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**University Examinations 2014/2015**

SECOND YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGICAL SCIENCES, DEGREE OF BACHELOR OF SCIENCE IN CROP PROTECTION.

**ICS 2240: INTRODUCTION TO COMPUTERS AND DATA PROCESSING**

**DATE: DECEMBER 2014 TIME: 2 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. With the aid of a labelled block diagram, explain the four state model of a computer (7 marks)
2. Describe the applications of the computer (6 marks)
3. Explain the functions of an operating system (7 marks)
4. Differentiate between system software and applications programs (6 marks)
5. What are the examples of language translators (4 marks)

**QUESTION TWO (20 MARKS)**

1. What is a computer virus and explain how to protect a computer from virus infection

(5 marks)

1. Name and describe five input devices found in a computer system (5 marks)
2. Highlight and briefly discuss any two advancements in the second computer generation (5 marks)
3. Differentiate the two types of networks (5 marks)

**QUESTION THREE (20 MARKS)**

1. Clearly name and describe the factors affecting the speed of and performance of computer (6 marks)
2. Distinguish between digital and analog computers (6 marks)
3. Describe RAM and ROM types of main memory stating characteristics and functions of each (8 marks)

**QUESTION FOUR (20 MARKS)**

1. Describe the factors to consider when selecting a storage media (5 marks)
2. Explain why it is necessary to protect data (5 marks)
3. Briefly explain the following (10 marks)
4. On-line
5. Interface
6. Buffer
7. Port
8. Peripheral

**QUETION FIVE (20 MARKS)**

1. What is Multi-processing systems? Give their advantages and disadvantages

(8 marks)

1. Explain the different types of computer systems (7 marks)
2. Describe the uses of central processing unit component of the computer system

(5 marks)