

QN1.

- a) Definition of a computer system

Is a collection or set of functional components (hardware, software, communication devices, users) working together to manage data/information.

- b) Examples of portable computing devices

- *Laptops/mini laptops*
- *Electronic calculators*
- *Digital watches/smart watches*
- *Mobile phone/ smartphone*
- *PDA*
- *Tablet/ipad*
- *Notebook/netbook*
- *Palmtop*

Qn2

- a) Storage media for the folder

Hard disk/hard disk c/ Local disk c

- b) Conversion of size of the folder

$3.15 \times 1024 \times 1024 = 3303014.4 \text{ bytes}$

Or

$3.15 \times 1000 \times 1000 = 3150000 \text{ bytes}$

- c) Identification of the subfolder where the files are stored

Desktop

- d) Path

C:\User\Student1\Desktop

QN 3

a) Qualities of a good printer

- *Good resolution/good quality output*
- *Low power consumption*
- *Produce large number of pages/printouts per minute i.e fast printing speed*
- *Compatible with computing devices*
- *Cost effective in terms of maintenance*
- *Withstand dusty environment and strong vibrations*
- *Durable*
- *large memory space*

b) use of the following devices

i. *projector*

Display / magnify/ convey/ show computer output to a wide screen

ii. *speaker*

Used to output/ produce/ give out sound or audio

QN 4

- a) *true*
- b) *true*
- c) *false*
- d) *false*
- e) *true*

QN 5

a) *Distinction between system software and application software*

System software is software that operates computer hardware and provides platform for application software to run

While

Application software are programs used to perform specific tasks for end users.

b) *Categories of system software*

- *Operating system*

- *Utility software*
- *Programming languages*

QN 6

a) Meaning of Netiquettes

Acceptable moral guidelines/ Good practices / social/social behavior when communicating on the internet/ online/ network.

b) Netiquettes of the internet

- *Remember that you are sharing with humans*
- *Adhere to the same standard of behavior online that you follow in real life.*
- *Know where you are*
- *Respect other people's time and bandwidth.*
- *Keep flame/war under control*
- *Share expert knowledge*
- *Respect other people's privacy*
- *Be forgiving for other people's mistakes*
- *Do not abuse your power.*
- *Use proper language while communicating*
- *Be clear in your communication*

QN 7

a) Full form of BIOS

Basic input output system.

b) Explanation of booting process

i. Cold booting

Is a process involving turning on or starting a computer that has been switched off.

Or

It helps in attaining the operative routine environment of the computer when it has been switched off.

ii. warm booting

Is a process of restarting/ resetting a computer which is turned on or operating.

Qn 8

(a) *Examples of word processors*

- *Ms word*
- *Abi word*
- *Word perfect*
- *Wordstar*
- *k.word*
- *lotus word pro*
- *open office.org writer*
- *wordpad*
- *google docs*
- *wps word*
- *libre office write*

(b) *Explanation of the following views in word processors.*

i. *Print layout*

Is a document view which allows the user to see and modify (Edit/format) the document.

ii. *Read/full screen view*

Is a view in which the writing tools and menus are hidden to give more room for full view of the page.

Qn 9

a) *Difference of a repeater from a switch*

A repeater is a communication device that amplifies/ rejuvenates or boosts signals due to attenuation.

While

A switch is a communication device in a network that joins devices together.

b) *Factors to consider to have a LAN*

- *Data security level*
- *Size of the organization/number of users to serve*
- *Data traffic expected*
- *Network budget/costs involved*
- *Level of administrative support involved*
- *Nature of the organization*

- *Needs of the network*

Qn10

a) Explanation for E-learning

- *Is a learning process conducted over electronic media typically on the internet.*

b) Reasons for increased E-learning facilities in educational institutions

- *Greater access to education*
- *Education needs more technology*
- *E-learning offers more and better options*
- *Cost effectiveness*
- *E-learning is fun that motivates learners*
- *Makes learning convenient*
- *Due to changes in the nature of learning*
- *Saves time*
- *Reduces risks*

Qn 11

a) Definition of information security

It is the protection of data/information against unauthorized access or destruction/loss

b) Ways of ensuring data and information security

- *Full data backup*
- *Encryption of data*
- *Installation and update of antivirus*
- *Activating firewalls at different levels*
- *user authentication/user accounts settings*
- *Use passwords/ possessed objects*
- *Data masking through shielding or covering data*
- *Audit trails as a way of continuously analyzing data*
- *Apply security monitors*
- *Log files*
- *Introduce call back systems*

- *Activating a screen saver*

Qn 12

(a) Identification of devices

Flash disk/ pendrive/memory stick

Memory card/SD card

Hard disk/ Hard disk drive

(b) Advantages of secondary storage

- *Provide larger storage space in terms of storage units*
- *Provides permanent storage/ non volatile*
- *Cheaper in terms of cost per unit of storage (cost effective)*
- *They are portable*
- *Readily available*
- *More compatible with most computing devices*
- *Facilitate data sharing*
- *Provides data backup*

