

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN  
BOTANY (MICROBIOLOGY AND BIOTECHNOLOGY)**

**MICB 833: PATHOGENIC MICROORGANISMS**

**STREAMS:**

**TIME: 3 HOURS**

**DAY/DATE : THURSDAY 15/07/2021**

**2.30 P.M – 5.30 P.M**

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**INSTRUCTION**

**Answer any three questions**

1. Discuss the evolution of pathogens. [20 marks]
  2. Discuss the microbial mechanisms of pathogenicity. [20 marks]
  3. Discuss various bacterial toxins used during infection. [20 marks]
  4. Discuss the host immune response. [20 marks]
  5. (a) Outline differences between virus and Viroids. [10 marks]  
(b) Explain why diagnosis and treatment of Viroid diseases is challenging. [10 marks]
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