



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

B.Sc. DEGREE IN: ENVIRONMENTAL MANAGEMENT AND
WATER RESOURCES

MAIN EXAMINATION PAPER 2019

TITLE OF PAPER : WATER LAW AND INSTITUTIONS
COURSE CODE : EHM 422
DURATION : 2 HOURS
MARKS : 100

INSTRUCTIONS :

- : READ THE QUESTIONS & INSTRUCTIONS CAREFULLY
- : ANSWER **ANY FOUR** QUESTIONS
- : 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 ONE (25 marks total and each question below carries 5 marks))

- 1A.** List the problems that can arise in the course of utilization of water resources justifying the need for legislation and regulatory control.
- 1B.** What was the basic contest between the Confucians and Legalists in ancient China that later culminated in the emergence of a combined system of laws addressing also water utilizations?
- 1C.** Describe the difference between i) law and ii) legislation.
- 1D.** List the possible challenges of a modern water legislation
- 1E.** List the possible solutions to the occurrences of externalities in water utilizations.

QUESTION TWO (25 marks total and each question below carries 5 marks)

- 2A.** Define price elasticity of water demand.
- 2B.** Define i) water policy and ii) water legislation explaining how the two relate and differ from each other.
- 2C.** Discuss the main features of water ownership and water use right in the common law countries. How did this feature relate closely with one particular form of ownership in the Roman law? State also how the natural flow theory is used in the common law countries in relation to water use rights.
- 2D.** Discuss the advantages and disadvantages of incorporating customary laws in modern water legislation. How do you describe the characteristics of customary laws in Africa in relation to private water rights? and those prevailing in the Muslim countries (cite the two important water rights in the Muslim customary law on water)?
- 2E.** Discuss the issue to be taken into account in the course of drafting legislation addressing i) agricultural water uses ii) industrial water uses.

QUESTION THREE (25 marks total and each question below carries 5 marks)

- 3A.** What was the main feature of water ownership in the Feudal period in Europe leading up to the French Revolution? How did the water administration following Napoleonic Code differ from the Feudal period? Specifically explain the difference the Napoleonic Code had with that of the ancient Roman Code on water ownership.
- 3B.** Discuss the major reasons for the variation of water rights and water administration among the different states in the USA. The USA also uses the so-called Reservation Doctrine. What is this doctrine used for and which institution authorizes its implementation? In the United States, is it possible to sell or transfer water right under the prior Appropriation doctrine?
- 3C.** State the three forms of acquiring water use rights. What procedure should be specified in water legislation for the granting of permits for water use? What is the difference between a permit and concession?
- 3D.** List the issues that the broad policy declaration of water resources management policy must address. What considerations should be given in the course of drafting modern water legislation in relation to existing customary uses of water?
- 3E.** List the events/ condition that may lead to emergency declaration to be included in water legislation and the measures to be taken during this period of emergency.

QUESTION FOUR (25 marks total and each question below carries 5 marks)

- 4A.** Consider the following to aspects of water resources management, i.e., i) water resources allocation and ii) issuing of water permit. Explain which modes of administration (centralization or decentralization; concentration or deconcentration) would be appropriate for each of the above two components of water management. Support your answer with adequate reasons.
- 4B.** State the definition of an international water course as adopted by the 1997 UN law on Non-Navigational uses of international Water Courses.
- 4C.** List the factors that must be taken into account in determining the extent of decentralization in water resources planning, management and administration.
- 4D.** Define and describe the different water resources institutions that may exist according to the territorial level of jurisdiction.
- 4E.** Describe the two types of water user associations and indicate the difference between the two.

QUESTION FIVE (25 marks total and each question below carries 5 marks)

- 5A.** List the possible sources of international law.
- 5B.** Describe the principle of absolute territorial sovereignty.
- 5C.** Define the following environmental principles : i) the precautionary principle ii) the stand still principle iii) BATNEEC
- 5D.** State the obligations of a water course state in relation to a plan or project that it is intending to implement on the water course. This is the obligation as stated in the 1997 UN law on Non-Navigational uses of international Water Courses
- 5E.** State article XIII of the Helisinki rules regarding navigation.