

SOLUTIONS TO BEGINNING OF TERM ONE O'LEVEL 2023

SECTION A (20 MARKS)

1.	D	6	A	11	D	16	D
2.	C	7	B	12	C	17	D
3.	C	8	C	13	B	18	A
4.	D	9	B	14	C	19	B
5.	B	10	C	15	B	20	D

SECTION B

1. (a) Explain the following terms in relation to e-mail

(i) **Subject:** (01 mark)

The theme of the email message

(ii) **To:** (01 mark)

Carries the address of the recipient

(iii) **CC:** (01 mark)

Enables copies of the email message to be sent to the third party while acknowledging other recipients.

(iv) **BCC:** (01 mark)

Enables copies of the email message to be sent to the third party without acknowledging any other recipient.

(b) State **four** advantages of e-mail communication over ordinary mail. (04 marks)

- ◆ A message can be sent anywhere in the world at the price of a call, without having to leave your desk.
- ◆ Speed of delivery – the message will arrive in a few minutes and can be picked up the next time recipients look at their email.
- ◆ Ability to send to multiple recipients – the message can be sent simultaneously to a group of people.
- ◆ It is very easy to send a reply to an email as soon as it is received using a reply button.
- ◆ Large files such as spreadsheets and graphics can be sent as attachments.
- ◆ Low cost that is cheap.
- ◆ Can be used for advertising
- ◆ Assurance of whether the mail has been delivered
- ◆ No use of stamps
- ◆ It sends multimedia

(c) (i) Distinguish between **Internet** and **e-mail** (04 marks)

Internet is the worldwide collection of networks linked together while e-mail is a service that enables exchange of electronic messages over ICT devices.

(ii) What do the following terms stand for in full

FTP (01 mark)

File Transfer Protocol

TCP (01 mark)

Transmission Control Protocol

(iii) Explain briefly the FTP services (01 mark)

FTP enables large files transfer from a client computer to a remote and from a remote to a client computer.

2. (a) Identify **four** tasks one can do with a computer. (04 marks)
- ◆ E-mail communication
 - ◆ Word processing
 - ◆ Spreadsheet application
 - ◆ Statistical analysis
 - ◆ Entertainment
- Others – saving, printing, storing, manipulating data and study guides.
- (b) List any **four** requirements needed to set up a local area network (LAN). (04 marks)
- ◆ Hub or switch
 - ◆ Communication media
 - ◆ Computers
 - ◆ Routers
 - ◆ Network cards
 - ◆ Network operating system software
 - ◆ Power to run the system
- (c) State any **four** functions of an operating system. (04 marks)
- ◆ Memory management
 - ◆ Process management
 - ◆ Device management
 - ◆ File management
 - ◆ It acts as an interface between the computer user and the computer
 - ◆ Schedules jobs
- (d) List any **three** programming languages (03 marks)
- ◆ Pascal
 - ◆ BASIC
 - ◆ Java
 - ◆ FORTRAN
 - ◆ C⁺
3. (a) (i) Identify **three** precautions a web designer should consider when designing a web page. (04 marks)
- ◆ Precious content
 - ◆ Use minimal graphics
 - ◆ Consumer requirements
 - ◆ Copyright consideration
 - ◆ Take into account versions of client browsers
 - ◆ Avoid use of frames
- (ii) Why is it not good to have a lot of graphics on a web page? (02 marks)
- ◆ It may take too long to load
 - ◆ Client computer may support different color depths
 - ◆ Takes a lot of space
- (b) List **four** qualities of a good web page. (04 marks)
- ◆ it should load quickly
 - ◆ should have feed backs
 - ◆ should have a web page title and a brief summary about the page
 - ◆ should have resources to other resources
 - ◆ it should have date of last update
 - ◆ should have good navigation buttons

(c) Give **three** advantages of Optic fibre cable over UTP (unshielded twisted pair) (06 marks)

- ◆ it is more resistant to external interfaces
- ◆ it transmits more data – supports large band width
- ◆ fast data transmission
- ◆ the signal is not attenuation that is signal strength remains constant.

4. (a) (i) What is **an application package**? (02 marks)

Application package is a user software program designed to accomplish a given task.

(ii) What is a **custom made package**? (02 marks)

It is an application program designed to meet clients' particular needs.

(b) (i) Distinguish between **custom made** and **off shelf application packages**. (02 marks)

A custom made is developed to meet particular needs for end users whereas off-shelves are of general nature and solve needs which are common in nature such as word processing and spreadsheets.

(ii) State **three** advantages of off shelf packages. (03 marks)

- ◆ Better documentation
- ◆ More standardized
- ◆ Larger number of users
- ◆ Fewer modifications
- ◆ Relatively inexpensive
- ◆ Readily available
- ◆ They can be customized
- ◆ Have less errors

(iii) State **two** disadvantages of off shelf packages. (02 marks)

- ◆ Lock into software vendors
- ◆ Inflexibility in the application package

(c) (i) What is **word processing**? (01 mark)

It is a process where text is manipulated to form documents and reports.

(ii) List **three** word processing application packages. (03 marks)

- ◆ Word perfect
- ◆ Word star
- ◆ Microsoft word
- ◆ Lotus Ami pro
- ◆ Word pad

5. (a) (i) What is a **virus**?

(01 mark)

It is a program that copies its self onto files or programs and destroys software and the entire computer system.

(ii) Outline the **four** common ways in which viruses are spread.

(04 marks)

- ◆ Opening an infected file
- ◆ Running an infected program
- ◆ Use of the infected diskette
- ◆ Through internet/e-mail
- ◆ Use of infected hard disks
- ◆ Through free ware/share ware
- ◆ Starting up a computer with an infected floppy disk.

(b) State **four** ways used to protect your computer against viruses.

(04 marks)

- ◆ Discouraging use of external diskettes
- ◆ Installing Up to date antivirus program version
- ◆ Write protect the recovery disk before using it
- ◆ Backup the important files regularly

(c) (i) Name any **three** virus scanning software.

(03 marks)

- ◆ Norton antivirus
- ◆ NOD32
- ◆ Thunder byte
- ◆ AVG
- ◆ F-secure
- ◆ Kaspersky

(ii) List any **three** symptoms of computers with a virus

(03 marks)

- ◆ Computers may freeze
- ◆ Computers may be rude
- ◆ Corrupted files
- ◆ A computer may fail to solve or accessing a file to save
- ◆ Failure to do print jobs

6. (a) State **four** major characteristics of the third generation computers. (04 marks)

- ◆ They used integrated circuits
- ◆ Magnetic disk was developed during this period for storage purposes
- ◆ Computer memory expanded to 2 megabytes of RAM
- ◆ Speed accelerated to 5 million instruction per second.
- ◆ Use of parallel processing
- ◆ Development of microprocessors

(b) What do you understand by the following terms?

(i) **Command line interface**

(02 marks)

With command line interface, a user types keywords or press special keys on the key board to enter data and instructions.

(ii) **Graphical user interface**

(02 marks)

A graphical user interface allows a user to use menus and visual images such as Icons, buttons and other graphical objects to issue commands.

(iii) **Mechanical computers**

(02 marks)

Mechanical computers are computers composed of mainly movable parts that is wheels and axles.

(c) Give **two** examples of operating systems with the following

(i) **Command line interface**

(02 marks)

- ◆ UNIX
- ◆ LINUX
- ◆ Susie Linux
- ◆ Novel Netware

(ii) Give **two** examples of electro- mechanical computers.

(02 marks)

- ◆ Leibniz calculator
- ◆ Analytical engine