



MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF COMPUTING AND INFORMATION TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE

UNIVERSITY ORDINARY EXAMINATION

2020/2021 ACADEMIC YEAR

**THIRD YEAR FIRST SEMESTER EXAMINATION FOR, BACHELOR OF
SCIENCE IN SOFTWARE ENGINEERING**

SCS 308– OPEN SOURCE TRENDS

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) Differentiate the following (4 Marks)
 - i. FOSS/ FLOSS
 - ii. Proprietary /Open Source Software
- b) Distinguish among : Open Free and Proprietary (6marks)
- c) According to the FSF, free software is about protecting four user freedom .Explain the four user freedom (8marks)
- d) The bazaar method of development has been proven over time to have several advantages ,discuss the advantages (4marks)
- e) According to Andrew Leonard ,why do he consider FOSS than other platforms (2marks)
- f) Explain the benefits of using FOSS in relation to solving day to day activities (6marks)

SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)

- a) The advantage of going with distribution of Linux are many, the single most important advantage of vendor Linux over “stock” Linux is that it saves users time. Explain the various users saved by them (8marks)
- b) Highlight four FOSS characteristics (5marks)
- c) Is Linux Foss? Justify your answer (4marks)
- d) Explain why should one consider open source software on other softwares (3marks)

QUESTION THREE (20 MARKS)

- a) Discuss the criteria to determine if distribution is open source (10marks)
- b) Discuss the current issues and challenges affecting the free and open source movement (10marks)

QUESTION FOUR (20 MARKS)

- a) Discuss the roles of patents and copyright in software protection (10marks)
- b) Using a table discuss any five factors affecting open source vs. proprietary (10marks)