



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

BSc. ENVIRONMENTAL HEALTH SCIENCES

RE-SIT EXAMINATION PAPER 2018

TITLE OF PAPER : CONTROL OF COMMUNICABLE DISEASES

COURSE CODE : EHS220

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

In the management of outbreaks in public health, media plays an important role in unearthing some unknown outbreaks, especially where there is a poor surveillance system with regard to that particular disease. It is however advised that not all that spreads through the media should be taken as it is. However, it cannot be ignored, hence the need to conduct an investigation. For an example, in Swaziland, the first rotavirus outbreak which affected 3 000 people resulting in 36 deaths, was first reported by the local newspaper before it was captured by the Ministry of Health. The Ministry had to act promptly to avoid more deaths through conducting an outbreak investigation and come out with an outbreak report.

- a) Discuss in depth the steps involved in conducting an outbreak investigation. [10]
- b) What are the possible setbacks that are often envisaged in conducting an outbreak investigation once the media is involved and how could these be prevented or handled? [5]
- c) Discuss the steps the Ministry undertook after the outbreak report was out i.e. response to an outbreak report. [10]

Total [25]

QUESTION 2

A. In the control of diseases, understanding the natural history of a disease is important as it helps in deciding on the control measures per each stage of the sequence.

Discuss the detailed natural history of a disease. [10]

B. Zoonotic diseases have resulted in a number of deaths in the world yet they can be controlled. Rabies is one example of this group of infectious diseases.

- a) Define what zoonotic disease means. [3]
- b) Discuss rabies in terms of the following:
 - i) Causative agent. [2]
 - ii) Reservoir. [2]
 - iii) Mode of transmission. [3]

iv) Prevention and control. [5]

Total [25]

QUESTION 3

Every country needs to have a policy on how communicable disease should be controlled. However there are number of issues to be considered in the choice of the control measures. For example, in Swaziland, communicable diseases are addressed under programmes and units of which one of them in the Malaria Control Unit.

- a) State 10 things to be considered in selecting control measures for infectious disease in a country's public health policy. [10]
- b) The activities of the Malaria Control Units cover the chain of infection of the disease. Discuss the chain of infection of Malaria in terms of the following:
- i) Persons at risk of malaria. [5]
- ii) The World Health Organization control strategy. [10]

Total [25]

QUESTION 4

- a) Discuss the three main methods of controlling communicable diseases using appropriate examples. [15]
- b) The recent floods in Durban have left people, especially the urban slum settlers, without a roof and basic sanitation services. This has resulted in an outbreak of Giardiasis in the area. Discuss the following with regard to the disease in this area:
- i) Infectious agent for the disease. [2]
- ii) Mode of transmission. [3]
- iii) How would you control and manage this outbreak in this area as a communicable disease control specialist? [5]

Total [25]

QUESTION 5

According to WHO (2013), Swaziland has been improving with regard to immunization coverage from the early 1980s where immunization was introduced in the country. This has led to improvement in quality of life among children resulting in a healthier nation. This is as a result of the establishment of The Swaziland Expanded Programme on Immunization in 1979.

Among the WHO scheduled immunization vaccine, is the Diphtheria, Tetanus and Pertussis (DTaP) vaccine whereby the Diphtheria and Pertussis is of importance to communicable disease control.

- a) Discuss the control of patients, contacts and immediate environment including epidemic control measures for Diphtheria [10]
- b) Explain how Pertussis is different from common cold stating the control measures for both Pertussis and common cold. [15]

Total [25]