MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF COMPUTING INFORMATION TECHNOLOGY

DEPARTMENT OF INFORMATION COMMUNICATION

UNIVERSITY ORDINARY EXAMINATION

2020/2021 ACADEMIC YEAR

SECOND YEAR **FIRST** SEMESTER EXAMINATION FOR DIPLOMA IN INFORMATION TECHNOLOGY

UNIT CODE: SCS 054

UNIT TITLE-OPEN SOURCE SYSTEMS

DURATION: 2 HOURS

Instructions to candidates:

1. Answer question One and Any Other Two questions.

2. Mobile phones are not allowed in the examination room.

3. You are not allowed to write on this examination question paper.

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE (30 MARKS)

a) Define the following terms which are associated with open source software. (4marks)
   i. Open source software
   ii. Control version system
b) List the FOUR freedom that are guaranteed by open source software. (4marks)
c) Differentiate between copyright and copy left in terms of software licenses. (4marks)
d) Explain TWO key features of linux that make it differ from unix. (4marks)
e) Explain the function of the following linux commands. (6marks)
   i. Is
   ii. Mk dir
   iii. Cd
f) Give FOUR examples of open source software applications. (4marks)
g) Discuss TWO reasons why open source projects are successful. (4marks)

SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)
a) Discuss any FOUR open source office suiter. (8marks)
b) Explain any THREE open source software licenses. (6marks)
c) Compare the philosopher of Free Software Foundation and Open Source Community Initiative. (6marks)

QUESTION THREE (20 MARKS)

a) Discuss the comparison of open source software and proprietary software under the following areas. (12marks)
   i. Cost
   ii. Service & support
   iii. Innovation
b) Explain any THREE open source project management tools. (6marks)
c) Define the term shell as used in unix based operating system. (2marks)

QUESTION FOUR (20 MARKS)

a) Discuss THREE open source commercial organisation .(6marks)
b) Explain TWO types of open source project. (4marks)
c) Discuss FIVE ways in which governments have benefited from use open source software. (10marks)