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KIRIRI WOMEN'S UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2024/2025 ACADEMIC YEAR
FIRST YEAR, SECOND SEMESTER EXAMINATION
FOR THE DIPLOMA IN INFORMATION & COMMUNICATION TECHNOLOGY
DIT 1014 – COMPUTER MAINTENANCE AND SUPPORT

Date: 9TH December 2024
Time: 11:30AM – 1:30PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

- a) What are servers, and what roles do they play in a networked environment? (4 Marks)
- b) Discuss FOUR factors one would consider before purchasing a computer for official use. (4 Marks)
- c) Describe the TWO major components of a processor cooler assembly. (4 Marks)
- d) Differentiate between the system bus and the expansion bus. (4 Marks)
- e) Differentiate between (8 Marks)
 - i) Compiler and interpreter
 - ii) Shell and kernel
 - iii) System Software and Application Software
 - iv) Computer hardware and computer software
- f) Discuss the boot order and how you would set it in the BIOS. (2 Marks)
- g) Discuss any FOUR general strategies for supporting and resolving a computer user's problems. (4 Marks)

QUESTION TWO (20 MARKS)

- a) What are the key benefits of having comprehensive system documentation? (4 Marks)
- b) Define the term motherboard, what are the roles of a motherboard in a PC? (6 Marks)
- c) Define the term preventive maintenance, why should you develop a preventive maintenance plan? (6 Marks)
- d) Operating systems contain a number of components that are aimed at providing different functionalities to the user. Briefly describe the functions of the following using an operating system of your choice.
 - i) Kernel (2 Marks)
 - ii) Shell (2 Marks)

QUESTION THREE (20 MARKS)

- a) State FIVE functions of the kernel in an operating system (5 Marks)
- b) State the importance of the following
 - i) Regularly updating your antivirus software. How can this be achieved? (2 Marks)
 - ii) Regularly Blowing dust from your computer system. How can this be done? (2 Marks)
- c) Give four differences between the Hard Disk Drive (HDD) and Solid State Drive (SSD) (4 Marks)

- d) Explain the main reasons for assembling your own PC. (5 Marks)
- e) Explain what is a handheld computer? (2 Marks)

QUESTION FOUR (20 MARKS)

- a) Discuss any Four Components of the computer CPU (8 Marks)
- b) State the criteria one can use in selecting computer Hardware components (5 Marks)
- c) List and explain routine maintenance tasks for computer systems. (5 Marks)
- d) Differentiate between a computer system and a system (2 Marks)

QUESTION FIVE (20 MARKS)

- a) Explain the function and importance of power supplies in computers. (4 Marks)
- b) Discuss the THREE types of computer software (6 Marks)
- c) State the major advantages of backing up data in the computer using a tape drive (4 Marks)
- d) As a computer hardware technician employed at Kiriri Women University of Science and Technology, outline the various trouble shooting techniques that you can use (6 Marks)