Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination - 29-Jul-2021

[Time: 3 Hours] [Max. Marks: 100]

MICROBIOLOGY
PAPER – I (RS-2/RS-3)
Q.P. CODE: 7355

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

Answer All The Questions 10 X 10 = 100 Marks

1. Discuss different Hybridisation Techniques and their applications. Add a note on probes and its uses in clinical microbiology.
2. Describe the mechanisms of action of Extended spectrum Beta-lactamases in Gram negative bacteria and their role in nosocomial infections.
3. Evaluation of disinfectants.
4. Immunological tolerance.
5. Bacteria with defective cell wall.
6. Transposons.
7. Plasma cell.
8. Anaphylaxis.
9. Pathogenicity islands.
10. Alternate pathway of complement activation.

M.D. Degree Examination - 31-Jul-2021

[Time: 3 Hours] [Max. Marks: 100]

MICROBIOLOGY
PAPER – II (RS-2/RS-3)
Q.P. CODE: 7356

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

Answer All The Questions 10 X 10 = 100 Marks

1. Define MDR TB and XDR TB. Write about the newer methods of drug susceptibility testing for M. Tuberculosis.
2. Describe the pathogenesis and laboratory diagnosis of H.Pylori.
3. Enumerate pyogenic cocci. Write about the antigenic structure, pathogenesis and antibiotic resistance of gonococci.
4. Enumerate the pathogenic markers of Staphylococcus aureus. Discuss in detail about MRSA and its methods of detection.
5. HACEK organisms and their importance in hospital.
6. Describe the epidemiology, pathogenesis and laboratory diagnosis of diphtheria.
7. What are hospital acquired infections? Write about the aetiology and laboratory diagnosis of ventilator associated pneumonia. Add a note on VAP bundle.
8. TRIC agents.
9. Stenotrophomonas maltophilia as an emerging nosocomial pathogen.
10. Give an account of nosocomial pathogens commonly isolated from burn patients and outline their epidemiological typing methods.

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – 02-Aug-2021

[Time: 3 Hours] [Max. Marks: 100]

MICROBIOLOGY
PAPER – III (RS-2/RS-3)
Q.P. CODE: 7357

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

Answer All The Questions 10 X 10 = 100 Marks

1. Classify Mycetoma. Describe the pathogenesis and management of Mycetoma.
2. Describe the laboratory diagnosis of pneumocystitis jerovecil pneumonia.
3. Describe antifungal susceptibility testing methods.
4. Classify oncogenic viruses. Describe mechanism of viral oncogenesis.
5. Discuss the role of immunodiagnosis in fungal infections.
6. Describe laboratory diagnosis of Cytomegalo virus infection.
7. Describe immunopathogenesis of HIV and markers of disease progression in AIDS.
8. Name the subcutaneous mycosis. Describe laboratory diagnosis of chromoblastomycosis.
9. Discuss laboratory diagnosis of Human papilloma virus infection and its vaccines.
10. Discuss laboratory diagnosis of Dengue fever. Add a note on its complications.

M.D. Degree Examination – 04-Aug-2021

Time: Three Hours Max. Marks: 100 Marks

MICROBIOLOGY - PAPER – IV
(RS-2/RS-3)
Systematic Bacteriology Parasitology
Q.P. CODE: 7358

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

Answer All The Questions 10 x 10 = 100 Marks

1. Classify nematodes. Discuss the pathogenesis and laboratory diagnosis of lymphatic filariasis. Add a note on control measures.
2. Classify Cestodes. Discuss the life cycle and laboratory diagnosis of Diphyllobothrium latum.
3. Schistosoma haematobium.
4. Recent developments in diagnosis of Toxoplasmosis.
5. Serological tests for amoebiasis.
6. Life cycle of Ancylostoma duodenale.
7. Hyper infection syndrome.
8. Cultivation of protozoal parasites.
9. Post Kala- azar dermal leishmaniasis.
10. Life cycle of Enterobius vermicularis.

Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination - 15-Nov-2021

[Time: 3 Hours] [Max. Marks: 100]

MICROBIOLOGY
PAPER – II (RS-2/RS-3)
Q.P. CODE: 7356

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

Answer All The Questions 10 X 10 = 100 Marks

1. List the various zoonotic bacterial infections. Discuss in detail about pathogenesis, clinical features and laboratory diagnosis of Acute Brucellosis.
2. Enumerate the role of non-fermentative Gram negative bacilli in various clinical infections. Describe the methods of their identification. Add a note on their antibiogram pattern.
3. Classify Rickettsia. Describe in detail pathogenesis and laboratory diagnosis of Typhus fevers.
4. Enumerate the causes of Enteric fever. Write in detail the cultural characteristics, Pathogenesis, laboratory diagnosis and Prophylaxis of typhoid fever. Add note on carrier detection methods.
5. List the aetiological agents of Gas gangrene. Describe the pathogenesis, laboratory diagnosis and prophylaxis of Gas gangrene.
6. Classify streptococci. Describe the virulence factors, pathogenesis and laboratory diagnosis of Streptococcus pyogenes infections.
7. Classify atypical Mycobacteria. Discuss their role in clinical infections and their laboratory diagnosis.
8. Discuss the aetiology and laboratory diagnosis of food poisoning. Add a note on modes of tracing the source of infection.
9. Write an essay on recent trends in Mycobacterial research.
10. Enumerate bacteria causing atypical pneumonia. Describe the epidemiology, pathogenesis and laboratory diagnosis of Legionella pneumophilia.

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M.D. Degree Examination – 17-Nov-2021

[Time: 3 Hours] [Max. Marks: 100]

MICROBIOLOGY
PAPER – III (RS-2/RS-3)
Q.P. CODE: 7357

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

Answer All The Questions 10 X 10 = 100 Marks

1. Discuss the pathogenesis and laboratory diagnosis of dengue. Add a note on its complications.
2. Describe the pathogenesis and laboratory diagnosis of dermatophytoses.
3. Candida species other than Candida albicans.
4. Fungal spores.
5. MMR vaccine.
6. Avian influenza.
7. Ebola virus.
8. Molluscum contagiosum.
9. Immunoprophylaxis of Poliomyelitis.
10. Histoplasmosis.

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination –19-Nov-2021

Time: Three Hours | Max. Marks: 100 Marks

MICROBIOLOGY - PAPER – IV
(RS-2/RS-3)
Systematic Bacteriology Parasitology
Q.P. CODE: 7358

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

Answer All The Questions | 10 x 10 = 100 Marks

1. Discuss the laboratory diagnosis and treatment of extra intestinal amoebiasis.
2. Enumerate haemoparasites. Discuss in detail about the conventional and newer laboratory methods for diagnosis of Malaria. Add a note on advances in the field of malarial vaccines.
3. Describe unique features of Strongyloides stercoralis infection in man. Discuss different methods of diagnosis of strongyloidiasis.
4. Classify filarial parasites. Describe life cycle, Laboratory diagnosis and prophylaxis of Wuchereria bancrofti.
5. Enumerate opportunistic parasitic infections in AIDS patient. Write in detail about the immune pathogenesis and laboratory diagnosis of Toxoplasma gondi in HIV patients.
6. Immunodiagnostic tests in parasitology.
7. Classify Trematodes. Write in detail the epidemiology, morphology, life cycle, pathogenesis and laboratory diagnosis of Schistosoma haematobium.
8. Enlist five parasitic zoonotic diseases. Describe the morphology, life cycle and pathogenesis and laboratory diagnosis of Hydatid disease.
9. Classify intestinal Flagellates. Describe the morphology, clinical features and laboratory diagnosis of each one of them.
10. Immune evasion mechanisms in parasites.

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