



W1-2-60-1-6

**JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY
UNIVERSITY EXAMINATIONS 2023/2024**

**END OF SEMESTER EXAMINATIONS FOR THE DEGREE OF MASTER OF SCIENCE
IN MEDICAL VIROLOGY**

TMM 3119: MEDICAL VIROLOGY II

DATE: DECEMBER 2023

TIME: 3 HOURS

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS

QUESTION 1

- a.) Discuss, with virus examples, the general features of enteroviruses (10 marks).
- b.) Discuss, with illustration the course of polio virus infection (15 marks)

QUESTION 2

Discuss the morphology, genome, pathogenesis, Immune response, and prevention of Rotavirus (25 marks)

QUESTION 3

- a) What are herpesviruses and how are they classified? (6 marks)
- b) With relevant examples, describe the transmission, diagnosis, treatment, and prevention of herpes simplex viruses (12 marks).
- c) Describe and differentiate neonatal and genital herpes giving consequences in failure of their management (7 marks)

QUESTION 4

- a) Differentiate Monkeypox and small pox with respect to
 - i) Pathogenesis (6marks)
 - ii) Control (2marks)
 - iii) Attack rate (2marks)
- b) Discuss molluscum contagiosum (15marks)

QUESTION 5

- a) Describe the Structure and genome organization of lyssa virus (15 marks)
- b) Discuss various diagnostic tests for Lyssa Virus infection (10 marks)

QUESTION 6

The Ministry of Health has called you to a pediatric hospital to investigate a sudden upsurge of a viral infection that is characterized by fever, sore throat, and coughing. The disease has a characteristic presentation of croup and pneumonia.

- a) What would be your suspected virus of interest? (3 marks)
- b) Describe the transmission and pathogenesis of the said virus (5 marks).
- c) What would be your definitive mode of diagnosis for this infection? (10 marks)
- d) What would be your suggested prevention and control measures to avoid further spread? (7 marks)

