



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY  
SCHOOL OF HEALTH SCIENCES  
UNIVERSITY EXAMINATION FOR DEGREE OF MASTER PUBLIC HEALTH  
1<sup>ST</sup> YEAR 2<sup>ND</sup> SEMESTER 2023/2024 ACADEMIC YEAR  
KISUMU CAMPUS**

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<b>COURSE CODE:</b>	<b>HES 5121</b>
<b>COURSE TITLE:</b>	<b>EPIDEMIOLOGICAL METHODS</b>
<b>EXAM VENUE:</b>	<b>STREAM:</b>
<b>DATE:</b>	<b>EXAM SESSION:</b>
<b>TIME:</b>	<b>3.00 HOURS</b>

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**Instructions:**

1. Answer Question One (Compulsary) and any other 3 questions
2. Candidates are advised not to write on the question paper.
3. Candidates must hand in their answer booklets to the invigilator while in the examination room.

## QUESTIONS

1. Discuss the epidemiological principles of causation supporting the scientific belief that Human Immunodeficiency Virus (HIV) causes HIV/AIDS. (15 marks)
2.
  - i) Define secondary data (3 marks)
  - ii) Explain the advantages and disadvantages of using secondary data in epidemiological research (12 marks)
3.
  - i) Define bias as used in epidemiological studies (3 marks)
  - ii) Discuss information bias in the context of epidemiological studies (12 marks)
4.
  - i) Distinguish between intention-to-treat (ITT) and per-protocol (PP) analyses for randomized clinical trials. (3 marks)
  - ii) Explain the disadvantages associated with the use of per-protocol analysis. (12 marks)
5. Compare and contrast scoping and systematic reviews as applied in epidemiological studies. (15 marks)
6.
  - i) List the ethical principals outlined in the Belmont Report of 1978. (3 marks)
  - ii) Explain the mandates of institutional ethics review committees regarding study protocols dealing with human participants. (12 marks)

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