W1-2-60-1-6

JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY

UNIVERSITY EXAMINATIONS 2016/2017

FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR BACHELOR DEGREE IN ACTUARIAL SCIENCES/ BACHELOR DEGREE IN STATISTICS

STA 2102: INTRODUCTION TO INFORMATION TECHNOLOGY FOR STATISTICS

<u>DATE: DECEMBER 2016</u>   <u>TIME: 2 HOURS</u>

INSTRUCTIONS:

1. Answer question ONE (section A) and any other two questions in section B.
2. All questions except question one carry equal marks

SECTION A (30 MARKS)

a) State and explain any three functions of computer network. **(6 marks)**

b) Discuss the term System software. **(3 marks)**

c) All signals are originally analog. Outline the digitization process.

         (4 marks)

d) State and explain any three classes of operating systems functionally.

         (6 marks)

e. Discuss the following
   i) Byte.
   ii) Network Administrator. **(3 marks)**

f. Discuss the following: **(3 marks)**
   i) super computer.
   ii) Pie chart. **(3 marks)**

g. Discuss the difference between WAN and Internet. **(3 marks)**

         (5 marks)

SECTION B (20 MARKS EACH)

QUESTION TWO

a) Discuss the term operating System and explain its functions.

         (6 marks)

b) Discuss the following terms
   i) System management Programs.
   ii) Utility software. **(3 marks)**

         (3 Marks)

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c) Discuss the term sequential files and explaining the advantage and disadvantage. (4 marks)

d) Discuss the type of memory and functions of ROM. (4 marks)

QUESTION THREE

a)

(i) Supercomputer and mainframe are the fastest computers with very powerful and very fast processors currently available. State the difference between the two machines (4 Marks)

(ii) Discuss the characteristics of digital signals. (5 marks)

b) Discuss the basic central processing unit registers. (5 Marks)

c) Discuss the following terms.
   i. Backup utility. (3 marks)
   ii. Non-determinacy. (3 marks)

QUESTION FOUR

a) The World Wide Web (abbreviated as 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)

b) Outline the difference between spreadsheet and word processor

(4 Marks)

c) Explain any five keyboard shortcuts of a Microsoft word processor. (5 Marks)

d) Discuss any three types of computer networks. (5 marks)

THE END