CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

WEDNESDAY: 23 April 2025. Morning Paper.   **Time Allowed: 2 hours.**

This paper consists of fifty (50) Multiple Choice Questions. Answer ALL questions by indicating the letter (A, B, C or D) that represents the correct answer. Each question is allocated two (2) marks. Do NOT write anything on this paper.

1.   Which one of the following keyboards does not have physical keys but instead relies on touch or gestures?
     A.   Mechanical Keyboard
     B.   Virtual Keyboard
     C.   Ergonomic Keyboard
     D.   Wireless Keyboard   (2 marks)

2.   What does the acronym **OCR** stand for in the context of document scanning?
     A.   Optical Character Recognition
     B.   Optical Code Reader
     C.   Obtuse Character Reader
     D.   Optical Code Recognition   (2 marks)

3.   When a file is deleted from a computer it is _____.
     A.   permanently removed from the hard drive
     B.   moved to a temporary storage area
     C.   converted into a different file format
     D.   archived for future recovery   (2 marks)

4.   Which one of the following types of printers uses a ribbon and pins to create characters on paper?
     A.   Laser Printer
     B.   Thermal Printer
     C.   Dot Matrix Printer
     D.   Multi-functional Printer   (2 marks)

5.   Which one of the following types of memory is used in laptops?
     A.   SIMM
     B.   DIMM
     C.   SODIMM
     D.   SOSIMM   (2 marks)

6.   Which one of the following options is an example of a high-level programming language?
     A.   C++
     B.   Assembly Language
     C.   Machine Code
     D.   Binary Code   (2 marks)

7.   In a batch operating system, jobs are processed _____.
     A.   one at a time in a continuous loop
     B.   as they arrive in real-time
     C.   in groups without manual intervention
     D.   based on user interaction   (2 marks)

8. A modem is used to _____.
   A. connect devices in a LAN
   B. convert digital signals to analog signals and vice versa
   C. forward data packets to their destination
   D. extend the range of a network   (2 marks)

9. The function of a folder in a file system is to _____.
   A. execute applications
   B. store multiple files and other folders
   C. compress files
   D. delete files   (2 marks)

10. Which one of the following generation of computers used transistors?
    A. First generation
    B. Second generation
    C. Third generation
    D. Fourth generation   (2 marks)

11. Which one of the following terminologies is **NOT** a component of database systems?
    A. Procedure
    B. Hardware
    C. Software
    D. Networks   (2 marks)

12. In the fetch-decode-execute cycle, the central processing unit (CPU) obtains instructions from the _____.
    A. storage device
    B. main memory
    C. circuit board
    D. control unit   (2 marks)

13. Which one of the following terminologies is **NOT** a file attribute?
    A. File name
    B. File size
    C. Security
    D. Location

14. Which one of the following features enables videos to play back-to-back one after another?
    A. Captioning
    B. Streaming
    C. Autoplay
    D. Background   (2 marks)

15. Which one of the following protocols is used for emails?
    A. TFTP
    B. IMAP
    C. HTTP
    D. DHCP   (2 marks)

16. The device which allows a user to input handwritten or drawn images into a computer is known as _____.
    A. Scanner
    B. Keyboard
    C. Webcam
    D. Graphics tablet   (2 marks)

17. _____ is used to display slideshows or presentations in a large format.
    A. Printer
    B. Plotter
    C. Projector
    D. Speaker   (2 marks)

18. Which one of the following documents is for backing storage media?
    A.   Register
    B.   Cache Memory
    C.   Optical Disk
    D.   Main Memory (RAM)   (2 marks)

19. Which one of the following action refers to the function of the "Tab" key on a computer keyboard?
    A.   Create a tab in a document
    B.   Move the cursor to the next cell in a table
    C.   Open a new browser tab
    D.   Complete a form field   (2 marks)

