



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)  
MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2022 / 2023 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER EXAMINATIONS**

**FOR THE DEGREE**

**OF**

**MASTER OF SCIENCE IN DISASTER MANAGEMENT AND  
SUSTAINABLE DEVELOPEMENT**

**COURSE CODE: DSM 802**

**COURSE TITLE: POST DISASTER RECONSTRUCTION**

**DATE: 14/4/2023**

**TIME: 8-11 AM**

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**INSTRUCTIONS TO CANDIDATES**

Answer Question **one** and any other **three** questions

**TIME: 3 Hours**

**MMUST observes ZERO tolerance to examination cheating**

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

**Question one**

- a) Explain the meaning of ‘disaster recovery’? **(2 Marks)**
- b) What is your understanding of the concept of ‘building – back – better’ as used in disaster recovery and reconstruction **(2 Marks)**
- c) Explain how implementation of national and county development plans could be causing disasters in the country **(6 marks)**
- d) Outline three macro-economic variables that would be affected by impact of drought **(6 marks)**
- e) Distinguish between damages and losses as used in post disaster needs assessment. **(4 Marks)**

**Question two**

- a) Differentiate between recovery and reconstruction **(4 Marks)**
- b) State the objectives of recovery **(6 Marks)**
- c) You have been appointed by the national government to lead a drought recovery process in Turkana County following the recent drought that affected the county from early 2022. Outline the opportunities you can seize to ensure recovery is grounded from the initial drought relief interventions while ensuring the risky drought conditions are not reproduced during the process. **(10 Marks)**

**Question three**

- a) Discuss briefly the characteristics of hazards that would cause disasters in cities and urban areas in Kenya **(8 Marks)**
- b) Vulnerability encompasses the conditions determined by physical, social, economic, and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards. Discuss using examples the socio-economic characteristics of Kenya’s urban areas and cities that make them susceptible to the damaging effect of disasters. **(12 marks)**

**Question four**

The table below is a summary of typical damages, losses and needs by sector following the 2008-2011 drought in Kenya. Use the table to answer the questions below.

Sector	Impacts (damage and losses)	Needs (Recovery and Reconstruction)	DRR needs
Agriculture	121,104.1	5,048.8	13,736.8
Livestock	699,336.2	106,379	85,103.0
Fisheries	4,163.6	1,160.3	2,991.2
Agro Industry	7,159.6	0	0
Health	4,745.7	5,099	0

Nutrition	6,699.4	225.1	130.9
Education	3,979.7	645.8	3,592.1
Energy	32,392.3	13,000	0
Water & Sanitation	88,203	17,268.3	78,627.3
Environment and Tourism, Forestry, Wildlife	784.6	7,387.9	647.5
Total			

- (a) From the table above, compute the total impacts, reconstruction and recovery and DRR needs following the 2008-2011 drought in Kenya. **(6 marks)**
- (b) Identify the sector which suffered the highest losses and give the estimated losses. **(2 marks)**
- (c) Explain the importance of information obtained from the damages and losses assessment. **(3 Marks)**
- (d) Explain the importance of Disaster Risk Reduction (DRR) needs with regard to reconstruction and sustainable development. **(3 Marks)**
- (e) Identify the potential sources for financing disaster recovery and reconstruction. **(6 Marks)**

**Question five**

- a) Examine the financial challenges that would face disaster recovery and reconstruction in developing countries. **(4 Marks)**
- b) Outline the information and data that need to be collected for recovery and reconstruction planning in the aftermath of a disaster from these sectors:
- i). Energy **(4marks)**
  - ii). Agriculture **(4marks)**
  - iii). Housing **(4marks)**
  - iv). Education **(4marks)**