UO

(University of Choice)

MASINDE MULIRO UNIVERSITY OF

SCIENCE AND TECHNOLOGY

(MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

MAIN EXAMINATION

2023/2024 ACADEMIC YEAR

THIRD YEAR FIRST SEMESTER EXAMINATION

BACHELOR OF SCIENCE IN DISASTER PREPAREDNESS AND ENVIRONMENTAL TECHNOLOGY

COURSE CODE: DPE 303

COURSE TITLE: PHOTOGRAMMETRY

DATE: 11/12/2023 **TIME: 3-5PM**

Instructions to Candidates

- This paper contains FOUR (4) questions
- Question **one is compulsory {total =30 Marks}**
- Attempt **any other two** (2) {total = **40 Marks**} from the remaining questions

MMUST observes ZERO tolerance to examination cheating

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

SECTION 1: COMPULSORY {30 MARKS}

Question ONE

a) Using examples in the field of hazards and disasters, discuss the role of photogrammetry in disaster risk management. Provide diagrams where applicable **[10 Marks]**

b) Describe the time gap between research, development, and operational use in photogrammetry **[10 Marks]**

c) In the context of flood hazard mapping, what is the relationship between application of photogrammetry, remote sensing, and Geographic Information Systems [GIS]? **[10 Marks]**

SECTION II: ATTEMPT ANY OTHER TWO (2) QUESTIONS {40 MARKS}

Question TWO

Using examples, differentiate between the following

a) Geometric information and physical information **[10 Marks]**

b) Semantic information and temporal information **[10 Marks]**

Question THREE

Describe any two [2] photogrammetric products highlighting where and when they are used in the management of a forest environment **[20 Marks]**

Question FOUR

With the advancement of science and technology globally, photogrammetric cameras have benefited from the availability of high-end sensing devices for sensing and recording radiometric energy. Discuss this advancement using examples **[20 Marks]**