



UNIVERSITY OF SWAZILAND  
Faculty of Health Sciences  
Department of Environmental Health Science

DEGREE IN ENVIRONMENTAL HEALTH SCIENCE  
**MAIN EXAMINATION PAPER 2017**

TITLE OF PAPER : COMMUNICABLE DISEASES CONTROL  
COURSE CODE : EHS 220  
DURATION : 2 HOURS  
MARKS : 100

INSTRUCTIONS : READ THE QUESTIONS & INSTRUCTIONS CAREFULLY  
: ANSWER FOUR QUESTIONS  
: **QUESTION ONE IS COMPULSORY**  
: EACH QUESTION **CARRIES 25** MARKS.  
: WRITE NEATLY & CLEARLY  
: NO PAPER SHOULD BE BROUGHT INTO THE EXAMINATION ROOM.  
: BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER.

DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR.

**QUESTION 1**

Recently, the southern part of Africa has been experiencing some floods where people were displaced from their homes. Countries through the help of international relief organizations offered assistance such as food parcels in the camps. However, in a camp located in Mozambique there were a number of people complaining of painless watery diarrhoea. Most of these people described the diarrhoea as like rice water.

- a) What disease are these patients suffering from? Explain your answer. [2]
- b) What further information would be required to make a conclusive investigation? Why? [3]
- c) Due to the nature of the disease in (a), Swaziland as a neighbouring country, needs to be prepared as this disease has a potential of spreading across borders. As a health officer in Swaziland, you have been tasked with the duty of heading a sub project aimed preventing the disease from attacking the country. Using the principles of communicable disease control, discuss how your office will ensure that Swaziland is safe from this disease; and should the disease reach Swaziland, state how your office will tackle such. [20]

**[25 MARKS]**

**QUESTION 2**

In 2016, Swaziland celebrated 27 years of a Polio free country. This is one of the greatest achievements the country has made in the past years. However, it is worth noting that by the year 2012, Polio hasn't been eliminated in the some countries in the world (Nigeria, Pakistan, Afghanistan and Chad) thus efforts still have to be invested in the prevention of this disease.

- a) What is the health term given to a diseases like Polio i.e. there are no more cases in the country but efforts to prevent it are still practiced? [2]
- b) What could be the possible explanation for the existence of the disease in the few countries mentioned above? [3]
- c) Even though the country is doing well in ensuring that there is not even a single new case of Polio in the country, it is still important to educate communities on this

disease. As a student of Communicable Disease Control, you have been requested to make a presentation on the disease during the morning radio show. Discuss this disease for the benefit of the listeners. The discussion should cover the following:

- i. Chain of infection [12]
- ii. Prevention and control [8]

[25 MARKS]

### QUESTION 3

The recent Cyclone Dineo has left clinics mostly in the eastern part of the country overstretched as it was observed that the incidence of faeco-orally transmitted diseases and arthropod/ vector borne diseases escalated. This period of time has exposed the weaknesses of the Ministry of Health when it comes to epidemic preparedness and response. A number of people were admitted in the country's hospitals and there was a reported shortage of medication and human resources. This could have been prevented should the country had prepared in well advance for such happenings. These problems led the Ministry to create a post for a Communicable disease control specialist. The duties of the specialist involve setting up a surveillance system and sensitizing communities on health issues compromising their health.

Discuss how, if you were to be hired as the specialist, would you ensure a safe and healthy Swaziland even during such natural disasters attacking the continent. Your discussion should cover the following:

- a) Setting up a surveillance system [5]
- b) A preparedness and response plan for the Ministry so that the country will be more prepared should such a disaster hit the country again. [20]

[25 MARKS]

### QUESTION 4

According to a recently conducted study aimed at analysing international funding opportunities in developing countries, it was established that 80% of the available funds are

directed towards communicable disease control. It is disturbing though that these diseases are preventable yet contributes a large proportion of deaths.

- a) Discuss 5 modern conditions that favour the spread of communicable diseases. [10]
- b) The study also revealed that sexually transmitted diseases are the mainly funded communicable diseases more especially HIV/AIDS.
  - i) Discuss 5 risk factors for sexually transmitted diseases. [10]
  - ii) Give 5 general control measures for sexually transmitted diseases [5]

**[25 MARKS]**

### **QUESTION 5**

According to the Maslow Hierarchy of Needs, food is among the basic need for survival. This therefore means that for survival, we are all at risk of acquiring food borne diseases. These diseases are divided into two: mainly food borne intoxication and food borne infections.

- a) State the difference between food borne intoxication and food borne infections giving example of each. [4]
- b) What is the common cause of food infections? [1]
- c) Salmonellosis outbreaks have been associated with food prepared during mass gathering. It is therefore vital that communities are sensitized of such a disease as to avoid preventable outbreaks. This disease is of special interests in countries like Swaziland whereby mass gatherings are often and are part of the Swazi culture.
  - i) Discuss this disease using the chain of disease infection. [12]
  - ii) Discuss the prevention measures against Salmonellosis in the general public. [4]
  - iii) State how control to Salmonellosis in disasters [4]

**[25 MARKS]**