SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION AND RESEARCH

PG Supplementary Examinations, May 2024

Time: 180 Minutes **Max Marks: 100 Marks**

Microbiology Paper I
QP CODE: P3051
Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary

1. Describe the principle applications of Polarization Microscope
2. Describe Central Sterile services department in detail
3. Describe the principle, mechanism and uses of Matrix Assisted Laser Desorption Ionization-Time of Flight
4. Describe genetic mechanism of antibiotic resistance and the methods of detection
5. Enumerate fluoroquinolones .Describe the uses and mechanism of drug resistance and its clinical implications
6. Classify Immunity .Discuss acquired immunity in detail with suitable example
7. Describe Alternate pathway of complement fixation
8. Describe antigen presenting cells. Discuss role of macrophages in host defense
9. Describe the mechanism, diagnosis, and management of type 1 hypersensitivity
10. Describe the types of graft rejection and the factors influencing allograft rejection

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Time: 180 Minutes **Max Marks: 100 Marks**

Microbiology Paper II
QP CODE: P3052
Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary

1. Describe the toxins and enzymes of Staphylococcus aureus and their pathogenic effects.
2. Describe the epidemiology, pathogenesis and laboratory diagnosis of Plague .Add a note on plague vaccines
3. Describe the pathogenesis, clinical manifestations and laboratory diagnosis of Non typhoidal Salmonellae
4. Describe the virulence factors , drug resistance and laboratory diagnosis of Nonfermentors
5. Describe the pathogenesis, clinical manifestations and laboratory diagnosis of Mycobacterium avium intracellulare complex
6. Describe the pathogenesis, laboratory diagnosis of Latent Tuberculosis.Add a note on IGRA .
7. Describe the pathogenesis, clinical manifestations and laboratory diagnosis of Lyme's disease
8. Describe the pathogenesis and laboratory diagnosis of Syphilis
9. Describe the classification, replication cycle and infections caused by Chlamydia.
10. Classify family Rickettsiaceae. Write in detail about Scrub Typhus.

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Time: 180 Minutes **Max Marks: 100 Marks**

Microbiology Paper III
QP CODE: P3053
Your answer should be specific to the question asked
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1. Describe the Cell lines used in virology
2. Varicella-zoster virus : Pathogenesis and laboratory diagnosis
3. Discuss on HIV pathogenesis and challenges in the development of HIV vaccines
4. Oncogenic viruses: agents, pathogenesis and laboratory diagnosis
5. Virulence factors and pathogeneis of Entamoeba histolytica
6. Hydatid disease : Pathogenesis and laboratory diagnosis
7. Loa Loa: life cycle, pathogenesis and laboratory diagnosis
8. Protozoa causing opportunistic infections
9. Chromoblastomycosis: pathogenesis and laboratory diagnosis
10. Non albicans candida as emerging pathogen

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Time: 180 Minutes **Max Marks: 100 Marks**

Microbiology Paper IV
QP CODE: P3054
Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary

1. Central line associated blood stream infections and its prevention
2. Meningitis: Agents, pathogenesis and laboratory diagnosis
3. Prions : pathogenesis , laboratory diagnosis and sterilization techniques
4. Describe normal residential bacterial flora at various sites in the body and discuss their role in providing inherent defense against infectious agents
5. Emerging parasitic infections and the laboratory techniques to diagnose them
6. DNA sequencing : Principle and applications
7. Nephelometry: principle and applications
8. DNA vaccines
9. Discuss about the accrediation of clinical microbiology laboratory
10. MRSA : Mechanism of resistance, types , detection methods, treatment and clinical significance