(University of Choice)

MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER EXAMINATIONS

FOR THE CERTIFICATE
OF INFORMATION TECHNOLOGY

COURSE CODE: ITC 013

COURSE TITLE: INTERNET APPLICATION

DATE: 14/12/2022   **TIME: 09:00-11:00AM**

INSTRUCTIONS TO CANDIDATES

Question ONE (1) is compulsory
Answer ANY other TWO (2) questions

MMUST observes ZERO tolerance to examination cheating

This paper consists of 3 printed pages. Please Turn Over

This paper consists of FIVE questions. Answer **Question ONE** and **ANY OTHER TWO.**

QUESTION ONE [24 MARKS]

a) Differentiate between the following concepts. [6 marks]

    i.   Internet and Network
    ii.   Web browser and search engine
    iii.   Dial up connection and Direct connection

b) Internet is said to be autonomous and no one owns it. Explain [2 marks]

c) TCP/IP and OSI are the most common internet reference models. Give **TWO** similarities and **TWO** differences between the OSI and TCP/IP [4 marks]

d) Define DNS and state its functions in regard to internet technologies [4 marks]

e) Given the URL **http://**www.exampledomain.com, indicate the different parts that make up the URL [4 marks]

f) Briefly describe any **TWO** Technologies employed by internet service providers in providing internet services [4 marks]

QUESTION TWO [18 MARKS]

a) Give any Two services offered by ISPs. [2 marks]

b) For complete internet connectivity, three conditions must be met. Briefly outline them [3 marks]

c) ISPs provide a variety of ways to connect to the Internet, depending on location and desired connection speed. List the factors that determine the type of technology to be used. [5 marks]

d) Internet service providers plays a vital role of connecting their clients to the internet. Discus the responsibilities that ISPs must take up with to achieve this. [4 marks]

e) Michael is an Information Technology student and would like to connect his house and the neigbourhood with internet. Describe what Michael is supposed to do to achieve this. [5 marks]

QUESTION THREE [18 MARKS]

a) Define a protocol [2 marks]

b) List any two protocols that work in each of the following scenarios. [6 marks]

    i.   Internet
    ii.   Remote access
    iii.   Electronic mail transfer

c) Give two examples in each of the following categories   [4 marks]
    i.   Web browser
    ii.   Search engine

d) Most web browsers are made is such a way that they provide the users with features to help them navigate the internet with ease. Outline the functions of a browser and briefly discus some of their features [6 marks]

QUESTION FOUR [18 MARKS]

a) The TCP/IP model is a layered suite that define how two communicating devices communicate over the internet. Name the different layers of the TCP/IP model and briefly describe them. [10 marks]

b) The TCP/IP model and the OSI Model describes how communication takes place on the internet. Discus the differences between the two models   [8 marks]

QUESTION FIVE [18 MARKS]

a) What do you understand by the term computer virus?   [2 marks]
b) Name at least 5 computer viruses known to you.   [5 marks]
c) While technology changes at a rapid pace, so do internet connections. The type of internet connection will determine how much time is spent for uploading or downloading. State four ways in which one can connect to the internet
                                    [4 marks]
d) The internet has become the most popular and influential medium in the world. It is the biggest source of information, communication, and advertising. Despite the many advantages it offers, there are also some limitations in using the internet. State and briefly explain four disadvantages of internet.
                                    [7 marks]