



SECTION A (One mark each)

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

SECTION B (60 MARKS)

21. (a) *— represent data using physical quantities*
Analog computers use a continuous signal for its operations whereas a digital computer uses a discrete signal for its operations. *Binary digits.*
(2 marks)

- (b) Characteristics of third generation computers.

- used integrated circuits for processing. *— Introdc of mini computer*
- used semi-conductor memory
- Small size than previous generation
- use of high level programming languages
- improved faster operations and more dependable output.
- ~~Used~~ *Used magnetic disks for storage.*
- *Networking*
- *Parallel processing*
- *Introdc of OS*
- *Use of keyboards for input and monitor for output.* (3 marks)

- (c) (i) Qualities of good information

- Precise and concise *— Accuracy*
- Relevant *— Clear source*
- Effective *— Complete*
- Feedback *— upto date*
- *Clear* *— worthy the cost*
- *Timely*
- *Accessibility*
- *Error free source.*
- *Organised.* (3 marks)

- (ii) Examples of data (2 marks)

- Numbers e.g. 1, 0
- Letters *characters*
- *Image*
- *Symbols*
- *Musical notes*
- *c*

- (ii)
- ~~HTTP~~
 - ~~DHCP~~
 - ~~HTTPS~~
 - ~~SMTP~~
 - ~~POP~~
 - ~~IMAP~~
 - TCP/IP
 -
 -

(b) (i) Elements of a good website (3 marks)

- Have feedback
- Load very quickly
- Webpage title
- Have ~~links~~ ^{Active} links
- Date of last update
- Navigation buttons
- Information accessibility
- Relevant content
- Relevant graphics

(ii) Benefits of website (2 marks)

- Communication
- Advertisement
- Study purposes (E- learning)
- E-commerce
- E-banking
- E-registration

(a) (i) End note (2 marks)

A feature that allows you to work with word to insert citations and references into your document.

(ii) Line spacing (2 marks)

Refers to the space left between lines in a paragraph.

(b) (i) Transaction looping (2 marks)

It allows you to display each slide automatically for a certain amount of time which you can determine.

(ii) Slide master (2 marks)

Refers to the top slide in a hierarchy of slides that stores information about the themes and slide layouts of a presentation.

- A single slide that controls all other slides in a given presentation.

(iii) Slide layout (2 marks)

This contains formatting positioning and place holder boxes for all the content that appears in a slide.

26. (a) Advantages of GUI over CLI (3 marks)
- One can memorize commands in CLI one has to memorize commands.
 - CLI is easier to use compared to CLI interface.
 - Under GUI, one can edit the configurations manually unlike in CLI.
 - GUI has an impressive display compared to CLI display which is dull.
 - GUI is user friendly.
 - GUI is similar to any application.
- (b) (i) to compress a file (2 marks)
- Makes it easier to store documents as they take up less space and will be easier to open later as well.
- Reduce transmission time.
- (ii) To back up a file (2 marks)
- Create a copy of data that can be recovered in the event of primary data failure or secure important files from data loss.
- (c) (i) Source code (1 mark)
- Instruction which the a programmer writes in a high level programming language.
- (ii) Object code (1 mark)
- Set of instructions that have been converted by a compiler into binary form.
- (iii) Syntax (1 mark)
- Rules that define the structure of a language.
 - Rules that control the structure of the symbols, punctuation and words of a programming language.
- Set of grammatical rules used in programming
- SECTION C (20 MARKS) Attempt only one question

27. (a) Indicators of a computer system failure
- Noisy hard drive
 - Regular boot errors
 - Poor software performance
 - Poor hardware performance
 - Loud system fan
 - Hardware conflicts
 - File and program corruption
 - Constant freezing.
 - Communication failure between devices and OS.
 - Over heating.
 - Accidental loss of files.

- (b)
- Use of surge protector to control over and under voltage
 - Connecting uninterruptible power supply to the computer for additional electrical protection.
 - Files should be backed up regularly to prevent data loss caused by system failure.
 - Use of anti-virus
 - Restoring backed up files to their original locations on the computer
 - Backup files should be kept in a fire proof, treat proof safe or offside.
- Educating users.*
- Proper shutting down of computers.
- Any 5 x 2 marks

28. (a) LAN set up (10 marks)

- Switch
 - Router
 - Hub
 - NIC
- Networking devices.*
- Ensure that the user has a computer system in place ^{to} connect the computer to the networking devices through a networking cable.
 - Connect the network cables to several computers.
 - Configure the computers
 - Ensure that the computers can easily communicate with other computers.

(b) Limitations of a computer Network.

- Security issues
- High initial costs
- Moral and cultural effects
- Spread of terrorism
- Over reliance on networks
- *High rate of technical support.*
- *Limits face to face interactions.*
- *High dependence on the computer server.*

Any 5 X 2 marks

29. (a) - use of test data which subjects the new program to a real work challenge.

- Compilation
- Debugging utilities
- Dry-run / test check or walk.
- *Manual code review*
- *Syntax error analysis*
- *Static code analysis*
- *Use of automated test tools.*
- *Unit testing.*

(6 marks)

- (b)
- Portable; Machine independent and able to run on different operating systems.
 - Error checking: ability to check errors or bugs and correct them.
 - Affordable: in terms of costs and maintenance.

- With familiar notation: should have familiar notation so that it can be understood by most programmers.
- Efficient: ability to implement a command with few lines of code and acquire as a little space in memory as possible.
- Clear and simple: must be simple to learn and use.
- *User friendliness .*
- *Reuser ability .*

(8 marks)

(c)

#include <stdio.h>

int main()

{print f("Balibaseka\n");

Printf("Charles Abdullatif");

~~ge + ch (-);~~

} return 0;

}

END

(01 mark)

(01 mark)

(01 mark)

(01 mark)

(01 mark)

(01 mark)

V/B

Surname = input ("Mulungi: ")

givenname = input ("Pauline: ")

Print ("Surname: ", Mulungi)

Print ("Givenname: ", Pauline)