



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

DEGREE IN ENVIRONMENTAL HEALTH SCIENCE

FINAL EXAMINATION PAPER 2016

TITLE OF PAPER	:	ENVIRONMENTAL HEALTH PROJECT DESIGN AND MANAGEMENT
COURSE CODE	:	EHM 405
DURATION	:	2 HOURS
MARKS	:	100
INSTRUCTIONS	:	READ THE QUESTIONS & INSTRUCTIONS CAREFULLY
	:	QUESTION ONE IS COMPULSORY THEN ANSWER ANY OTHER THREE QUESTIONS
	:	EACH QUESTION <u>CARRIES 25</u> 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 project management, managers are tasked with balancing a number of constraints. List five of these constraints. [5]

In order to ensure coordination and implementation of project activities, organizations come up with a structures which are called project organizational structures. One of these structures is a programmatic based management structure. Discuss this structure in terms of definition, diagrammatic illustration, advantages and disadvantages.

[20]

[25 marks]**QUESTION 2**

a) Organizational culture has a strong influence on the type of management styles that can be used on projects. Discuss the following four management styles:

i. Autocratic [5]

ii. Paternalistic [5]

iii. Democratic [5]

iv. Laissez-faire [5]

b) Organizations further need a proper project governance to help in the overall management of the project activities. Discuss this concept of project governance.

[5]

[25 marks]**QUESTION 3**

The root cause analysis is one of the most vital tools which assist project managers to implement relevant interventions that aim at eliminating root causes other than the symptoms of a health problem.

a) Discuss root cause analysis in terms of definition, principles and objectives. [7]

b) Discuss the four steps of a root cause analysis. [8]

c) A regional health survey conducted by the Department of Environmental Health revealed that childhood mortality rates were escalating every year in the region. It was

further revealed that malaria was the leading cause of death amongst these children, comprising 25% of the overall death rate. The Department, therefore, concluded that a three year project was necessary to address the health problem. You were tasked with the duty of heading the project and the first step was to identify the root cause of the problem.

Using a tree diagram, illustrate how you will identify the root cause of the malaria related deaths amongst the children so that as a project manager, you will be in a good position to implement relevant activities in the communities. [10]

[25 marks]

QUESTION 4

- a) A project is defined as a “temporal endeavour” aimed at addressing a health need. Explain the meaning of temporal in the definition. [3]
- b) Before the idea of a project is borne, there has to be a needs assessment. Discuss needs assessment in terms of the following:
 - i) Definition [2]
 - ii) Purpose [5]
- c) The PRECEDE-PROCEED model is useful in the needs assessment for any health intervention. Discuss in depth the first three phases of this model. [15]

[25 marks]

QUESTION 5

Health interventions or projects are executed to improve the health of the beneficiaries. For the interventions to attain this utmost goal, they must be implemented and managed in a manner that will ensure sustainable change.

- a) Discuss five strategies that can be used by project managers to ensure sustainable change in the beneficiaries. [15]
- b) Projects should also be evaluated from the input to impacts. As a project manager in charge of a project which is aimed at decreasing infant mortality rates in Community A, the project target being an increase of the breastfeeding rates amongst mothers. Discuss five indicators you will use to evaluate your project. [10]

[25 marks]