

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF  
BACHELOR OF SCIENCE IN APPLIED COMPUTER SCIENCE**

**ACSC 111: PRINCIPLES OF COMPUTER SYSTEM MANAGEMENT**

**STREAMS: BSC (ACSC) YIS2**

**TIME: 2 HOURS**

**DAY/DATE: TUESDAY 14/04/2020**

**8.30 AM – 10.30 AM**

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**INSTRUCTIONS:**

**Answer Question 1 and any other Two**

**SECTION A: Answer all questions in this section**

**QUESTION ONE (30 Marks)**

- a) Outline the advantages of SATA over PATA. **[4 Marks]**
- b) Briefly explain any FOUR features of the USB interface **[4 Marks]**
- c) Differentiate between BIOS and CMOS. **[2 Marks]**
- d) Discuss two utilities used for disk management. One for Windows and another for UNIX/  
LINUX. **[2 Marks]**
- e) Mr Omar, a communications director at your work place complains of change in the  
performance of his PC. He says it has suddenly become slow, cant locate some files among  
other issues. Discuss any three major reasons that could cause such PC behavior. **[6 Marks]**
- f) Outline precautions that must be observed during PC assembly/ disassembly. **[5 Marks]**
- g) Discuss any two file systems compatible with the Windows OS. **[4Marks]**
- h) What are the main causes of the dreaded “blue screen”? **[3 Marks]**

**SECTION B (Answer any TWO questions from this section)**

**Question Two [20 marks]**

- a) Discuss the strategies that can be employed to fix software problems. **[6 Marks]**

- b) Explain any three types of backups. **[6 Marks]**
- c) Using a well labeled diagram, discuss the chipset, its components and functions. **[8 Marks]**

**Question Three [20 marks]**

- a) Discuss the types of hardware technologies used inside a hard drive. **[6 Marks]**
- b) You have been assigned the task to support users in the interiors of Samburu while your offices are in Nairobi. What are some of the tools you'd use to connect to their devices from the comfort of your office? **[6 Marks]**
- c) Explain the different hardware used by local networks. **[6 Marks]**
- d) What is a form factor? **[2 Marks]**

**Question Four [20 marks]**

- a) Your friend just bought a brand-new laptop with no software installed. He would like to have both LINUX and WINDOWS operating systems in the laptop. Illustrate how you would perform this task from beginning to end.
  - (i) Mention how you would prepare the hard drives. **[4 Marks]**
  - (ii) Outline the procedure of installing the Windows operating system. **[8 Marks]**
  - (iii) Outline the procedure of installing the LINUX operating system. **[8 Marks]**

**Question Five [20 marks]**

- a) Describe any three third party tools commonly used to optimize PC performance. **[6 Marks]**
  - b) Your immediate boss would like to know the advanced specifications of some computers the company recently bought. Explain two commands you would run in a windows environment to perform his task and what they exactly display. **[6 Marks]**
  - c) Using examples, discuss the commonly used commands to troubleshoot a computer network. **[8 Marks]**
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