20. The purpose of device management in an operating system is to _____.
    A.   allocate CPU time to different processes
    B.   manage user interface components
    C.   control access to hardware devices
    D.   control access to files and directories   (2 marks)

21. Which one of the following utility software is designed to remove unwanted or unnecessary software from a computer?
    A.   Firewall
    B.   Uninstaller
    C.   File manager
    D.   Image editor   (2 marks)

22. Which one of the following statements is **TRUE** about assembly languages?
    A.   They are easy for programmers to read and write
    B.   They are primarily used for web development
    C.   They are platform-dependent
    D.   They are automatically converted to machine code by the computer   (2 marks)

23. The disk which allows for both reading and writing of data is known as _____.
    A.   CD-ROM
    B.   CD-R
    C.   CD-RW
    D.   DVD-ROM   (2 marks)

24. The network topology which allows each device to connect directly to every other device is known as _____.
    A.   Star
    B.   Ring
    C.   Bus
    D.   Mesh   (2 marks)

25. A network topology characterised by a central hub or switch that connects all devices together is known as _____.
    A.   Mesh
    B.   Ring
    C.   Bus
    D.   Star   (2 marks)

26. A network that connects computers and devices within a specific geographic location, such as a city is known as _____.
    A.   Local Area Network (LAN)
    B.   Metropolitan Area Network (MAN)
    C.   Wide Area Network (WAN)
    D.   Wireless Local Area Network (WLAN)   (2 marks)

27. Encryption is a _____.
    A.   process of hiding a network's IP address
    B.   method of ensuring data confidentiality by converting it into unreadable form
    C.   process of creating a virtual network within the physical infrastructure
    D.   technique for increasing the speed of data transmission over a VPN   (2 marks)

28. Which one of the following devices amplifies and regenerates signals to extend the length of a network connection?
    A. Hub
    B. Repeater
    C. Switch
    D. Gateway (2 marks)

29. Which one of the following types of computer is small in size and designed for individual use?
    A. Supercomputers
    B. Mainframe computers
    C. Minicomputers
    D. Microcomputers (2 marks)

30. In relation to personal computers, the term "BIOS" stands for _____.
    A. basic Input/output System
    B. binary Input/output Software
    C. backup Internal Operating System
    D. bootable Input/output Setup (2 marks)

31. Which one of following components of the central processing unit (CPU) is responsible for executing instructions?
    A. Arithmetic Logic Unit (ALU)
    B. Control Unit
    C. Register
    D. Cache Memory (2 marks)

32. A unit of measurement that is used to indicate the clock speed of a processor is known as _____.
    A. Megabytes (MB)
    B. Gigabytes (GB)
    C. Hertz (Hz)
    D. Volts (V) (2 marks)

33. Which one of the following terms is **NOT** an important file attribute used in an operating system?
    A. Location
    B. Size
    C. Medium
    D. Protection (2 marks)

34. Which one of the following statements **BEST** describe the term placeholder as used in a presentation software?
    A. A feature that allows a user to add movement and effects to objects on a slide
    B. A predesigned slot for different contents like texts, images, and videos on a slide
    C. A special visual effect applied to a complete slide and only seen as one slide moves to the next
    D. A pre-defined combination of fonts, colours, background and other visual effects that can be applied to a presentation to improve its visual appeal (2 marks)

35. The main part of a desktop computer that contains all of the main electronic components is known as _____.
    A. system unit
    B. motherboard
    C. central processing unit
    D. power supply unit (2 marks)

36. Which one of the following statements **BEST** describe the function of graphical elements in a graphical user interface (GUI)?
    A. To enable users to drag and drop files, icons, or other elements to perform actions like moving files or organising desktop icons
    B. To provide a list of options for users to choose from
    C. To support various pointing devices like mice, trackballs, touchpads, and touchscreens
    D. To enhance user-friendliness and provide an intuitive way to navigate an operating system or software (2 marks)

