# M.D. DEGREE EXAMINATION BRANCH IV – MICROBIOLOGY

#### PAPER III – VIROLOGY AND PARASITOLOGY

Q.P.Code: 202016

Time: Three Hours Maximum: 100 Marks

I. Essay Questions:  $(2 \times 10 = 20)$ 

1. Write the definition and classification of Arboviruses and explain in detail about the pathogenesis and lab diagnosis of tick borne Arboviral disease.

2. Enumerate opportunistic parasitic infections in AIDS patient. Write detail about the immunopathogenesis and laboratory diagnosis of Toxoplasma gondii in HIV patients.

## II. Short Questions: $(8 \times 5 = 40)$

- 1. Zika virus.
- 2. Zymodemes.
- 3. Balamuthia mandrillaris.
- 4. Viral inclusion bodies.
- 5. Antigenic properties of Rota virus.
- 6. Serological markers of Hepatitis B viral infection.
- 7. Explain the egg counting techniques in stool specimen.
- 8. Vaccine for Human Papilloma virus.

## III. Reasoning Out: $(4 \times 5 = 20)$

- 1. Even after the control of Arboviruses in one area during summer, it will disseminate among humans during winter in the same area. Discuss the reasons?
- 2. What are the difficulties encountered in the preparation of Influenza vaccine? Add a note on the newer approaches in the preparation of Influenza vaccine.
- 3. Why Microfilaria is not demonstrable in peripheral blood examination in case of occult filariasis and what are other methods of diagnosing occult filariasis?
- 4. Explain how watery diarrhoea is produced by cryptosporidium infection in HIV patient?

#### **IV. Very Short Answers:**

 $(10 \times 2 = 20)$ 

- 1. Pseudo virion.
- 2. Leishmanoma.
- 3. Sub acute sclerosing panencephalitis.
- 4. Name four methods of preservation of stool specimen for ova and cyst.
- 5. Structure of Ebola virus.
- 6. Paratenic host.
- 7. Herpangina.
- 8. What is continuous cell line? Give two examples with its sources.
- 9. Haemadsorption.
- 10. Schistosoma intercalatum.

\*\*\*\*\*