COMPUTER STUDIES PAPER
FORM 1
TERM 3 2017
2017

MARKING SCHEME

1. What is a computer?
   (4 marks)
   A computer is an electronic machine or device that accepts data (raw facts) from an input device, performs arithmetical and logical operations (processing) in accordance with a stored pre-defined program and finally transfers the processed data (information) to an output device.
2. Explain the three main types of computers.
   (6 marks)
   - ***Mainframe computers –*** *large computers with almost unlimited power allowing many users access to them simultaneously. They have large storage capacity and can perform calculations at very high speeds.*
   - ***Mini-computers –*** *Minicomputers were designed for use in a normal office environment, providing extensive processing power, adequate for medium sized organizations.*
   - ***Micro-computers –*** *commonly called personal computers, PCs, are the smallest computers and were intended for use in an office, fitting on a desktop.*
3. (a) Give **five** main features of second generation computers.
   (5 marks)
   - *Use of transistors*
   - *Reliable in comparison to first generation computers*
   - *Smaller size as compared to first generation computers*
   - *Generated less heat as compared to first generation computers*
   - *Consumed less electricity as compared to first generation computers*
   - *Faster than first generation computers*
   - *Still very costly*
   - *A.C. needed*
   - *Supported machine and assembly languages*

(b) Cite **three** examples of the second generation computers.
(3 marks)
- *IBM 1620*

- *IBM 7094*
- *CDC 1604*
- *CDC 3600*

- *UNIVAC 1108*

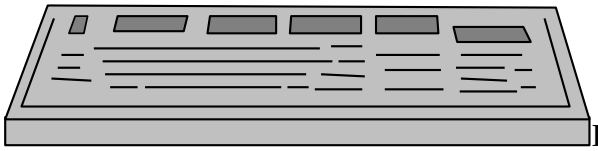
4. Explain **three** characteristics of computers.
   (6 marks)

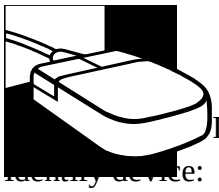
- *Speed – Computers work at incredible speeds, performing hundreds, thousands, even millions of calculations in a second.*
- *Storage and Retrieval of Information – Computers can store vast quantities of information, which they can "sift" through when so instructed.*
- *Diligence – Computers, unlike frail human beings, do not become bored or tired or lose concentration when performing highly repetitive work.*
- *Accuracy*

5. Explain **five** areas in which computer is used.
   (10marks)

- *Accounts receivable, payable, sales, purchases, nominal ledger, aged debts, balance sheets, profit and loss statements*
- *Payroll and cheque printing*
- *Stock control, finished goods, re-order highlighting, on-self reports, stock levels.*
- *Mailing lists, customer lists, letter writing, invoice reminders, credit control.*
- *Sales analysis, sales commission statements and lists, prospect highlighting.*
- *Cash flow control and analysis.*
- *Manufacturing and production control, work scheduling, time costing, shop floor loading.*
- *Order entry, sales order processing, back-order reports, credit reports, customer billing.*
- *Monitoring overdue accounts, identifying profitable and unprofitable accounts.*

6. Study the devices below and then answer questions that follow.


Device A


Device B

(a) Identify device:
(2 marks)
A – *Keyboard*
B – *Mouse*

(b) Give **one** function of:
(2 marks)
A – to key/type in information.
B – to point and click on your choice of instructions

(c) Mention any **four** skills in using device A.
(4 marks)

- *Sit upright*
- *Place the material to be typed on your left.*
- *Place both hands on the keyboards Home Keys*
- *Use all the ten fingers to start typing slowly at first.*
- *Speed will be improved gradually with a lot of practice.*

(d) Giving their functions, identify four Alphanumeric Keys found in device A. (8 marks)

- *Caps Lock key-used for changing between lower case and upper case*
- *Enter (Return) key-used to execute commands e.g. to start a new line in word processing programs.*
- *Space bar-creates a space between words when typing*
- *Backspace-deletes characters and spaces to the left of the insertion point*
- *Tab key-moves the insertion point at set intervals on the same line*

7. (a) What is a Computer Laboratory?
(2 marks)
It is a specially prepared room to facilitate installation of computers and to provide a safe conducive
environment for teaching and learning using computers.
b) State **three** factors to consider when setting up a computer laboratory.
(3marks)

- *Security of the computers*
- *Availability of stable Electric Power*
- *Number of computers to be installed*
- *Number of users to be accommodated at ago.*

8. State **five** safety precautions a computer laboratory user should observe.
(5marks)

- *They must be covered after use to avoid dust settling on the components*
- *The laboratory should be locked and fitted with burglar proof grill to prevent unauthorized access*
- *The cables should be properly insulated and laid well to avoid exposing users to electric shock and short circuit.*
- *The laboratory should have fire extinguishers in case of outbreak of fires*
- *There should be stable power supply for the computers i.e use of Uninterruptible Power Supply*

- *Storage media should be scanned before using.*
- *This will minimize the spread of computer viruses.*

9. Outline the steps followed when starting up a computer safely. (6 marks)

- *Ensure that all the cables are properly connected.*
- *Switch on main power supply.*
- *Switch on the power back up (UPS)*
- *Switch on the monitor.*
- *Switch on the system unit.*
- *Wait for the computer to finish the starting up process.*

10. Differentiate between cold and warm boot. (4 marks)