

PG Degree Regular/Supplementary Examinations in Microbiology (M.D)**Paper II – Clinical/Systemic Microbiology I****Time : Three Hours****Maximum : 100 Marks****Essay:****(20)**

1. A 40-yr old migrant worker from middle east came to India for vacation, a few days later he visited the OPD with low back ache, joint & muscular pain. He also complains of on & off fever for the past 2 months, exhaustion & night sweats which often left him drenched. He had history of tending goats & camel as part of his job. O/E, there was tenderness on his sacral prominence.
 - a. What are the differential diagnosis?
 - b. Discuss the pathogenesis and laboratory diagnosis.
 - c. Suggest the appropriate treatment and preventive measures.

Short Essays**(8 x10 = 80)**

2. Discuss the recent methods in the laboratory diagnosis of extrapulmonary tuberculosis.
3. A 45year old farmer with two pet dogs presents with complaints of right upper quadrant abdominal pain for the last several weeks. He is afebrile with normal vitals having mild right upper tenderness. USG abdomen quadrant shows hepatomegaly with a large multiseptated 'honeycomb' cyst in the right lobe of the liver.

Describe the epidemiology, clinical features, laboratory diagnosis and treatment of the disease.
4. Discuss the laboratory diagnosis, pre- exposure and post exposure prophylaxis of HIV infection.
5. Covid Associated Mucormycosis (CAM)
6. An 8-year-old girl is admitted with complaints of high-grade fever (>106 F) severe head ache, convulsions and delirium. On routine fundoscopy the child had retinal haemorrhage with pupillary dilation. The blood and CSF were sent for culture. Gram staining of the CSF did not show any bacteria. A peripheral blood smear(thin) prepared and stained by Giemsa showed few gametocytes in the RBC.
 - a. What is the most likely diagnosis?

- b. Discuss the laboratory diagnosis and treatment of the condition
 - c. Discuss the drug resistance in this clinical condition
7. Candida auris
 8. Discuss the pathogenesis and laboratory diagnosis and prevention of congenital CMV infections
 9. List the emerging viruses in India. Discuss in detail about the Nipah virus outbreaks in Kerala

Model QP