AMREF INTERNATIONAL UNIVERSITY

SCHOOL OF PUBLIC HEALTH

DEPARTMENT OF HEALTH SYSTEMS MANAGEMENT AND DEVELOPMENT

MASTER OF SCIENCE IN HEALTH SYSTEMS MANAGEMENT

END OF SEMESTER EXAMINATION - AUGUST 2026

HSM 719: HEALTHCARE FINANCIAL MANAGEMENT

DATE: 10th August 2026

TIME: Three Hours **Start:** 5:30 pm **Finish**: 8:30 pm

INSTRUCTIONS

1. This exam is marked out of 100 marks
2. This Examination comprises TWO Sections
3. Section A: Compulsory Question (25 marks)
4. Section B: Long Answer Questions (75 marks)
5. All questions in Section A are compulsory and Answer any THREE questions in Section B

SECTION A: ANSWER ALL QUESTIONS (25 MARKS)

1. A rural sub-county hospital is experiencing frequent stockouts of essential medicines because of poor working capital management. As the hospital's finance officer, explain five strategies you would implement to improve the working capital management. (5 marks)

2. Describe five key differences between debt financing and equity financing for healthcare organizations. (5 marks)

3. Explain five benefits of financial ratio analysis in evaluating the financial performance of a hospital**.** (5 marks)

4. You are evaluating a health facility's investment project that requires an initial investment of $80,000 today. The project is expected to generate the following cash flows over the next 5 years:

Year 1: $20,000

Year 2: $22,000

Year 3: $25,000

Year 4: $28,000

Year 5: $30,000

If the required rate of return (discount rate) is 12% per annum,

a) Calculate the Net Present Value (NPV) of the project. (4 marks)

b) Should the investment be accepted based on the NPV? (1 mark)

5. Describe five sources of revenue available to public health facilities operating within a devolved health system. (5 marks)

SECTION B: ANSWER ANY THREE (3) QUESTIONS OF YOUR CHOICE

6. You have been assigned to review the annual budgeting process of a private health facility.

a) Describe four types of budgets commonly used in healthcare organizations. (16 marks)

b) Explain how each type of budget supports financial planning in the facility. (9 marks)

7. Explain five stages of external financial audit process, giving relevant documents used at each stage. (25 marks)

8. In healthcare financial management, discuss five ways in which the budget is a tool for:

a) Financial performance assessment (10 marks)

b) Internal and external Controlling (10 marks)

c) Decision-making (5 marks)

9. a) XYZ Health Corporation has provided the following financial statements for the year ended December 31, 2025.

Balance Sheet of XYZ Health Corporation *as of December 31, 2025*

Assets	**Amount (USD)**	**Liabilities and Equity**	**Amount (USD)**
Current Assets		Current Liabilities	
Cash	$55,000	Accounts Payable	$35,000
Accounts Receivable	$70,000	Short-term Notes Payable	$20,000
Inventory	$60,000	Accrued Expenses	$15,000
Prepaid Expenses	$8,000	Total Current Liabilities	$70,000

Total Current Assets	**$193,000**		
		Long-Term Liabilities	
Non-Current Assets		Long-Term Debt	$150,000
Property, Plant & Equipment	**$400,000**	**Total Liabilities**	**$220,000**
Accumulated Depreciation	($80,000)		
Net PPE	$320,000	Equity	
		Common Stock	$150,000
Total Assets	**$513,000**	**Retained Earnings**	**$143,000**
		Total Equity	**$293,000**
		Total Liabilities & Equity	**$513,000**

Income Statement of XYZ Health Corporation for the Year Ended December 31, 2025

Revenue and Expenses	Amount (USD)
Revenue	
Net Sales	$750,000
Cost of Goods Sold (COGS)	($450,000)
Gross Profit	**$300,000**
Operating Expenses	
Selling Expenses	($60,000)
Administrative Expenses	($50,000)
Depreciation Expense	($15,000)
Total Operating Expenses	**($125,000)**

Operating Income (EBIT)	**$175,000**
Interest Expense	($15,000)
Earnings Before Tax (EBT)	**$160,000**
Income Tax Expense (30%)	($48,000)
Net Income	**$112,000**

Using the financial statements above, compute the following five financial ratios and interpret each result:

i) Quick (Acid-Test) Ratio (3 marks)

ii) Net Profit Margin (3 marks)

iii) Debt Ratio (3 marks)

iv) Return on Equity (ROE) (3 marks)

v) Times Interest Earned Ratio (3 marks)

b) A hospital is planning to purchase a new CT scan machine that costs $1.5 million. To finance the purchase, the hospital takes out an 8-year annuity loan with an interest rate of 6% per year, compounded annually. The hospital will make equal annual payments at the end of each year. Calculate the amount the hospital will pay at the end of each year for 8 years to fully pay off the loan. (10 marks)