



AMREF INTERNATIONAL UNIVERSITY

SCHOOL OF PUBLIC HEALTH

DEPARTMENT OF HEALTH SYSTEMS MANAGEMENT AND DEVELOPMENT

BACHELOR OF SCIENCE IN HEALTH SYSTEMS MANAGEMENT AND DEVELOPMENT

END OF FIRST SEMESTER EXAMINATION APRIL 2025

HMD 415 HEALTH SYSTEMS RESEARCH

TIME: Two Hours

Date : 15th April 2025

TIME : Two (2) Hours Start: 4:30 pm End: 6h30

INSTRUCTIONS TO CANDIDATES

1. This exam is marked out of 70 marks.
2. This examination comprises TWO sections:
Section A: Compulsory Questions (30 marks)
Section B: Long Answer Questions (40 marks)
3. Answer ALL questions in Section A.
4. For Section B, answer any two (2) questions of your choice.
5. Use the university examination booklets provided.
6. Write your student registration number on all your answer sheets.

SECTION A: COMPULSORY (30 Marks)

Short Answer Questions

1. (a) Define Health Systems Research (HSR) (1 mark)
(b) Differentiate Health Systems Research (HSR) from clinical research. (1 mark)
2. Describe the relevance of four key areas of concern in Health Systems Research (HSR) to the functioning of health systems. (4 marks)
3. Describe 3 ways in which *systems thinking* in Health Systems Research can be used to address complex health system challenges in Kenya (3 marks)
4. Describe four potential applications of Artificial Intelligence (AI) in improving healthcare systems in Kenya. (4 marks)
5. Highlight three challenges faced in conducting health systems research in low-resource settings in Kenya. (3 marks)
6. A recent health systems research report suggests that there is a mismatch between health service delivery needs and the resources allocated by the government. List four key data sources that could have been used to assess the mismatch between health service delivery needs and government resource allocation (4 marks).
7. Describe 3 primary challenges of integrating mixed-methods approaches (quantitative and qualitative) into health systems research (3 marks).
8. Describe three benefits of stakeholder involvement in a research study aimed at improving the uptake of the newly launched Social Health Insurance Fund (SHIF) in Kenya. (3 marks)
9. Describe four potential impacts of climate change on health systems in Kenya. (4 marks)

SECTION B: Answer any two questions in this section (40 marks)

Long Answer Questions

SECTION B: Long Answer Questions (40 Marks)

Answer any two (2) questions in this section.

10 Imagine you are conducting a health systems research project focused on evaluating the enrollment in the Social Health Insurance Fund (SHIF) and its role in reducing disparities in access to healthcare in rural areas in Kenya. Answer the following:

- (a). Describe the research design you would use for this study (4 Marks)
- (b). Outline the data collection methods you would use to gather relevant data. (4 Marks)
- (c). Describe the analysis techniques you would use to analyze the data collected. (4 marks)
- (d) Highlight four challenges in conducting a study like this in rural settings in Kenya. (4 marks)
- (e) For each of the four challenges in conducting a study like this in rural settings in Kenya, propose one strategy to mitigate each challenge. (4 marks)

11. You are leading a research project that aims to assess the implementation challenges of the National Health Sector Strategic Plan (NHSSP) at the county level in Kenya. Answer the following:

- (a). Describe the research design you would use for this study (4 marks)
- (b). Describe the tools you would use to collect data for this study (4 marks).
- (c). Discuss the methods you would use to analyze the data collected.
- (d). Discuss four strategies would you use to engage county health officials and other local stakeholders in the research process to ensure the findings are used to improve the implementation of the NHSSP (8 marks)

12 (a) Explain the difference between operational, implementation, and health system research domains.(5 Marks)

12 (b) Using an example from the Kenyan health system, describe 2 ways how each of these domains could be utilized to address a current health system challenge. (10 marks)

12 (c) Critically discuss five ways health systems research can influence the development of county-level health sector strategic plans in Kenya. (10 marks)

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