



*(University of Choice)*  
**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY SPECIAL/SUPPLEMENTARY EXAMINATIONS  
2018/2019 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER EXAMINATIONS**

**FOR THE  
BACHELOR OF SCIENCE  
IN  
DISASTER MANAGEMENT AND HUMANITARIAN ASSISTANCE**

**COURSE CODE: DEM 104**

**COURSE TITLE: WATER SUPPLY IN EMERGENCY AND REFUGEE SITUATIONS**

**DATE: 24<sup>TH</sup> SEPTEMBER, 2019**

**TIME: 3 – 5PM**

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**INSTRUCTIONS TO CANDIDATES**

**Answer Question ONE and Any Other TWO Questions.**

**TIME: 2Hours**

**MMUST observes ZERO tolerance to examination cheating**

**This Paper Consists of 2 Printed Pages. Please Turn Over.**

1 a) Identify the sources of water giving their advantages and disadvantages. (10 marks)

b) Explain the reasons why waste water should be treated. (10 marks)

2. Most diseases associated with water are caused by pathogens, mention and explain how these diseases are classified according to the nature of pathogens. (20marks)

3. a) State and explain the hazards preparedness measures for ensuring supply of clean water.(8marks)

b) Explain why bacteriological testing and chemical testing of water is important in water testing in emergencies.(12marks)

4. Emergencies come with several challenges including not having clean water. Explain the short and long term measures that should be taken to ensure that the refugees have access to clean water. (20 marks)

5 Water quality and quantity is essential in any emergency. What measures should be taken to ensure that both are achieved during refugee situations. (20marks).