37. Which one of the following terms is **NOT** a type of computer memory?
    A. Flash disk
    B. Cache
    C. BIOS
    D. RAM   (2 marks)

38. Which one of the following hardware is **NOT** a computer output device?
    A. Headphones
    B. Projector
    C. Scanner
    D. Plotter   (2 marks)

39. A chart is a graphical and visual representation of data. In Ms Excel, there are different kinds of charts. Which one of the following charts is useful when there is only one data series and none of them are zero or less than zero?
    A. Line
    B. Bar
    C. Area
    D. Pie   (2 marks)

40. Which one of the following devices is **NOT** a type of printer?
    A. Water jet
    B. 3D
    C. Thermal
    D. Dot Matrix   (2 marks)

41. The purpose of Random-Access Memory (RAM) in a computer is to _____.
    A. store the operating system
    B. store temporary data
    C. store permanent data
    D. control input/output operations   (2 marks)

42. The process of encoding data on disk drives in a compact form that reduces storage volume requirements is known as ____.
    A. compression
    B. defragmentation
    C. scanning
    D. partition   (2 marks)

43. The purpose of file sorting is to _____.
    A. organise files in a logical order
    B. randomly arrange files
    C. increase file size
    D. delete files   (2 marks)

44. Which one of the following statements explains the difference between "data" and "information"?
    A. Data is qualitative while information is quantitative
    B. Data is raw facts and figures while information is processed data
    C. Data is subjective while information is objective
    D. Data is static while information is dynamic   (2 marks)

45. Which one of the following characteristic ensures that information provides a full picture of the topic being discussed?
    A. Timeliness
    B. Accuracy
    C. Completeness
    D. Relevance   (2 marks)

46. Which one of the following statements **BEST** describes a type of system that puts the user into direct conversation with the computer through a keyboard?
    A. Batch processing
    B. Time sharing
    C. Real time processing
    D. Interactive computer   (2 marks)

47. The main function of the motherboard in a computer is _____.
     A.   storing data and applications
     B.   connecting and allowing communication between all other components
     C.   providing internet connectivity
     D.   running software programs   (2 marks)

48. Which one of the following names is **NOT** a type of computer on the basis of operation?
     A.   Digital
     B.   Remote
     C.   Hybrid
     D.   Analog   (2 marks)

49. Which one of the following statements describes the **MAIN** purpose of the "BIOS" in a computer?
     A.   Storing and accessing data quickly
     B.   Providing internet connectivity
     C.   Rendering graphics for video games
     D.   Controlling the computer's basic operations and boot process   (2 marks)

50. Which one of the following statements is **NOT** classified as an inside threat to cyber security?
     A.   Physical theft
     B.   Power outages
     C.   Information leakage
     D.   Data entry errors   (2 marks)

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CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 3 December 2024. Morning Paper.   **Time Allowed: 2 hours.**

This paper consists of fifty (50) Multiple Choice Questions. Answer ALL questions by indicating the letter (A, B, C or D) that represents the correct answer. Each question is allocated two (2) marks. Do NOT write anything on this paper.

1.   In a spreadsheet, the equation designed by a user is known as _____.
     A.   a formula
     B.   an expression
     C.   an argument
     D.   a function   (2 marks)

2.   Which one of the programming languages is non-procedural and allows a programmer to define what has to be done instead of how the task is to be completed?
     A.   Machine
     B.   Low level
     C.   High level
     D.   Fourth generation   (2 marks)

3.   Which one of the following statements **BEST** defines the term software version?
     A.   Set of digits that represent the release date and specific changes to the program
     B.   Software update that resolves a security issue or otherwise that impacts an organisation's assets
     C.   The distribution of the final or latest of a software to the users
     D.   Set of high-level criteria that defines when a product increment is complete   (2 marks)

4.   Which one of the following advantages applies to a mouse?
     A.   Requires a flat and open surface
     B.   Heavily relies on a battery
     C.   Requires very little training
     D.   There is need for human interventions to act and react   (2 marks)

