



“Investing in Africa’s future”

**COLLEGE OF HEALTH AGRICULTURE AND NATURAL SCIENCES
DEPARTMENT OF BIOMEDICAL AND LABORATORY SCIENCES
NSHA301: HEALTH ECONOMICS AND HEALTHCARE FINANCING**

END OF SEMESTER FINAL EXAMINATIONS

NOVEMBER 2022

LECTURER: MR T. MASESE

DURATION: 3 HRS

INSTRUCTIONS

Answer **ANY FOURS QUESTIONS**

DO NOT repeat material.

Write legibly.

Credit is given to application of theory and practice

Question 1

- a. User charges are direct payment by users of healthcare services at the point of service and are usually favored as a way to supplement revenues of health care facilities. Discuss the arguments for and against the promotion of user charges. What methods can be used to effect user exceptions **(10 marks)**
- b. Risk aversion implies that individuals prefer to pool risk by making a small regular payment into a fund in return for the guarantee that if large expenses occur these will be covered by the fund. Discuss the various risk pooling methods used in healthcare financing and how the premiums paid are determined in these methods. What are the risks involved and how do they arise **(10 marks)**
- c. Cost shifting has made the financing system complex and opaque. What is cost shifting and what are its consequences **(5 marks)**

Question 2

- a. What is managed healthcare? Explain the demand and supply side financial disincentives used by insurance companies (medical aid societies) and the state to limit expenditure and access to health services **(8 marks)**
- b. What are the features of a good healthcare financing system from both an individual household and community point of view? Discuss 7 factors that influence the health services sector and should be given due attention in health care financing **(11 marks)**
- c. Explain the concept of supplier-induced demand in health care **(3 marks)**
- d. Suppose the price of eye tests fell by 20% and the quantity of eye tests bought rose by 30%, calculate the price elasticity of demand for eye tests. Interpret your answer **(3 marks)**

Question 3

- a. A given study has shown that the quantity demanded for Pungwe beer in Mutare has increased by 10%. During the same period the income of the population of the town is assumed to have increased by 5%. Based on the information provided calculate the income elasticity of demand and discuss the business policy implications of the result **(3 marks)**

- b. The benefits of health care are the outputs or outcomes of healthcare interventions and are classified into four categories. Using clear examples, briefly explain each of these categories **(8 marks)**
- c. Four practical approaches have been suggested to the problem of determining the level of state funding of health and social care. Discuss each of the 4 approaches **(6 marks)**
- d. List 4 major uses of funds in health care and 4 sources of funding in health care **(8 marks)**

Question 4

- a. There are in essence four basic alternative methods of financing care services: direct payment by users; private health insurance; social or state insurance; direct taxation and official development assistance. Discuss the various types of health care financing that come under each of these headings **(15 marks)**
- b. Research shows that the people who benefit from health care are not usually the people who pay for it due to a process called cost shifting which makes financing system complex and opaque. What is cost shifting? Explain some of the ways that third party payments are made through cost shifting in health care. **(8 marks)**

Question 5

- a. Briefly explain the difference between health and healthcare What are the main factors that may influence the state of health **(6 marks)**
- b. Define the term “economic resources” and briefly explain the 4 categories of economic resources and their payments. Briefly explain the economic problem and the 3 basic questions that each society has to answer when allocating its resources **(10 marks)**
- c. With the help of appropriate examples explain the following concepts as they relate to healthcare: Asymmetric Information; Moral Hazard and Adverse selection **(4 marks)**
- d. Outline the advantages and disadvantages of user fees. What mechanisms can be used to exempt the poor from paying for health care? **(5 marks)**

Question 6

- a. Health care is expensive, we cannot predict when we are going to be ill, and postponing buying health care is often risky due problems of risk and uncertainty. Discuss problems that occur in health care due to problems of asymmetric information. Discuss your answer under the following headings: adverse selection; moral hazard; rational choices; information problems; doctors as agents for patients, supplier-induced demand; consumers as

satisfaction maximizers; imperfect competition; externalities; equity and healthcare **(15 marks)**

b. Briefly discuss each of the following healthcare financing methods:

- i. Private health insurance
- ii. Community financing
- iii. Health savings accounts
- iv. Informal payments
- v. Official development assistance

(10 marks)

Question 7

a. List the determinants of the price elasticity of demand for health services (10 marks)

b. Bains Imaging Company manufactures an x-ray machine that currently sells at \$900. Sales volume is about 2000 machines per month. A close competitor, Cimas X-rays P/L has cut the price of a similar imaging machine it makes from \$1100 to \$800. Bains Imaging's economist has estimated the cross elasticity of demand between the two firms' products at about 0.4, given current income and prices. What impact if any will the action by Cimas X-rays P/L have on the total revenue generated by Bains Imaging Company, if Bains leaves its current price unchanged? **(6 marks)**

c. Imperial Derby manufactures a line of incinerator ovens costing \$500 each. Its sales averaged about 6000 units per month during the past year. In August Imperial's closest competitor, Defy cut its price for a closely competitive model from \$600 to \$450. Imperial noticed that its sales volume declined to 4500 units per month after Defy announces its price cut.

- i. What is the cross elasticity of demand between Imperial's oven and Defy 's competitive model **(3 marks)**
- ii. Would you say these two firms are close competitors? What other factors could have influenced the observed relationship? **(3 marks)**
- iii. If Imperial knows that the price elasticity of demand for its ovens is -3.0, what price would Imperial have to charge to sell the same number of units it did before the Defy price cut? **(3 marks)**

END OF PAPER