Qn 13

a) Explanation of the use of the following

i. Device driver

It enables the connected hardware to communicate or configure with the operating system

ii. Screen saver

- *Provides data security*
- *Prevents/reduces phosphor burn out/ ghosting*
- *Saves energy*
- *Provides entertainment*
- *Used as advertisement platform*

b) Examples of antiviruses

- *Avast*
- *Kaspersky*
- *Norton*

- *AVG*
- *Smadav*
- *Panda*
- *F-secure*
- *Mcafe*
- *Avira*
- *360 total security*
- *Dr. Solomon tool kit*
- *Windows defender*

Qn 14

a) Full form of BCC

Blind Carbon copy

- b) Description of using Email service to do the following:
- i. Sending a file from a storage device

Option I:

- *Log into an Email account*
- *Click on compose/open*
- *Type recipient's address*
- *Click attach button*
- *Browse a file from storage device*
- *Confirm attach file*
- *Click send button*

Option II:

- *Browse a file*
- *Right click on the file*
- *Go to share*
- *Select recipient's email option*
- *Type recipient email address*
- *send*

Option III:

- *browse a file*
- *right click on the file*
- *point to “send to” and select mail recipient*
- *type sender email address and recipient’s email address*
- *select send*

ii. *send an email message you have received to another person*

- *open the received email*
- *click on forward*
- *type recipient’s email address*
- *select send*

qn 15

a) *explanation of AI*

Ability of machines to mimic/reason like/apply human intelligence

Or

Developing intelligence machines that work like human beings.

b) *Ways in which one use the GPS*

- *Navigation*
- *Locating places*
- *Mapping (map development) or plotting/measuring size of an area*
- *Travel guide*
- *Timing (precise time measurement)*
- *Monitoring/surveillance*

Qn 16

a) *Explanation of terms in database*

i) *Primary key*

A unique identifier of a record in a database table

Or

It is a field in a table which uniquely identifies a record/row in a table.

ii) *Record*

It is a collection of fields that define a given entity/entry.

b) *Examples of a database object*

- *Table*
- *Query*
- *Form*
- *Report*
- *Macro*
- *modules*

qn 17

a) *definition of communication protocol*

set of rules/procedures/guidelines that govern communication over a network or between devices.

Or

Set of instructions and standards that govern exchange of data/information on network.

b) *Examples of communication protocols*

- *TCP*
- *TCP/IP*
- *IP*
- *HTTP*
- *FTP*
- *SMTP*
- *POP*
- *IMAP*

QN 18

a) *Functions of OS*

- *File management*

- *Booting of the computer*
- *Administering computer security*
- *Computer performance management*
- *Memory management*
- *Device management*
- *Scheduling of tasks*
- *Queing/ spooling of print jobs*
- *Provision of user interface*
- *Establishment of network connection*
- *Platform for running applications*
- *Resource management*

b) *Basic components of GUI*

- *Icons*
- *Menu*
- *Buttons*
- *Dialog box*
- *Windows*
- *Desktop*
- *Pointer*
- *Toolbars*

Qn19

a) *I) meaning of wireless transmission*

Movement of signals from one device to another without physical connection/cable

Or

Transfer of data using microwaves, radio waves and infrared from one device to another.

Or

A form of transmission of signals through air or non physical media.

iii) *Examples of wireless transmission*

- *Microwave*
- *Radio wave*

- *Infrared*
- *Bluetooth*
- *Wifi*
- *Satellite*
- *Xender*
- *Share it*
- *Share me*
- *Flash share*
-
- *Cm transfer*
- *Wireless mouse*
- *Radio transmission*
- *remote control*
- *wireless modem*
- *mobile phone*
- *Wireless router*
- *Radio broadcast*

b) Benefits of wireless communication

- *Wireless media is flexible as compared to bounded media*
- *Wireless communication can take place via satellite even in remote areas that will not have high cost physical infrastructure like telephone lines*
- *Can span large geographical areas easily*
- *Provides easier extension of a network/convenient*
- *Relatively cheaper to set up and maintain*

Qn 20

a) *Ways the speed of a computer can be improved*

- *Adding more memory*
- *Adding in a large capacity hard disk or second hard disk*
- *Removing/ deleting unwanted files*
- *Uninstalling unwanted programs*
- *Upgrading or changing to the faster processor*
- *Defragment the disk*
- *compress files*
- *Closing currently open application are not in use*
- *Scanning and removing viruses*
- *Restart a computer*
- *Free up space on partition that holds the os*

b) appropriate port

- parallel port
- serial port
- network port