5.   Which one of the following types of software enables communication between an operating system and peripheral devices?
     A.   Device driver
     B.   Utility software
     C.   Firmware
     D.   Language translator   (2 marks)

6.   Which one of the following printers produces a single page print in one pass?
     A.   Dot matrix printer
     B.   Laser printer
     C.   Chain printer
     D.   Line printer   (2 marks)

7.   Which one of the following computer memories can be programmed only once after manufacturing?
     A.   EPROM
     B.   ROM
     C.   PROM
     D.   EEPROM   (2 marks)

8. Which one of the following statements about CD-RW discs is **TRUE**?
   A.   They can be written to only once
   B.   They are not rewritable
   C.   They can be rewritten multiple times
   D.   They require a special player to read   (2 marks)

9. Which one of the following benefits applies to a Command Driven Interface?
   A.   It requires less memory
   B.   It allows for more complex operations
   C.   It is easier for novice users
   D.   It relies heavily on graphical representations   (2 marks)

10. Which part of a worksheet in a spreadsheet is used to display the address of the active cell, range or object selected?
   A.   Menu bar
   B.   Name box
   C.   Title bar
   D.   Formula bar   (2 marks)

11. A hardware device that allows a computer to be connected to an external network is known as a _____.
   A.   network interface card
   B.   switch
   C.   repeater
   D.   router   (2 marks)

12. Which one of the following types of operating systems is used in mobile phones?
   A.   Windows 10
   B.   Mac OS
   C.   Symbian
   D.   Google Chrome   (2 marks)

13. The feature that allows computer users to perform calculations using formulae in a spreadsheet program is referred to as _____.
   A.   autocomplete
   B.   conditional formatting
   C.   function library
   D.   pivot table   (2 marks)

14. The software created by people who are willing to give it away for the satisfaction of sharing or knowing they helped to simplify other people's lives is known as?
   A.   Freeware
   B.   Shareware
   C.   System software
   D.   Antivirus   (2 marks)

15. Which one of the following presentation software features enables a user to align objects on a slide?
   A.   Pixels
   B.   Guides
   C.   Plasma
   D.   Slates   (2 marks)

16. Which one of the following word processing features allows a computer user to create a list of document headings that update automatically when changes are made?
   A.   Reference table
   B.   Index catalogue
   C.   Table of contents
   D.   Abstract catalogue   (2 marks)

17. Which one of the following features of accounting software helps in tracking money owed by customers?
   A. Accrued expenses
   B. Accounts payable
   C. Accrued receivable
   D. Accounts receivable (2 marks)

18. Which one of the following areas is a way of using computers at home?
   A. For entertainment
   B. For automatic diagnosis of diseases
   C. For sales forecasting
   D. For creating commercial publications (2 marks)

19. Which one of the following statements gives the purpose of a file extension?
   A. To determine the file's physical location
   B. To identify the file's owner
   C. To indicate the file's content or format
   D. To prevent unauthorised access to the file

   (2 marks)

20. Which one of the following is a type of user account that allows computer users to change system settings that do not affect other users or the security of the computer?
   A. Administrator account
   B. Standard user account
   C. Guest account
   D. Remote account (2 marks)

21. Which one of the following statements is **TRUE** about information?
   A. It is unprocessed facts and figures
   B. It does not make sense to the user
   C. It can be used to make decisions
   D. Accuracy and timeliness are not important (2 marks)

22. Which one of the following types of systems is **BEST** defined as an integrated system that is formed as a combination of computer hardware and software for a specific function?
   A. Digital
   B. Mainframe
   C. Analogue
   D. Embedded (2 marks)

23. Which one of the following media is a twisted 4 pair sheathed copper wire cable that can support data transfer rates of up to 1 gigabits (1,000 megabits)?
   A. Cat 5 cable
   B. Cat 6 cable
   C. Fibre optic cable
   D. Coaxial cable (2 marks)

