



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

UNIVERSITY EXAMINATION FOR THE

BACHELOR OF SCIENCE WATER RESOURCE MANAGEMENT

BACHELOR OF ARTS SPARTIAL PLANNING

1st YEAR 1st SEMESTER 2016 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: SCS 3111

COURSE TITLE: COMPUTER ORGANISATION AND APPLICATIONS

EXAM VENUE: STREAM: SPARTIAL PLANNING

DATE: 19/12/2016 EXAM SESSION:

TIME: 2.00 HOURS

INSTRUCTIONS:

- 1. Answer Question 1 (Compulsory) and ANY other two questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

QUESTION ONE 30 MARKS

1. Clearly define a computer (2 mks)
2. Give one reason why a computer is referred to as an electronic device (2 mks)
3. Explain the following terms as used in computer science. (8 mks)
 - i. Data
 - ii. Program
 - iii. Data processing
 - iv. Information
4. Briefly explain the 5 classification (generations) of computer according to historical development (10 mks)
5. List down four functions of the uninterruptible Power Supply (UPS) (4 mks)
6. Outline three reasons why it is important to first shut down the computer before turning it off. (4 mks)

QUESTION TWO 20 MARKS

1. Identify and explain five areas where computers are used to process data (10 mks)
2. Define the term ‘ computer laboratory’ (2 mks)
3. Give two factors to be considered when preparing a computer laboratory (2 mks)
4. Describe the ideal environment for a computer to work properly (3 mks)
5. List down three safety precautions one should observe when entering a computer laboratory (3 mks)

QUESTION THREE 20 MARKS

1. List four types of keys found on a computer keyboard, giving an example of each.(4 mks)
2. A computer must go through the process of booting/ initialization before use
 - i. Briefly explain the term “computer booting”. (2 mks)
 - ii. Explain what happens in the computer during the booting process. (6 mks)
3. Give and explain two types of booting.
 - i. Cold booting. (4 mks)
 - ii. Warm Booting. (2 mks)
4. Give two main functions of a computer input device. (2 mks)

QUESTION FOUR 20 MARKS

1. Draw, and briefly explain, a well – labeled diagram showing the functional units of computer hardware. (12 mks)
2. What is a computer bus? (2 mks)
3. State the functions of each of the following computer bus (3 mks)
4. By giving examples, differentiate between primary and Secondary Computer storage. (3 mks)

QUESTION FIVE 20 MARKS

1. Calculate the capacity in MB of a two sided floppy disk with 6 sectors per surface, and 512 bytes per sectors. (10 mks)
2. A double – sided disk contains 40 tracks on each side. The tracks are divided into 9 sectors of 512 bytes each. What is the total capacity of the disk in megabytes? (10 mks)