## UNIVERSITY OF SWAZILAND

# **Faculty of Health Sciences**

## **Department of Environment Health Sciences**

### **MAIN EXAMINATION PAPER- MAY 2015**

TITLE OF PAPER : COMMUNICABLE DISEASES CONTROL

COURSE CODE : EHM 207

TIME

: 2 HOURS

MARKS

: 100

INSTRUCTIONS

: ANSWER QUESTION 1 AND ANY OTHER THREE

**QUESTIONS** 

: EACH QUESTION CARRIES 25 MARKS

: NO FORM OF PAPER SHOULD BE BROUGHT INTO NOR TAKEN OUT OF THE EXAMINATION

ROOM

: BEGIN THE ANSWER TO EACH QUESTION ON A

SEPARATE SHEET OF PAPER

#### **QUESTION 1**

- a) Define the following terms used in communicable diseases control (CDC)
  - i. Eradication [2]
  - ii. Period of communicability [2]
  - iii. Elimination of infection [2]
  - iv. Quarantine [2]
  - v. Surveillance [2]
- b) Discuss 5 factors favoring outbreak of diseases [10]
- c) What are the guiding steps to be followed in conducting a rapid health assessment? [5]

[25 marks]

#### QUESTION 2

- a) You are heading the communicable diseases control (CDC) programme in the country. Recently, the country has been ranked as a high risk destination in terms of travellers' diarrhea. It is now incumbent upon your programme to set up control strategies with regard to this disease. In detail take us through the control strategies your programme is likely to set up. Hint: Begin this strategy by defining the disease in terms of symptoms and characteristics. [20]
- b) What are the five (5) risk factors for childhood diarrhea? [5]

[25 marks]

### QUESTION 3

- a) What are the two explanations of tuberculosis control? [4]
- b) What does the acronyms DOTS stand for in TB control? What does DOTS programme entail and discuss four benefits of the programme. [10]

- c) HIV/TB is the condition whereby a person living with HIV is co-infected with TB. Why is HIV/TB a challenge in TB control? [1]]
- d) Discuss the three TB control strategies and their limitations [10]

[25 marks]

#### **QUESTION 4**

- a) Displaced people within malaria endemic areas create risk for a severe epidemic, particularly if the displaced persons are from less endemic areas. Explain why this population group is at risk and what could be done to alleviate the problem of severe disease in them. [5]
- b) What is the difference between incubation period and prepatent period? [4]
- c) In the past two weeks, four patients came to the clinic complaining of fever, chills, headache and malaise. Diagnosis of malaria was confirmed by microscopic demonstration of the parasite in blood smears. An investigation was conducted and it was discovered that one of the patients (patient X) had previously visited Mozambique two weeks prior to the onset of the symptoms. The remaining three patients reported not to have travelled in the past few weeks. It was concluded that patient X was exposed to malaria in Mozambique and infected.
  - i. Do you agree with the conclusion for patient X? Explain your answer [2]
  - ii. What further information is needed to help unpack puzzle for the remaining three patients? [5]
  - iii. Supposing all the patients are from the same area, design a control and prevention strategy for malaria in the area using the three general approaches to communicable disease control[9]

[25 marks]

#### QUESTION 5

a) Using the six step infectious disease process, discuss the general infection chain of sexually transmitted infections (STIs) [12]

- b) Why are women more vulnerable to STIs than men? [3]
- c) Explain in depth the factors contributing to spread of STIs [5]
- d) Discuss the strategies for implementation to prevent and control STIs as a programme officer in your area of jurisdiction based on these factors. [5]

[25 marks]