



**MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY
(MMUST)**

SCHOOL OF PUBLIC HEALTH BIOMEDICAL SCIENCES AND TECHNOLOGY

DEPARTMENT: PUBLIC HEALTH

UNIVERSITY EXAMINATIONS

2022/2023 ACADEMIC YEAR

DOCTOR OF PHILOSOPHY IN PUBLIC HEALTH

COURSE CODE: PHE 923

COURSE NAME: ADVANCED EPIDEMIOLOGIC STUDIES

DATE: 26TH APRIL 2023

TIME: 8.00AM-11.00AM

INSTRUCTIONS TO CANDIDATES:

General Instructions

1. Write your University Registration Number on every booklet that you use.
 2. Do not write your name on any papers you use.
 3. Answer all FIVE questions
 4. The time allowed for this Paper is **Three (3)** hours.
 5. Observe carefully further instructions on the cover of Answer Booklets.
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1. Give a comparative overview of the different study designs used in epidemiology and public health. (20 marks).

2. Discuss case-controlled studies;
 - a) **both** in general, including the advantages, cases/matching cases& controls, analysis, confounders; (10 marks)
 - b) and **in comparison** to other types of studies. (10 marks)

3. What is the CONSORT Statement? Why was it introduced? What led to the CONSORT Statement coming into being? (20 marks)

4. In cohort studies, we have both prospective and retrospective designs.
 - a) Give a detailed example of each type. (10 marks)
 - b) Discuss the attributes of cohort studies, including Relative Risk (RR), advantages & disadvantages, loss to follow-up. (10 marks)

5. Sources of error in epidemiological research is an area of great concern. Discuss the factors that contribute to both random and systematic error. (20 marks)