24. Which one of the following devices is a type of router that is designed for high throughput, low latency and reliability to handle the massive traffic in backbone networks?
   A. Edge router
   B. Distribution router
   C. Core router
   D. Access router (2 marks)

25. Which one of the following statements **BEST** describes the purpose of a firewall in network security?
   A. To increase network speed
   B. To block unauthorised access
   C. To store backup data
   D. To manage network traffic (2 marks)

26. Which one of the following network topologies has direct connection to every other node creating redundant and robust network structure?
    A.   Ring
    B.   Bus
    C.   Mesh
    D.   Star   (2 marks)

27. The critical component in a computer system that is responsible for interpreting and executing most of the commands is known as _____.
    A.   system unit
    B.   power supply unit
    C.   central processing unit
    D.   backing storage device   (2 marks)

28. A quick-repair job to a software designed to resolve functionality issues, improve security or add new features is known as _____.
    A.   patch
    B.   upgrade
    C.   debug
    D.   code   (2 marks)

29. Which one of the following features is an advantage of using pre-written software?
    A.   Greater flexibility and customisation options
    B.   More control over the software's functionality
    C.   Lower cost and quicker implementation
    D.   Better compatibility with other applications   (2 marks)

30. Which one of following data security goals ensures that data is not altered without the permission of the owner?
    A.   Data confidentiality
    B.   Data integrity
    C.   Non-repudiation
    D.   Data availability   (2 marks)

31. Which one of following network components converts digital data from a computer to an analogue signal for transmission over telephone lines?
    A.   Hub
    B.   Modem
    C.   Router
    D.   Multiplexer   (2 marks)

32. Which one of the following statements is a reason why plotters are still being used despite the availability of high quality printers?
    A.   Plotters are more affordable than printers
    B.   Plotters offer better accuracy and precision for large drawings
    C.   Printers cannot handle graphical outputs
    D.   Plotters have faster printing speed than printers   (2 marks)

33. Which one of the following is an advantage of fibre optic cables over traditional copper cables?
    A.   Lower cost
    B.   Higher bandwidth
    C.   Simplicity of installation
    D.   Flexibility   (2 marks)

34. Which one of the following statements is a characteristic of Random Access Memory (RAM)?
    A.   It is non-volatile
    B.   Its capacity can be increased
    C.   It forms a minor portion of computer memory
    D.   Data can only be read from it but cannot be written on it   (2 marks)

35. Which one of the following Microsoft Excel functions can be used to find the lowest score by students in the mathematics paper?
A. Max()
B. Min()
C. Average()
D. Low() (2 marks)

36. Which one of the following statements **BEST** describes the process of starting a computer and loading the operating system?
A. Activating
B. Booting
C. Rebooting
D. Restarting (2 marks)

37. Which one of the following computer network evaluation factors measures the number of units of information that a network can process in a given amount of time?
A. Reliability
B. Speed of transmission
C. Throughput
D. Latency (2 marks)

38. What is the function of the 'Esc' key in the slide show mode in a PowerPoint presentation?
A. To start the slide show
B. To exit the slide show
C. To edit the slide
D. To print the presentation (2 marks)

39. Which one of the following types of network topologies is characterised by network devices connected to a single hub through a cable?
A. Star topology
B. Mesh topology
C. Ring topology
D. Bus topology (2 marks)

40. Which one of the following statements describes the purpose of disk defragmentation utility?
A. Scanning for viruses and malware
B. Creating backups of files
C. Organising disjointed data on the hard drive
D. Compressing files to save disk space (2 marks)

41. FORTRAN, BASIC and COBOL are examples of _____.
A. high level programming languages
B. low level programming languages
C. assembly languages
D. application software (2 marks)

