



## TECHNICAL UNIVERSITY OF MOMBASA

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Institute of Computing & Informatics

### UNIVERSITY EXAMINATION FOR:

BBOM- BACHELOR OF BUSINESS ORGANISATION & OFFICE MANAGEMENT

EIT 4160 COMPUTER APPLICATIONS AND PRESENTATIONS I

END OF SEMESTER EXAMINATION

**SERIES:** SEPT. , 2017 Series

**TIME: 2 HOURS**

### **Question One**

a) A 5-year-old laptop with a recently formatted hard drive needs to have an operating system installed.

i) Define an operating system [2marks]

ii) Discuss five function of an operating system. [10marks]

iii) Describe TWO factors about the laptop's hardware that would influence the choice of an operating system. [4marks]

iv) A decision has been made to undertake a FULL installation of the operating system software. What are the consequences of this decision for the laptop and its users? In your answer consider other more suitable installation options. [4marks]

b) List and explain any three windows operating systems tools. [6marks]

c) Discuss any four factors one should consider when purchasing a computer [4marks]

### **Question Two**

a) A confidential file needs to be deleted from a workstation. Explain the most effective way to achieve this. [2marks]

b) Discuss the importance of the following types of computers memories [6marks]

i. Cache

- ii. ROM
- iii) Virtual memory
- c) List any two reason why a computer may slow down in performance and efficiency [4Marks]
- d) State any FOUR common operations performed during software installation. [4marks]
- e) Explain the following software installation concepts [4marks]
  - i. plug-in
  - ii. Device driver

**Question Three**

- a) Kilifi county council is in the process of outsourcing for a database system to manage its community development projects. As a community development officer provide insights on the following issues.
- i) Two softwares that can be used to develop such a system [2marks]
  - ii) Explain the purpose of data validation in a database [3 marks]
- b) Explain four reasons why an organisation should move away from manual type writing and adopt an electronic word processor [4marks]
- c) Justify any three criteria to be considered when purchasing software. [3marks]
- d) List and explain any four attributes of good information in an organisation [8marks]

**Question Four**

- a) Bit rate and bandwidth tell us about the speed of data communication. What is the relationship between bit rate and bandwidth? [4 marks]
- b) Explain the applications of the following information technology concepts [10marks]
- i. Optical Character Recognition
  - ii. Optical Mark Reader
  - iii. Magnetic Ink Character Reader
  - iv. Bar Code System
  - v. Voice Data Entry
- c) Discuss any two advantages of tailor made software's over standard application software's in an organisation. [2marks]
- d) Explain the most appropriate device an organisation can adopt for data backup [2marks]

e) Discuss the importance of a firewall in a computer system [2marks]

**Question Five**

a) Discuss the classification of computers according to generations and highlight the technology that was used in each generation. [8marks]

b) Illustrate the functional components of the CPU clear showing the flow of program instructions, flow of control and flow of data signals [6 marks]

c) Using a relevant example, illustrate the benefits of accessing the world-wide web (www) to the student community in a university? [4 marks]

d) Differentiate between system software and application software. [2marks]