



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 (January - April 2026)
HMD 322: HOSPITAL INFRASTRUCTURE AND FACILITY MANAGEMENT

TIME: Two Hours

Date : April 2026

TIME : Two (2) Hours **Start:** 11:00 a.m **End:** 2:00p.m

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-40 marks

Read carefully the additional instructions preceding each section.

SECTION A: COMPULSORY -Answer ALL Questions (30 Marks)

1. Define the following terms:

- a) Hospital Manager (1 mark)
- b) Planned Preventive Management (2 marks)
- c) Decommissioning (2 marks)

2. Indicate five (5) key responsibilities of a hospital manager (5mks)

3. List five (5) advantages of proper equipment usage in Healthcare Technology Management (5mks)

4. Identify five (5) benefits of a successful procurement and commissioning process (5mks)

5. Describe five (5) ways to minimize equipment downtime in Healthcare Technology Management (5mks)

6. Outline any five (5) employee retention strategies in facility management (5mks)

SECTION B: ANSWER ANY TWO (2) QUESTIONS (40 Marks)

7. Tumaini hospital intends to expand the scope of its services to include oncology and renal services. The hospital has been struggling with frequent equipment downtime, and high maintenance costs. The Healthcare Technology Management (HTM) department is asked to prepare a comprehensive plan and budget for infrastructure development aligned with the HTM cycle. As the hospital administrator:

a) Explain five ways in which the planning stage of the HTM cycle should be applied to assess infrastructure and technology needs (10 marks)

b) Describe five ways in which budgeting decisions can be aligned with the HTM cycle to ensure cost-effective and sustainable hospital infrastructure (10 marks)

8. Describe five (5) roles of infrastructure and equipment management in improving healthcare service delivery (20 marks)

9. A 214 bed capacity level 5 hospital in Nairobi has recently expanded its pediatric critical care unit and diagnostic research departments. The hospital relies heavily on advanced medical

technologies. The Healthcare Technology Management (HTM) unit is responsible for procurement, installation, maintenance, calibration, and disposal of medical equipment. However, the department is facing several challenges.

a). Explain five (5) key challenges that could be facing the HTM department in this case (10 Marks)

b) Discuss five (5) potential risks these challenges could pose to patient safety and hospital operations (5 Marks)

c) Propose five (5) practical strategies the hospital can implement to improve HTM performance (5 Marks)

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