42. Which one of the following security measures **BEST** describes the data security process that enables organisations to manage who is authorised to manipulate corporate data and resources?
A. Encryption
B. Access control
C. Authorisation
D. Filtering (2 marks)

43. The main part of a computer that contains all the essential hardware components is known as _____.
A. system unit
B. monitor
C. processor
D. power supply (2 marks)

44. Which one of the following is measured using "dots per inch"?
    A. Screen size
    B. Data speeds for modems
    C. Resolution of an image
    D. Processing speed (2 marks)

45. A detailed document that outlines how an organisation responds effectively to an unplanned incident and resume business operations is known as _____.
    A. disaster recovery plan
    B. software development plan
    C. backup strategic plan
    D. maintenance strategy (2 marks)

46. Which one of the following file systems allows files to be stored across multiple locations, yet accessed as if they were on a local system?
    A. Hierarchical file system
    B. New technology file system
    C. Distributed file system
    D. Extended file allocation table (2 marks)

47. Which one of the following control measures is **MOST** effective in mitigating the risk of a ransomware attack?
    A. Turn off automatic system server updates
    B. Regular data backups and offline storage
    C. Disabling antivirus software for 24 hours
    D. Using one strong password for all accounts (2 marks)

48. Which one of the following statements describes the role of a switch in a Local Area Network (LAN)?
    A. Filters and forwards data packets
    B. Provides internet access
    C. Encrypts data
    D. Connects different networks (2 marks)

49. A person who writes computer software for running the hardware of a computer is called a _____.
    A. systems analyst
    B. programmer
    C. systems designer
    D. data processor (2 marks)

50. The fundamental concept in modern computing which allows a system to use more memory than what is physically available on the machine is known as _____.
    A. virtual memory
    B. random access memory (RAM)
    C. read only memory (ROM)
    D. cache memory (2 marks)

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CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 20 August 2024. Morning Paper.   **Time Allowed: 2 hours.**

This paper consists of fifty (50) Multiple Choice Questions. Answer ALL questions by indicating the letter (A, B, C or D) that represents the correct answer. Each question is allocated two (2) marks. Do NOT write anything on this paper.

1.   The origin of all the different generations of computers is characterised by a significant technological development in their components. Which computer generation first used Integrated Circuits (ICs)?
      A.   Second
      B.   Fourth
      C.   First
      D.   Third   (2 marks)

2.   Identify the network topology shown in the diagram below.

      A.   Ring
      B.   Tree
      C.   Bus
      D.   Mesh   (2 marks)

3.   Which one of the following can be referred to as the brain of a computer?
      A.   Artificial Intelligence Unit (AIU)
      B.   Graphics Processing Unit (GPU)
      C.   Central Processing Unit (CPU)
      D.   Random Access Memory (RAM)   (2 marks)

4.   Which one of the following refers to the type of computer that has more than one CPU, can store very large volumes of data and uses vector arithmetic in its operations?
      A.   Supercomputer
      B.   Microcomputer
      C.   Minicomputer
      D.   Mainframe computer   (2 marks)

5.   Which one of the following **BEST** describes a firewall in the context of computer security?
      A.   Type of malware
      B.   Hardware component of a computer
      C.   Program that enhances computer performance
      D.   Guideline that determines how traffic is allowed or blocked on a network (2 marks)

6.   Which one of the following is a computer input device?
      A.   Headphones
      B.   Projector
      C.   Scanner
      D.   Plotter   (2 marks)

7. A computer device responsible for converting digital data into analog signals that can be sent over a telephone line is known as _____.
    A.   modem
    B.   router
    C.   CPU
    D.   hard drive   (2 marks)

8. Which one of the following cannot be classified as a type of ICT?
    A.   Telnet
    B.   Multimedia
    C.   Broadcasting technologies
    D.   Telephony   (2 marks)

