Strathmore
UNIVERSITY

STRATHMORE BUSINESS SCHOOL

MASTER OF BUSINESS ADMINISTRATION IN HEALTHCARE MANAGEMENT

END OF SEMESTER EXAMINATION

HCM 8103: FINANCIAL MANAGEMENT OF HEALTHCARE ORGANISATIONS

Date: Thursday, 22nd March 2018 **Time:** 3 hours

Instructions

1. This examination consists of **FIVE** questions.
2. Answer question **ONE** and **ANY OTHER TWO** questions.
3. Answer Comprehensively.

Question 1(Compulsory) (40 Marks)

Read the case of **Medicare and drug-eluting stents** provided and answer the following questions

a) In what ways has the quality of medical care improved as a result the development of drug eluting stents? **(3 Marks)**

b) What would you consider as the value you derive from drug-eluting stents if you were:

(i) A patients, **(5 Marks)**

(ii) A physicians (Cardiologist), **(5 Marks)**

(iii) A hospitals, **(5 Marks)**

(iv) Government/society **(5 Marks)**

(v) Insurer (ie Medicare) **(5 Marks)**

c) If this technical innovation is viewed as typical of medical care, what are the possible opportunities for controlling costs in the short and long terms? **(5 Marks)**

d) What should drive Medicare's decision about whether to reimburse and the amount to reimburse for a procedure including a drug-eluting stent? **(7 Marks)**

Question 2(15 Marks)

National Kidney Foundation: The CEO with a Golden Tap

National Kidney Foundation (NKF) is a non-profit healthcare institution providing subsidised dialysis treatment and kidney care in Singapore. It was founded by Dr Oon TickKhoo after a personal anguish when his brother died of Kidney failure. TT Durai took over as the CEO of the Foundation after being a volunteer for 10 years. It is also worth noting that the name 'Durai' meant the charitable one. Indeed, Durai proved to be a confident, articulate and intelligent visionary leader. He set out and developed the Foundation into a world-class healthcare service organisation

During his reign, NKF realized impressive growth. He ran the organisation as an innovative business centric enterprise. Under his leadership, NKF offered a unique holistic healthcare service from dialysis, to kidney transplant and even home care. The Foundation provided exceptional products to kidney patients and embedded - *the will to live*. Its approach was a multi-pronged and involved the patient, the family and the Hospital.

The NKF maxim was "if you want to die we will not let you". By 2005, NKF emerged as the world's largest non-profit dialysis provider.

Durai was an excellent fundraiser. The Financial statement reported that he raised an average of over 100 Million dollars per annum. He used a breakfast show to raise awareness and attract funds. Most donors were individuals who were touched by the vision of NKF. His breakfast TV show was often voted the best in the country. Donors came from far and wide. NKF was an attractive employer, with many MBA volunteers from top business schools like Harvard.

In April 2004, Straits Times Singapore's leading newspaper published an article stating that a gold plated tap had been installed in Durai's office bathroom. It was reported that the tap was worth only Ksh900. The article read in part:

> *Inside Chief Executive T.T. Durai's office suite on the 12th floor of the Ksh21 million building, he (the contractor) says he 'lost it' when he had to install among others things, a glass- panelled shower, a pricey German toilet bowl and a gold-plated tap.*

Durai sued the newspaper for defamation. The paper responded by bringing allegation that Durai had been flying first class on some airlines and was grossly overpaid and also enjoyed generous annual bonuses. The incident sparked widespread outrage among Singaporeans, and under public pressure Durai stepped down in July 2005.

Durai had set up a Board organised into Executive Committee, Finance Committee, Remuneration Committee and Audit Committee. When investigations were carried out, it emerged that the Board was quite dysfunctional! The Executive Committee had assumed the role of the Board so much such that the two could not be distinguished. The Finance Committee had no minutes and the treasurer's laptop crashed during the investigations. It also emerged that the Remuneration Committee often considered remuneration issues but then forwarded them to the CEO and subsequent action was based on the CEO's absolute discretion. Additionally, the chair of the Audit Committee was not a member of the Board while his reports and recommendations were largely ignored.

George Ee became the Foundation's interim Chairman and CEO. When faced with the task ahead of him, George Ee had a few questions, want went wrong? How did the situation come to this?

Required:

a) Discuss how agency conflict may have arisen in the Case of National Kidney Foundation **(5 Marks)**

b) Discuss how the fraud could have been prevented.(Hint: consider the responsibility of various actors). **(10 Marks)**

Question 3 (15 Marks)

You are the Managing Director of Hope National Hospital (HNH) a Not- for-Profit Hospital serving underprivileged in the society. You have recently received a note from the main donor that you organisation is not financial sustainable and therefore the donor will withdraw support unless clear financial sustainability strategy is in place. Patients have been complaining that the cost of service is too high. You ask your accountant for financial analysis and receive the following schedule of performance from most recent financial statements:

HNH Financial Analysis.

RATIO TYPE	FORMULA	Year 2015	Year 2016
Return on net assets ratio	Change in net assets / Total net assets	8%	-5%
Primary reserve ratio	Net current assets *365 / Total expenses	25	15
Contributed income ratio	Income from Contributions / Expenses from core activities	95%	96%
Institutional Donors	Institutional Donors x 100 / Total Revenue	80%	85%
Individual Contributions Ratio	Individual Contributions x 100 / Total Revenue	10%	8%
Government Grants	Government Grants x 100 / Total Revenue	5%	2%
Debt burden ratio	Cost of debt serving / Total expenditure	10%	15%
Demand ratio	Operating expenses / Total income	65%	60%

Program support ratio	Support expenses Total income	35%	40%
Cost Per Patient Served	Total Patient cost _Number of Patients	Ksh1,200	Ksh1,300
Revenue Per Patient Served	Total Patient Revenue _Number of Patients	Ksh 900	Ksh 900

Use the Financial analysis in Question One to answer following question:

a) Using the financial analysis presented, explain why the donor considered HNH unsustainable. **(10 Marks)**

b) What would you do to improve the financial sustainability of HNH **(5 Marks)**

Question 4 (15 Marks)

a) You read an article in the business paper regarding downgrading of Kenya's bond rating. Your healthcare organization is in process of making a capital investment in an MRI system. What are the potential impact on your investment scenarios in developing a financial analysis using NPV? (Consider impact on both revenue and expense categories). **(8 Marks)**

b) What are the objectives of the capital investment decision? **(4 Marks)**

c) A shilling today is preferred to a shilling later. Explain **(3 Marks)**

Question 5 (15 Marks)

Heart Hospital is in possession of a non-operational, fifty-bed hospital. The after-tax value of the land is Ksh2,500,000. The equipment and the building are fully depreciated and have an after-tax market value of Ksh3,500,000. The hospital could either sell off its property or convert it into a new state-of-the-art acute-care hospital. An analysis of the market reveals that the facility could attract 9,000 discharges per year, a number expected to increase at a rate of 3 percent per year. Projected net patient revenue per discharge is Ksh10,000 for the first year, increasing annually by 4 percent thereafter. Projected operating expense per discharge is Ksh8,400 for the first year, increasing annually by 6 percent thereafter. Renovation costs to create a plush facility would be Ksh45,000,000. The new facility would be depreciated on a straight-line basis over a ten year life to a Ksh12,000,000 salvage value. At the end of ten years, the land is expected to be sold for an after-tax value of Ksh6,000,000. Net working capital will increase at a rate of Ksh3,000,000 per year over the life of the project. Heart Hospital has a 35 percent tax rate and required rate of return of 9 percent.

Required

Use the NPV technique to advice the company whether to renovate this project

(Show all your workings)