

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

KISII LEARNING CENTRE

HDC2122: INTRODUCTION TO EPIDEMIOLOGY

END OF SEMESTER EXAMINATION

SECTION A

All questions in this section are compulsory

30marks

1. Define the following terms 6marks
 - a) Public health
 - b) Epidemiology
 - c) Re-emerging infections
2. Distinguish between the following terms 8marks
 - a) Common source epidemic vs. propagated epidemic
 - b) Infant mortality rate vs. child mortality rate
 - c) Latent period vs. symptomatic period
 - d) Herd immunity vs. acquired immunity
3. Briefly explain the contribution of the following individuals to the field of epidemiology 8marks
 - a) Hippocrates
 - b) Robert Koch
 - c) John Snow
 - d) John Graunt
4. State the purpose and uses of epidemiology 5marks
5. Draw the epidemiological triangle 3marks

SECTION B

Answer any two questions

1.
 - a) State five approaches necessary for disease prevention 10marks
 - b) State four sources of epidemiological data and briefly discuss the advantages and disadvantages of each 10marks
2.
 - a) Define screening 2marks
 - b) Define validity of a screening test 2marks
 - c) Outline three principles of a screening program 6marks

- d) State the characteristics of a good screening test 10marks
3. a) Define non-communicable disease 2marks
- b) Define a risk factor giving example of risk factors of one non communicable disease 3marks
- c) As a public health officer, outline measures you can put in place to prevent lung cancer 10marks
- d) Why should diseases be prevented 5marks
4. Discuss the socio-economic factors that facilitate the transmission of HIV/AIDS