

MICROBIOLOGY

PAPER-III

Time: 3 Hours
Max. Marks: 100

MICRO/D/19/18/III

Important Instructions:

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts, wherever appropriate.

Write short notes on:

1. Enumerate arboviruses associated with encephalitis. Describe epidemiology, clinical features and preventive measures used in Japanese B encephalitis. 3+(2+3+2)
2. Enumerate the helminths affecting the liver and discuss the life cycle, pathogenesis and laboratory diagnosis of echinococcosis. (3+2+2+3)
3. Classify slow virus diseases. Discuss in detail about human Prion diseases. 3+7
4. Discuss clinical features, mode of transmission, laboratory diagnosis, prevention & control as well as treatment of dengue virus infection. 2+1+2+2+3
5. Describe life cycle of *Trypanosoma gambiense*. Write in brief about clinical features, laboratory diagnosis and treatment of African trypanosomiasis. 4+(2+3+1)
6. Describe recent changes in the polio vaccination program in India. What are Vaccine-Derived Polioviruses (VDPVs) and discuss their clinical and epidemiological importance? 3+7
7. Describe the present geographical distribution, habitat, morphology, life cycle and pathogenesis of *Dracunculus medinensis*. 2+1+2+3+2
8. a) Briefly discuss paragonimiasis including its newer species found prevalent in India. 4+(2+4)
b) Clinical manifestations and laboratory diagnosis of filariasis.
9. a) Larva migrans 5+5
b) Cysticercosis
10. Describe antigenic variations in influenza virus, its importance in the epidemiology and preventive strategies of the disease. 4+3+3
