

## **MAASAI MARA UNIVERSITY**

### **UNIVERSITY EXAMINATIONS 2017/2018 (REGULAR)**

#### SCHOOL OF SCIENCE AND INFORMATION SCIENCES

# UNIVERSITY EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE (COMPUTER SCIENCE)

#### SECOND YEAR FIRST SEMESTER EXAMINATION

**COURSE CODE: EEM 2212** 

**COURSE TITLE: COMPUTER APPLICATION** 

DATE: 29<sup>TH</sup> APRIL, 2019 TIME: 8.30- 10.30AM

#### **INSTRUCTIONS**

Answer Question ONE and any other TWO

#### **SECTION A**

## **QUESTION ONE (COMPULSORY 30 MARKS)**

- a) What is the difference between Application Software and System Software (4 Mks)
- b) Name and explain three types of cloud models available (6 Mks).
- c) Using a well labeled diagram explain the basic concepts of GIS (6 Mks)
- d) Difference between Human and Machine Intelligence (4 Mks)
- e) Name and explain the functions of ArcGIS machine learning tools (6 Mks)
- f) Computer communication is an important aspect in information technology. Computers commonly communicate through a computer network. Answer the following questions:
  - i. What is a network? [1 Mks]
  - ii. Explain any three benefits of a network [3 Mks]

#### **SECTION B**

## **QUESTION TWO (20 MARKS)**

- a) The CPU is comprised of three main parts, name and explain the functions of the parts (3 Mks)
- b) What is a machine learning? (2Mks)
- c) Name and discuss the Importance of emerging computer trend on environmental management (6 Mks)
- d) Define and explain the difference between RAM and ROM. (3Mks)
- e) There are Two AI methods widely used in GIS, Identify and explain each giving an example (6 Mks).

## **QUESTION THREE (20 MARKS)**

- a) Computer networks are classified based on various factors, name and explain each (8 Mks).
- b) Name Three special purpose memories found either inside or outside the microprocessor and explain what each does. (6Mks)
- c) List and explain the three types of buses found in the CPU. (6Mks)

## **QUESTION FOUR (20 MARKS)**

- a) What is computer Modelling? (2 Mks)
- b) Using a well labeled diagram please explain how Modelling process works (8 Mks)
- **c)** Discuss five benefits of cloud computing on environmental management. (10Mks).

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