



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 MAY-AUGUST 2026

HMD 216: HEALTH NEEDS ASSESSMENT

DATE: 5TH AUGUST 2026

TIME : Two (2) Hours Start----5:30PM-----End...7:30PM.....

INSTRUCTIONS TO CANDIDATES

- 1) This exam is out of 70 marks
- 2) Section-A is compulsory with a Total of 30 Marks
- 3) Answer any TWO (2) questions in Section B

Read carefully the additional instructions preceding each section.

Section A: Attempt ALL QUESTIONS in this section (30mks)

1. Outline the four (4) criteria for selection of Health Needs Assessment (HNA) populations (4mks)
2. Identify four (4) ways of developing a team strategy when assembling members to conduct a Health Needs Assessment (HNA) exercise (4mks)
3. Outline four (4) uses of Quality Adjusted Life Years (QALYs) data in international Health Needs Assessment (4mks)
4. Highlight four (4) benefits of undertaking a Health Needs Assessment (HNA) to a community in preparation for implementation of a health-related project (4mks)
5. List four (4) types of information that may be collected during the first stages of an emergency Health Needs Assessment (4mks)
6. State five (5) limitations of using healthcare cost data during Health Needs Assessment in the community (5mks)
7. The gap between the rich and the poor in accessing healthcare services in Kenya continues to widen. Identify five (5) reasons that may account for this health disparity (5mks)

SECTION B: Answer ANY TWO questions in this section (40mks)

8. a) Given two interventions:

Intervention A:

Purchase a new wheel chair for the elderly which increases the quality of life by a utility of 0.35 with a 15 years benefit and extra costs of £35,000 per year and;

Intervention B:

Construct a special postnatal care for mothers which increases the quality of life by a utility of 0.65 with 30 years benefit and a total cost of £200,000.

- i) Calculate the number of QALYs for each alternative (4mks)
 - ii) Calculate the cost-effectiveness ratio for each intervention. (4mks)
 - iii) Which alternative would you opt for? Give a reason for your answer (2mks)
- b) Using examples, explain five (5) reasons for critical appraisal of health-related interventions (10mks)

9. You have been contracted to develop a Health Needs Assessment plan to assist the County Government of Nairobi towards emergency preparedness in case of Ebola Outbreak in the County.
- Using relevant examples, evaluate three (3) approaches you would consider in conducting a Health Needs Assessment (HNA) to identify risk populations in the county prior to the implementation of the emergency plan (12mks)
 - Explain four (4) principles of Community Health Needs Assessment (CHNA) you will apply to ensure the exercise is successful citing appropriate examples (8mks)
10. The County Government of Marsabit in collaboration with the Nuru ya Afya project has appointed you as the new Project Team Leader to provide specialized dietary health services to people living with disability in this community.
- Using appropriate examples, describe the six-step process you would follow to conduct program evaluation for this health intervention (12mks)
 - Evaluate four (4) ways of involving the public during the process of conducting a Health Needs Assessment (HNA) among the members of this community prior to implementation of this intervention (8mks)