MAASAI MARA UNIVERSITY

UNIVERSITY EXAMINATIONS 2021/2022 (REGULAR)

SCHOOL OF PURE, APPLIED AND HEALTH SCIENCES
DEGREE OF BACHELOR OF SCIENCE (COMPUTER SCIENCE)

FOURTH YEAR FIRST SEMESTER EXAMINATION

COURSE CODE: COM 4106

COURSE TITLE: ICT AND SOCIETY

DATE: 4th APRIL 2022   TIME:2:30pm- 4:30pm

INSTRUCTIONS TO CANDIDATES

- **Question ONE in Section "A " is Compulsory**
- **Answer any Two (2) Questions from Section "B"**
- **Illustrate your answers where necessary**

QUESTION ONE

(a) Explain the following terminologies in ICT. **(5 marks)**
    (i)   Ubiquitous computing
    (ii)   Trolling
    (iii)   Biometrics
    (iv)   Augmented Reality
    (v)   White hacker

(b) Discuss FIVE (5) technologies that were adopted by citizens during the COVID-19 pandemic lockdown. **(5 marks)**

(c) Discuss the trends in the educational sector. **(10 marks)**

(d) According to the Digital Data Report of 2021, Kenya has 21.75 million Internet subscribers. Discuss reasons attributing to this amazing trend in Internet usage. **(10 marks)**

QUESTION TWO

(a) Discuss the following concepts as used in security of information systems:
    (i)   Authentication   **(2 marks)**
    (ii)   Identification   **(2 marks)**
    (iii)   Authorization   **(2 marks)**
    (iv)   Audit trails   **(2 marks)**
    (v)   Filtering   **(2 marks)**

(b) As online stores become more advanced, it is important to be aware of the potential security risks that exist. Explore the different types of security threats that come with e-commerce and give the best methods to avoid them. **(5 marks)**

(c) Discuss THREE (3) methods that can be used by parents to limit access to the Internet by minors. **(5 marks)**

QUESTION THREE

(a) Discuss FIVE (5) ways in which the government can bridge the digital divide gap. **(5 marks)**

(b) Discuss the technological trends observed in hardware and software development. **(5 marks)**

(c) As an IT expert, you have been approached by an organization that campaigns for the rights of children to give a talk on the dangers of social media. Discuss the relevant points you would put across for your talk. **(10 marks)**

QUESTION FOUR

(a) "Digital content creators should avoid posting controversial content on the Internet."

    (i) Explain what controversial content entails in content creation. **(5 marks)**

    (ii) Discuss the impact of posting controversial content. **(5 marks)**

(b) Discuss how ICT has contributed to widening the digital divide in Kenya. **(5 marks)**

(c) Discuss FIVE (5) technologies that uses a person's physical characteristics to prevent illegal access to an organizations information systems. **(5 marks)**