

The Co-operative University of Kenya

END OF SEMESTER EXAMINATION DECEMBER-2018

**EXAMINATION FOR THE DEGREE OF BACHELOR IN DISASTER RISK
MANAGEMENT AND SUSTAINABLE DEVELOPMENT**

UNIT CODE: CODM 2405

UNIT TITLE: HAZARDOUS MATERIALS AND WASTE MANAGEMENT

DATE: DECEMBER, 2018

TIME:

INSTRUCTIONS:

- Answer question **ONE (compulsory)** and any other **TWO** questions

QUESTION ONE

- (a) Define Municipal Solid Waste in terms of source **(5 Marks)**
- (b) Briefly, describe the procedures for household waste composition analysis as a basis for planning a waste recycling program in any city. **(5 Marks)**
- (c) Using a diagram, outline the key components of an Integrated Solid Waste Management (ISWM) system. **(10 Marks)**
- (d) With examples, define Hazardous Waste (HWM) **(5 Marks)**
- (e) Explain the role of a Transfer Station in a Solid Waste Management system **(5 Marks)**

QUESTION TWO

- (a) Outline and discuss 10 major Factors to consider when selecting waste collection and transportation vehicles in a less developed country. **(20 Marks)**

QUESTION THREE

- (a) With examples, describe effective solid waste reduction strategies and technologies that may be applied by The Cooperative University of Kenya management to achieve a clean environment in the institution. **(20 Marks)**

QUESTION FOUR

- (a) Following a sequential approach, describe steps of planning and implementation of a successful solid waste recycling program for Nairobi City County. **(20 marks)**

QUESTION FIVE

- (a) Outline and explain the key environmental and social factors to consider when selecting and planning a sanitary landfill site for a city **(20 Marks)**