**COMPUTER STUDIES**

**Term 1 2024 Series**

**Form One**

**Answer all the questions**

1. Define the following Terms as used in Computer studies
2. Data
* ***Raw facts that do not have much meaning to the user***
1. Information
* ***Processed data that is meaningful to the user***
1. ICT
* ***It is the integration of information and telecommunication facilities /resources to facilitate transfer of information from one point to another***

***Award 2marks each max 6***

1. Mention five examples of peripheral devices
* ***Monitor***
* ***Speaker***
* ***Mouse***
* ***Keyboard***
* ***Scanner***
* ***Microphone***
* ***Gamming pad***
* ***Touchpad***
* ***Projector***
* ***Printer***
* ***Digitizer***
* ***Camera***

***Award 1mark each max 5***

1. List five components/ devices housed within the computer system unit
* ***Fan***
* ***Heat sink***
* ***Hard drive***
* ***DVD drive***
* ***RAM modules***
* ***Expansion slot***
* ***Motherboard***
* ***CMOS battery***
* ***Processor***

***Award 1mark each max 5***

1. With an aid of a diagram state the difference between analog and digital data

|  |  |
| --- | --- |
| ***Analog***  | ***Digital***  |
| * ***Continuous in nature***
 | * ***Discrete in nature***
 |
|  |  |

***Award 2mark for description max 2***

***Award 1mark each for correct diagram max 2***

1. Give five challenges experienced by users of first generation computer
* ***Computer consumed a lot of power***
* ***Computer generate a lot of heat***
* ***Very large in size***
* ***Very slow in processing***
* ***Limited memory capacity***
* ***Unreliable due breakdown of the vacuums tubes***
* ***Limited programming capabilities***
* ***Difficult to operate***

***Award 1mark each max 5***

1. State five characteristics of fifth generation computers
* ***Massive storage capacity***
* ***Extremely fast when processing data***
* ***Superior hardware and software***
* ***Produce negligible heat***
* ***Support artificial intelligence***
* ***Relatively small in size***

***Award 1 mark each max 5***

1. Mention three hardware technology difference between first generation and third generation computers
* ***First generation computers used vacuum tubes while third generation computers used integrated circuit***.
* ***First generation computers used punch cards for input while third generation computers used keyboards***
* ***First generation computers used printouts for output while third generation computers used monitors***

***Award 1mark each max 3***

1. Mention four ways of controlling dust levels in a computer lab
* ***Placing the door mats at the entrance***
* ***Put curtains and blinders at the windows***
* ***Clean the computer lab regularly***
* ***Dust the computers and computer accessories using blower regularly***
* ***Cover the computers with dust cover while not in use***

***Award 1 mark each max 4***

1. Give four types of Keyboards
* ***Onscreen keyboard***
* ***Brailed Keyboard***
* ***Flexible Keyboard***
* ***Ergonomic Keyboard***
* ***Wireless Keyboard***
* ***Traditional Keyboard***

***Award 1 mark each max 4***

1. State the functions of the following mouse skills
2. Double click
* ***Open the selected item folder, folder or application***
1. Right click
* ***Opens the context menu, which provides operations that pertain to the menu***
1. Drag and Drop
* ***Moves a computer files folder or images from one place to another by clicking on them with the mouse and moving them across the screen.***

***Award 2 marks each max 6***

1. State five ways of enforcing security in computer laboratories established in learning institutions **(5marks)**
* ***Have grilled doors and windows***
* ***Employ security officer***
* ***Install CCTV cameras***
* ***Install Alarm systems***
* ***Use of swipe cards to restrict access by unauthorized users***
* ***Use of Biometric systems for user authentication***
* ***Use tracking system***

***Award 1mark each max 5***

1. Mention three functions of Uninterruptible Power Supply
* ***Provide temporary power when there is a power blackout***
* ***Warn the user by beeping to notify him or her about the power loss***
* ***Regulate power from unstable source***

***Award 1mark each max 3***

1. Use abacus to represent the following numbers
2. 2370



***Award 2marks for correct diagram max 2***

1. 0967

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***Award 2marks for correct diagram max 2***

1. Name three electronic pathway used by computer components mounted on motherboard to exchange signals
* ***Control bus***
* ***Address bus***
* ***Data bus***

***Award 1mark each max 3***

1. State three characteristics of Dynamic Random Access Memory
* ***DRAM is slower***
* ***DRAM is cheap***
* ***DRAM require refreshing***
* ***DRAM is constructed using Capacitors and Transistors***
* ***DRAM require more power***

***Award 1 mark each max 3***

1. List three examples of toggle keys found on a standard keyboard
* ***Num Lock***
* ***Caps Lock***
* ***Scroll lock***
* ***Insert Key***

***Award 1 mark each max 3***

1. Identify the function of each key represented by the symbols shown below
2.



* ***Move the cursor on a straight line at a specific interval***

***Award 2marks max 2***

1.



* ***Delete characters from right to left***

***Award 2marks max 2***

1. Mention five disadvantages of using computers in organizations
* ***Power dependent***
* ***Security threats***
* ***Computer breakdown***
* ***Create unemployment***
* ***High initial cost***

***Award 1 mark each max 5***

1. Why is Charles Babbage considered as the father of computers
* ***Considered as the father of computer because the idea or concept used in Analytical and difference engine were borrowed and used in developing modern computers***

***Award 2marks max 2***

1. Name three non-electronic devices used to perform arithmetic manipulations before electronic computer were invented
* ***Napier’s Bone***
* ***Abacus***
* ***Slide Rule***
* ***Pascaline Machine***
* ***Weaving loom***

***Award 1 mark each max 3***

1. State five ways of using computers in learning institutions like schools
* ***Teachers communicate with parents via email, whattapps, email and bulk sms***
* ***CCTV cameras are installed in school for security and for monitoring students***
* ***Computer program like Rolan, Spreadsheet are used to store and analyze academic data***
* ***Student do research on the internet***
* ***Computer simulation are used to carry experiments***
* ***Parents make payments via e-platform***
* ***Computer Aided learning***
* ***Computer Aided Instruction***
* ***E-learning***
* ***Prepare teaching time table using Timetabling programs***
* ***Prepare and keep books of account using accounting software***
* ***Use of Biometric systems to capture attendance***

***Award 1 mark each max 5***

1. List five input devices that capture directly from source
* ***Camera***
* ***QR code scanner***
* ***Finger Print Scanner***
* ***Optical Character Recognition***
* ***Optical Mark Recognition***
* ***Optical Barcode Recognition***
* ***Magnetic Ink Character Recognition***
* ***Magnetic Stripe Recognition***

***Award 1 mark each max 5***

1. Name three Arithmetic and Logical operations undertaken by the ALU **(6marks)**

***Arithmetic Operation***

* ***Addition***
* ***Subtraction***
* ***Multiplication***
* ***Division***

***Logical Operation***

* ***Sorting***
* ***Comparing values***
* ***Matching***

***Award 1mark each for Arithmetic operation max 3***

***Award 1 mark each for logical operation max 3***

1. State two ways in which dampness affects computers that are installed in the Laboratory
* ***High humidity may cause rusting of metallic parts of the computers***
* ***Very low humidity may cause accumulation of static electricity which is likely to damage computer circuitry***

***Award 1mark each max 2***