



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2016/2017

FIRST YEAR SEMESTER EXAMINATIONS
FOR THE DEGREE OF MASTER OF PUBLIC HEALTH
IN EPIDEMIOLOGY AND POPULATION HEALTH

CITY AND HOMABAY CAMPUSES

PHE 820: CONTROL OF COMMUNICABLE AND NON-COMMUNICABLE
DISEASES

Date: 30th June, 2017

Time: 2.00 - 5.00pm

INSTRUCTIONS:

- Answer ALL Questions in section A and any other THREE in section B.
- Read very carefully the additional instructions preceding each section



SECTION A (40 MARKS)

Instructions:

1. *This section has EIGHT (8) questions*
2. *Answer all the FIVE (5) questions*

1. Vaccines contain ingredients, called antigens, which cause the body to develop immunity. Vaccines also contain very small amounts of other ingredients all of which play necessary roles either in making the vaccine, or in ensuring that the vaccine is safe and effective. For each type of ingredients listed below, provide the rationale for its use
(5 marks)

Ingredient	Example	Rationale
Preservatives	Thimerosal	
Adjuvants	Aluminum salts	
Stabilizers	Sugars, gelatin	
Residual cell culture materials	Egg protein	
Residual inactivating ingredients	Formaldehyde	

2. Explain factors behind increasing burden of multi drug resistant tuberculosis (5 marks)
3. Studying the life cycle of a parasite is critical in its control. Identify five different types of information that the life cycle of a parasite will provide (5 marks)
4. Outline five reasons why Sexually Transmitted Infections control programmes often fail in developing countries (5 marks)
5. Disease burden is the impact of a health problem on a given area, and can be measured using a variety of indicators such as mortality, morbidity or financial cost. Suggest five reasons why it is important to measure disease burden (5 marks)
6. Highlight five modifiable risk factors for cardiovascular disease (5 marks)
7. State 5 objectives of the "Non Communicable Disease global action plan (5 marks)
8. You reside in a region that faces chronic problems of zoonotic diseases. As a Public Health Expert, you have been recruited to join a team of Professionals whose mandate is to control this public health problem. Propose five recommendations you would wish the Team of Professionals to embrace in an effort to control the chronic problem of zoonotic diseases in the region (5 marks)

SECTION B: LONG ESSAY QUESTIONS (LEQ'S) (60 MARKS)

Instructions:

1. *This Section has Four (4) Questions*
2. *Answer any Three (3) Questions from this section.*
3. *Each Questions in this section has been allocated (20 marks)*
9. Compare and contrast communicable diseases with non-communicable diseases (20 marks)
10. Vaccinations are an essential tool in our fight against infectious disease. Discuss the benefits of vaccinations programs to the community (20 marks)
11. The incidence of emerging infections in humans has increased within the past two decades and also threatens to increase in the near future.”
 - a. Discuss the factors influencing the rising burden of emerging diseases (15 marks)
 - b. Explain efforts and actions that prevention of emerging diseases will require (5 marks)
12. Cervical cancer, or cancer of the cervix, is cancer of the entrance to the uterus (womb). The cervix is the narrow part of the lower uterus, often referred to as the neck of the womb. Cervical cancer occurs most commonly in women over the age of 30. Explain the following:
 - a. Causes of cervical cancer (5 marks)
 - b. Tests and diagnosis of cervical cancer. (5 marks)
 - c. Treatment of cervical cancer (5 marks)
 - d. Prevention of cervical cancer (5 marks)