



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya.

Tel: +254 (0)799529958, +254 (0)799529959, +254 (0)712524293

Website: www.must.ac.ke Email: info@must.ac.ke

UNIVERSITY EXAMINATIONS 2024/2025

FIRST YEAR, SECOND SEMESTER SEMESTER EXAMINATION FOR THE DEGREE OF
MASTER OF SCIENCE IN SANITATION

ECS 7153: LEADERSHIP PROGRAM FOR CITY WIDE INCLUSIVE SANITATION

DATE: JANUARY 2025

TIME: 3 HOURS

INSTRUCTIONS: Answer question *One* and any other *Two* Questions.

QUESTION ONE: COMPULSORY (30 MARKS)

(a) Explain the importance of urban sanitation in terms of the following providing specific examples to support each response.

- i. health,
- ii. the environment,
- iii. the economy,
- iv. and social well-being. (6 Marks)

(b) Discuss the key components of safely managed sanitation in urban settings and describe at least two technological innovations that contribute to improved sanitation safety. (6 Marks)

(c) Evaluate the challenges faced in achieving universal, pro-poor, and gender-inclusive sanitation in urban areas. Use real-life examples to support your analysis. (6 Marks)

(d) In relation to Citywide Inclusive Sanitation (CWIS)

- i. Describe (CWIS) (3 Marks)
- ii. explain the benefits of implementing CWIS in urban settings. (3 Marks)

(e) Regarding Developing action plan for CWIS.

- i. Outline the step-by-step process (critical stages) for developing an action plan for CWIS, (4 Marks)
- ii. Outline any two tools used in the CWIS planning process. (2 Marks)

QUESTION TWO (15 MARKS)

Analyze the impact of urbanization trends on sanitation challenges in cities. How do these trends influence the formulation of global sanitation goals like SDG 6? Provide examples to substantiate your answer.

QUESTION TWO (15 MARKS)

With reference to real-world case studies, discuss the policy and regulatory measures that have successfully promoted inclusive sanitation in urban areas. What lessons can be learned from these successes for other cities facing similar challenges?

QUESTION TWO (15 MARKS)

Explain the SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis used in CWIS planning. Illustrate how this tool aids in identifying critical factors that affect sanitation implementation in urban settings.

QUESTION TWO (15 MARKS)

Describe sustainable sanitation planning and implementation frameworks. Discuss funding mechanisms and financial strategies that support successful sanitation projects in low-income urban areas. Provide examples to illustrate your response.