



“Investing in Africa’s future”

**COLLEGE OF HEALTH AGRICULTURE AND NATURAL SCIENCES
(CHANS)**

SHA301: HEALTH ECONOMICS

END OF SEMESTER FINAL EXAMINATIONS

APRIL/MAY 2019

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. 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? **(8 marks)**
- b. 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 **(5 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)**
- c. Medical care is only one of the many factors that determine health. Briefly explain the main determinants of health **(6 marks)**

QUESTION 2

- a. 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 3rd party payments are made through cost shifting in health care. **(8 marks)**
- b. Briefly explain the difference between health and healthcare. What are the main factors that may influence the state of health **(6 marks)**
- c. Health care cannot be entirely left to the markets because it is distinctive from other commodities. Discuss this statement giving reference to market failure, externalities, asymmetric information between doctors and patients **(6 marks)**
- d. Briefly explain the economic problem and the 3 basic questions that each society has to answer when allocating its resources **(5 marks)**

QUESTION 3

- a. The asymmetry of information makes the relationship between patients and doctors rather different from the usual relationship between buyers and sellers. Discuss the demand and supply relationship between doctors especially in the context of supplier-induced and doctors as patients' agents **(7 marks)**
- b. What the main determinants of demand for medical care i.e. what causes a shift in the demand curve for medical care **(8 marks)**
- c. Briefly explain each of the following methods of healthcare financing:
 - i. Private health insurance **(3 marks)**
 - ii. Community Financing **(2 marks)**
 - iii. Health savings accounts **(2 marks)**
 - iv. Informal payments **(3 marks)**

QUESTION 4

- a. Outline the advantages and disadvantages of user fees. What mechanisms can be used to exempt the poor from paying for health care? **(9 marks)**
- b. Managed health are demand and supply side measures that attempt to control a patient's demand and control overall expenditure through financial penalty in the event of claim. Explain some of the mechanism used to control demand and supply in managed health care. **(8 marks)**
- c. Externalities are another source of market failure. What is an externality? Using demand and supply diagram illustrate and explain how the market price fails to accurately capture the benefits and costs of vaccination of children against whooping cough **(8 marks)**

QUESTION 5

- a. From the patient's viewpoint, the need for medical care is not always clear-cut. Outline the five fundamental factors that have an impact on the demand for healthcare services **(5 marks)**
- b. The associations between health and national development are complex. The interaction is a two-way phenomenon with health being both influenced by and influencing economic development. Discuss this statement. What are the main determinants of poor health in poor countries **(10 marks)**

- c. Write down the factors that influence the choice of a financing system and explain the main features of a good healthcare financing system from both the community and household's points of view **(10 marks)**

QUESTION 6

- a. With the help of appropriate examples explain the following concepts as they relate to healthcare:
- i. Asymmetric Information **(2 marks)**
 - ii. Moral Hazard **(2 marks)**
 - iii. Adverse selection **(2 marks)**
- b. List 4 major uses of funds in health care and 4 sources of funding in health care **(8 marks)**
- c. Explain the features of a good healthcare financing system. Explain some financial disincentives used by health insurance companies to encourage proper use of health services resources **(6 marks)**
- d. Explain the concept of supplier-induced demand in health care **(5 marks)**

END OF PAPER