



**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**  
**UNIVERSITY EXAMINATIONS 2022/2023**  
**EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN**  
**MEDICAL VIROLOGY**

**TMM 3119: MEDICAL VIROLOGY II**

**DATE: FEBRUARY 2023**

**TIME: 3 HOURS**

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**INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS**

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**QUESTION 1**

Discuss Lyssa Viruses with respect to:

- a) Classification **(5 marks)**
- b) Transmission and clinical presentation **(10 marks)**
- c) Immune evasion mechanisms and diagnosis **(10 marks)**

**QUESTION 2**

- a.) Discuss, with virus examples, the most common causes of acute viral gastroenteritis **(10 marks)**.
- b.) Describe the pathophysiology of viral gastroenteritis **(5 marks)**.
- c.) Describe the typical historical and physical exam features of acute viral gastroenteritis **(10 marks)**.

**QUESTION 3**

Discuss polio virus in terms of clinical presentation, pathogenesis, Immune response, laboratory diagnosis and prevention **(25 marks)**

**QUESTION 4**

- a) Distinguish between Chronic aggressive (Active hepatitis) and Hepatocellular carcinoma **(10 marks)**
- b) Describe control measures for Hepatitis B virus **(15 marks)**

**QUESTION 5**

- a) List the commonly described coronaviruses that infect human **(7 marks)**
- b) Describe MERS-CoV under the following:
  - i. Classification **(3 marks)**
  - ii. Transmission **(3 marks)**
  - iii. Epidemiology **(5 marks)**
  - iv. Diagnosis **(5 marks)**
  - v. Prevention and control **(2 marks)**.

**QUESTION 6**

- a) Describe the transmission, clinical manifestation, and diagnosis of human cytomegalovirus (hCMV) infections **(15 marks)**
- b) What are the clinical consequences/outcomes of hCMV infections and how can they be averted? **(10 marks)**