagnosis of pulmonary tuberculosis. Add a note on drug resistant tuberculosis. (4+4+2)

Short Essay (Answer any ten)

5 × 10 = 50 Marks

4. Describe Staphylococcal food poisoning with relation to food items involved, pathogenesis and clinical manifestations. (1+2+2)
5. Describe the prophylaxis of tetanus
6. Describe the laboratory diagnosis of Pneumococcal meningitis
7. Describe the Classical pathway of complement activation
8. A 30 year old man presented with a painless, indurated circumscribed, superficially ulcerated lesion on the genitalia. a. What is the probable diagnosis? b. Name the methods of laboratory diagnosis of the disease in various stages. (1+4)
9. Name the causative agent and describe the pathogenesis and laboratory diagnosis of Weil's disease (1+2+2)
10. Acute Rheumatic fever: Etiological agent, Pathogenesis and Laboratory diagnosis (1+2+2)
11. Explain the mechanism and applications of Agglutination reactions. (2+3)
12. Describe the working principle of Autoclave with a diagram. List the sterilization controls used. (2+2+1)
13. Draw a labelled diagram of bacterial growth curve. List the morphological and physiological changes that occur in different stages. (2+3)
14. A 4 year old child presented with fever, white pseudomembrane in throat and toxic symptoms. Describe the laboratory diagnosis (5)
15. 30 year old female presented with stepladder fever, coated tongue and hepatosplenomegaly. Describe the laboratory diagnosis of above clinical condition (5)

Short Answer (Answer all)

3 × 10 = 30 Marks

16. Enumerate the three methods of genetic transfer in bacteria.
17. Name three antibiotics that inhibit protein synthesis in Bacteria
18. List the differences between active and passive immunity
19. Draw a neat labelled diagram of IgG
20. Name any three Atypical Mycobacteria and the diseases caused.
21. Enumerate 3 bacteria causing diarrhoea.
22. Enumerate 3 bacteria causing Urinary tract infection.
23. Enumerate three clostridia species of medical importance
24. Whooping cough: causative agents and prophylaxis. (1+2)
25. What is the procedure and principle of Mantoux test.



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

MBBS Phase II Examination February 2021

Time: 180 Minutes

Marks: 100

Microbiology Paper II

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

Long Essay (Answer any two)

10 × 2 = 20 Marks

1. Enumerate any four protozoa causing gastroenteritis. Describe the pathogenesis and laboratory diagnosis of extra intestinal amoebiasis. (2+4+4)
2. 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)
3. Describe antigenic variations seen in Orthomyxoviruses, their epidemiological importance and its laboratory diagnosis. (3+3+ 4).

Short Essay (Answer any ten)

5 × 10 = 50 Marks

4. Name the aetiological agent and describe the pathogenesis and laboratory diagnosis of Mycetoma (1+2+2)
5. Name the genera, microscopic morphology and diseases caused dermatophytes (1+2+2).
6. Name the causative agent, sources, lesions produced and treatment Cryptococcosis. (1+1+2+1)
7. Describe the pathogenesis and complications of Falciparum malaria. (3+2)
8. Describe the mode of transmission, pathogenesis and complications of Dengue fever. (1+2+2)
9. Describe the laboratory diagnosis of rabies.
10. Enumerate the viruses causing diarrhea and their laboratory diagnosis. (2+3)
11. Describe the clinical manifestations and laboratory diagnosis of hookworm infection. (3+2)
12. Describe the laboratory diagnosis of Candidiasis.
13. Name the causative agent and describe the pathogenesis of Burkitt's lymphoma. (1+4)
14. Describe the morphology and pathogenesis of Giardia lamblia. (2+3)
15. Describe the pathogenesis, complications and prevention of Measles. (2+1+2)

Short Answer (Answer all)

3 × 10 = 30 Marks

16. Enumerate three opportunistic fungal infections in AIDS
17. Draw a neat labelled diagram of 3 species of Aspergillus
18. List three opportunistic parasites and the diseases caused by them
19. Enumerate any three general characters of Nematodes.
20. Name three zoonotic diseases caused by parasites
21. Draw a labelled diagram of LD bodies.
22. Draw a neat labelled diagram of the microfilaria of Wucheraria bancrofti.
23. Mention three parasites found in blood.
24. Enumerate the mycotoxins and diseases caused by them.
25. Name the mode of transmission, infective form and clinical manifestations of infections of Trichomonas vaginalis.

