



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

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

**MAIN EXAMINATION PAPER 2020**

TITLE OF PAPER : WATER LAW AND INSTITUTIONS

COURSE CODE : EHS 438

DURATION : 2 HOURS

MARKS : 100

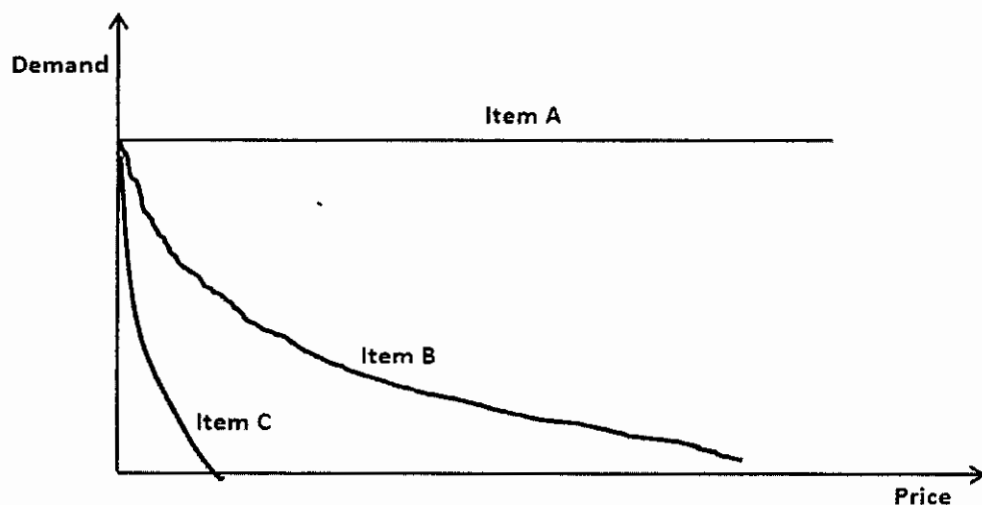
INSTRUCTIONS :

- : 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.** Describe the contents of water law and the problems that it is trying to address.
- 1B.** The variation of demand for three different items A, B and C against their respective prices is given in the table below. Compare the variation of the price elasticity of demand among the three items. State also for which of the three items economic instruments can be introduced to curb excessive consumption while optimizing economic gain.



- 1C.** List the five possible sources from which water law can be derived.
- 1D.** State the difference between general convention and special convention within the context of treaties.
- 1E.** What is customary law? Can you mention one international customary law with respect to the utilisation of international water resources?

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

- 2A.** State the three forms of acquiring water use rights.
- 2B.** What is the possible problem with the declaration that all water resources belong to the state as stated for example in the 2003 Water Act of Swaziland?
- 2C.** State the type of regulation that should be enforced as preventive measure to prevent the discharge of harmful effluents from say industries to natural water courses.
- 2D.** List the benefits of a water resources plan.
- 2E.** Define the following four forms of ownership of ground water i) absolute ownership ii) Reasonable use, iii) correlative rights iv) prior appropriation.

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

- 3A.** What aspects need to be incorporated in the water legislation with respect to the reuse of wastewater?
- 3B.** State what concession means, its applicability, validity and the difference it has with permit.
- 3C.** Under the common law doctrine, a riparian land owner sought an injunction at the court stating that an upstream land owner polluted the water by discharging wastewater from his home to a river that the person seeking the injunction is using for domestic purposes. The upstream land owner challenged the person at the court to provide any proof that harm has been caused by pollution even though he admitted the he discharges the wastewater to the river. What would be the judgement by the court in this respect?
- 3D.** State the procedure that should be followed in the granting of permit for the use of water contained in modern water legislation.
- 3E.** State a possible procedure that needs to be established for claims that may be made member of the public against a water administration.

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

- 4A.** Consider the following two 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.** Discuss the Absolute Territorial Integrity principle as an international principle in relation to sovereignty. State also how this principle affects the use of trans-boundary water resources among riparian countries.
- 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.** Discuss the main provision of settling disputes through arbitration provided in 1997 Law on Non-Navigational Uses of International Water Courses adopted by the UN member countries.

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

- 5A.** List the possible sources of international law.
- 5B.** Discuss the role of the presence of legal pluralism and of “forum shopping” related to water rights disputes. State the mechanisms that can be employed in resolving water right disputes in an environment whereby legal pluralism is present that encourages forum shopping.
- 5C.** Water rights that exist in the form of common ownership of water (*res communis omnium*) can suffer from what is commonly known as the tragedy of the commons. State and give examples how this may arise and discuss how this prevailing ancient and customary provision of community ownership be managed to minimize the effects caused by the tragedy of the commons.
- 5D.** State and give examples of the different water resources management institutions defined according to their function.
- 5E.** Discuss the difference between de-centralization and de-concentration of water resources management activities. What are the respective conditions that favor de-concentration or de-centralizations?