**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2017/2018**

**EXAMINATION FOR THE DEGREE OF BACHELOR OF BEED (WEM, ABE, SWEE)**

**ICS 2174: INTRODUCTION TO COMPUTER SCIENCE**

**DATE: JANUARY 2018 TIME:2 HOUR**

**INSTRUCTIONS:** Answer question one (section A) and any other two questions in section B.

All questions except one carry equal marks

**SECTION A (30 MARKS)**

**QUESTION ONE**

1. State and explain any three functions of computer network. [6 marks]
2. Discuss the term system software. [3 marks]
3. All signals are originally analog. Outline the digitization process. [6 marks]
4. State and explain any three classes of operating systems functionally. [6 marks]
5. Discuss the following
6. Byte [3 marks]
7. Network administrator [3 marks]
8. Discuss the following
9. Super computer. [3 marks]
10. Pie chart [3 marks]
11. Discuss the difference between WAN and internet. [2 marks]

**SECTION B**

**QUESTION TWO**

1. Discuss the term operating systems explain its functions. [6 marks]
2. Discuss the following terms:
3. System management programs. [3 marks]
4. Utility software, [3 marks]
5. Discuss the term sequential files and explain the advantage and disadvantage. [4 marks]
6. Discuss the type of memory and functions of ROM. [4 marks]

**QUESTION THREE**

1. Supercomputers and mainframe are the fastest computers with very powerful and very fast processors currently available. State the difference between the two machines. [4marks]
2. Discuss the characteristics of digital signals. [5 marks]
3. Discuss the basic central processing unit registers. [5 marks]
4. Discuss the following terms
5. Backup utility. [3 marks]
6. Non- determinacy. [3 marks]

**QUESTION FOUR**

1. The World Wide Web (WWW or W3 commonly known as the web) is a system of interlinked hypertext documents accessed via the internet. Discuss the three main components. [6 marks]
2. Outline the difference between spreadsheet and word processor. [4 marks]
3. Explain five keyboard shortcuts of a Microsoft word processor. [5 marks]
4. Discuss any three types of computer networks. [5 marks]