



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

**SUPPLEMENTARY EXAMINATION PAPER 2016**

TITLE OF PAPER : COMMUNICABLE DISEASES CONTROL

COURSE CODE : EHM207

DURATION : 2 HOURS

MARKS : 100

INSTRUCTIONS :

- READ THE QUESTIONS & INSTRUCTIONS CAREFULLY
- QUESTION **ONE IS COMPULSORY** THEN ANSWER **ANY OTHER THREE** QUESTIONS
- EACH QUESTION **CARRIES 25** MARKS.
- WRITE NEATLY & CLEARLY
- BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER.

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

**QUESTION 1**

- a) The international health regulations (IHR) of 2005 state that it is the mandatory duty for countries to carry out assessment of public health events occurring in their territories and then notify the World Health Organization (WHO) for all qualifying event.
- i) What is the stipulated timeline for notification? [1]
  - ii) Discuss the four criteria used to define the decision protocol for notification. [4]
  - iii) Mention six (6) diseases that have been specifically been stipulated to be notifiable under these regulations. [6]
  - iv) The IHR (2005) also identify four specific diseases that are always considered unusual and unexpected events whereby even one case is notifiable to WHO. Name these diseases? [4]
- b) Certain environmental factors play a major role in increasing the risk of outbreaks of infectious diseases. Discuss the five environmental factors that contribute to the onset of infectious diseases. [10]

**[25 marks]**

**QUESTION 2**

According to WHO (2014), each and every day millions of parents seek health care for their sick children, taking them to hospitals, health centers, pharmacists, doctors and traditional healers. Multiple studies conducted by the World Health Organization in collaboration with health ministries in a number of countries reveal that many sick children are not properly assessed and treated by these health care providers, and that their parents are poorly advised. This has led to the initiation of a programme called Integrated Management of Childhood Illnesses (IMCI).

- a) Discuss this program in terms of:
- i) definition [2]
  - ii) aim [2]
  - iii) constructs and [2]

- iv) strategy [6]
- b) What are the five main causes of death in children globally? [5]
- c) Discuss the core interventions to improve child health as per the IMCI programme in Swaziland [8]

[25 marks]

### QUESTION 3

On the 8<sup>th</sup> of August 2014, the WHO Director-General Dr. Margaret Chan in a press conference in Geneva described Ebola virus as the largest, most severe, most complex outbreak in the nearly four decades of the disease. This was on the day when the outbreak in West Africa was declared an international public health emergency. Dr. Chan also stated that “our collective health security depends on urgent support for containment in the affected countries”. This was after the disease had claimed lives of 932 people and accounted for 1 711 cases in four countries in the African region. Dr. Keiji Fukuda, WHO Assistant Director-General for Health Security concurred with Dr. Chan adding that Ebola is not mysterious but an infectious disease that can be contained. He further said there was need to fear and that misconceptions contributed a lot to the outbreak thus the need for collective health security. The mention of “collective health security” also included efforts from Swaziland.

The Ministry of Health in Swaziland also noted fear and misconceptions in the Swazi nation and there was therefore a need to set up a task team to ensure that Swazis are safe from the disease.

As a student of Communicable Diseases Control (EHM 207), the Ministry felt that you can be of great assistance in the task team. Design an Ebola virus disease outbreak response plan using the fundamental principles of communicable diseases control.

NB: Swaziland has no case of Ebola as of yet and the country has secured sufficient funding for this response plan. [25]

[25 marks]

**QUESTION 4**

- a) The past few years have seen countries like Swaziland facing challenges in the control of communicable diseases. Amongst these diseases is Tuberculosis (TB).
- i) Discuss five modern conditions that favour the spread of tuberculosis in Swaziland [10]
  - ii) Discuss the epidemiology of TB stating the risks involved in each stage [10]
  - iii) In 2007, studies revealed that 80% of all HIV positive patients in Swaziland are also infected with TB. The country has invested significantly on investing control strategies through the TB programme. Discuss 5 control strategies employed by the national TB Control Programme in Swaziland to control TB among HIV positive patients [5]

**[25 marks]**

**QUESTION 5**

Congratulations for making it through to year 2 as an Environmental health student. In partial fulfillment of your degree, you are expected to complete a certain number of hours of practice otherwise known as internship. You are amongst those who got attached to a health centre. Unfortunately it is that time of the year again whereby health centers are flooded with mothers of children who have diarrhoea. The children present with acute watery diarrhoea and mostly are between the ages 1 and 2 and also young infants. The parents also reported that prior to the diarrhoea, their children presented flue like symptoms. The attending health workers confirmed that the children are infected with a rotavirus.

As an Environmental Health Officer design a control plan for the outbreak based on the steps in the management of a communicable disease outbreak. [25]

**[25 marks]**