



AFRICAN ECONOMIC RESEARCH CONSORTIUM
Collaborative MA Programme in Economics for Anglophone Africa
(Except Nigeria)

JOINT FACILITY FOR ELECTIVES (JFE) 2011

JUNE – SEPTEMBER

HEALTH ECONOMICS II

Second Semester: Final Examination

Duration: 3 Hours

Date: Tuesday, September 20, 2011

INSTRUCTIONS:

1. This examination has **FOUR QUESTIONS**.
 2. You are required to attempt **THREE QUESTIONS** in total.
 3. Question 1 is **COMPULSORY**.
 4. Each question carries **TWENTY (20)** marks.
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Question 1 (Compulsory)

- (a) The government of your country seeks to prevent an outbreak of Chicken Pox among children of ages 0-9. One hundred thousand children will be vaccinated with an expectation that 2000 cases of Chicken Pox will be prevented this year. As a result of the inoculation, 100 children reacted adversely. The average cost of immunization is \$5 and the average cost of treatment of an episode of Chicken Pox is \$20, while the cost of treating adverse reaction is \$200. It is estimated that 10 people gain 8 additional years from the treatment, 800 will gain 0.04 healthy life years, but the 50 with who suffered adverse effect will lose 0.09 health life years.

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| (i) | Calculate the net costs. | (3 Marks) |
| (ii) | Calculate the net effects. | (4 marks) |
| (iii) | Calculate the Cost Effectiveness Ratio. | (2 Marks) |
| (iv) | Interpret your results and advise your government on what to do. | (3 Marks) |
| (v) | Mention the two common approaches to pricing in CBA in health intervention. | (3 Marks) |



- (b) Consider the following table of costs and benefits from a government policy to clean the water in a local area.

Level of abatement	total costs	total benefit
10	10	80
20	22	150
30	40	200
40	70	240
50	105	280
60	150	320
70	210	350
80	280	375
90	350	385
100	420	390

- (i) What level of abatement is most efficient by general economic criteria? (3 Marks)
- (ii) Find the average costs of and benefits from the level of abatement (2 Marks)

Question 2

Explain the relationship between

- (a) Health status and stages of development. (5 Marks)
- (b) Poverty and health. (5 Marks)
- (c) Health systems and health care services. (5 Marks)
- (d) Education and health. (5 Marks)

Question 3

- (a) Explain the objectives of health systems (6 Marks)
- (b) Explain the main challenges of health financing in Africa. Can these be remedied, how? (8 Marks)
- (c) What could be responsible for health system failure across countries in Africa? (6 Marks)



Question 4

- (a) What are the goals of health reform? **(8 Marks)**
- (b) Mention the major public health policy evaluation criteria as contained in Cheung, K.K (2010) **(6 Marks)**
- (c) Briefly explain at least four reasons as to why the straight jacket position of this framework of analysis may not work in Africa. **(6 Marks)**