9. Which one of the following statements **BEST** describes shareware software?
    A.   A software that respects users' freedom and community
    B.   A commercial software that is distributed free to its users but with some conditions
    C.   A computer software package that performs a specific function directly for an end user
    D.   A proprietary software that is released without charge to the public   (2 marks)

10. The resolution of an inkjet printer is commonly measured in units known as _____.
    A.   pixels Per Inch (PPI)
    B.   dots Per Inch (DPI)
    C.   prints Per Page (PPP)
    D.   ink Per Minute (IPM)   (2 marks)

11. Which one of the following is a positive impact of Information Communication Technology (ICT) on the society?
    A.   Increased social isolation
    B.   Decreased privacy
    C.   Increased cybercrime
    D.   Increased access to information   (2 marks)

12. Which spreadsheet function displays the current date only?
    A.   *Today()*
    B.   *Date()*
    C.   *Now()*
    D.   *IsDate()*   (2 marks)

13. Which one of the following statements will differentiate bespoke software from off-the-shelf software?
    A.   Bespoke software is cheaper
    B.   Bespoke software is customisable
    C.   Off-the-shelf software is always more reliable
    D.   Off-the-shelf software is designed for specific businesses   (2 marks)

14. Which one of the following is a type of social engineering attack where attackers focus on creating a fabricated scenario that they can use to steal someone's personal information?
    A.   Phishing
    B.   Pretexting
    C.   Tailgating
    D.   Baiting   (2 marks)

15. The following are characteristics of computer software:
    (i)   Manages the resources of the computer
    (ii)   Written in a high-level language
    (iii) Needs system software to run
    (iv)   Less interactive for the users

    Identify the specific characteristics for an application software.
    A.   (i), (ii), (iii)
    B.   (i) & (iv)
    C.   (ii) & (iii)
    D.   (i) & (iv)   (2 marks)

16. Which one of the following is **TRUE** about first generation programming languages?
    A. They are easy to learn and use
    B. They require a shorter execution time
    C. They require a high level of abstraction
    D. They are platform-independent (2 marks)

17. Which one of the following **BEST** describes a computer program that functions as an intermediary between a computer user and the computer hardware?
    A. Driver program
    B. Off the shelf program
    C. In-house program
    D. Operating system (2 marks)

18. What is the advantage of using a menu-driven interface in software applications?
    A. Requires less memory
    B. Allows for customisation
    C. Provides a consistent user experience
    D. Increases processing speed (2 marks)

19. Which one of the following keyboard shortcut keys can be used to close a computer program that is currently active?
    A. Shift + F4
    B. Shift + Esc
    C. Alt + Esc
    D. Alt + F4 (2 marks)

20. An environment that mimics a target for hackers and uses their intrusion attempts to gain information about cybercriminals is known as _____.
    A. backtracing
    B. honeypot
    C. malware
    D. spyware (2 marks)

21. The act of moving from one website to another is known as _____.
    A. attachment
    B. uploading
    C. browsing
    D. downloading (2 marks)

22. The purpose of compressing a folder in a computer system is to _____.
    A. reduce the file size
    B. create a backup
    C. organise files
    D. delete files (2 marks)

23. In word processing, the feature that allows a user to separate words into parts on syllable boundaries or join word into a single word using a dash-like punctuation mark is known as _____.
    A. wordart
    B. hyphenation
    C. watermark
    D. formatting (2 marks)

24. To add an attachment to an email you use _____ icon.
    A. stationary
    B. emoji
    C. paper clip
    D. GIF (2 marks)

25. Which one of the following is the access method used for hard disk drive?
   A. Sequential
   B. Direct
   C. Random
   D. Associate (2 marks)

26. Which feature of presentation software allows users to add text, images, and graphics to slides?
   A. Animation
   B. Slide transitions
   C. Slide layout
   D. Slide design (2 marks)

27. The purpose of the Autofill feature in spreadsheet software is to _____.
   A. automatically correct spelling errors
   B. predict and extend a series of values
   C. create backups of the spreadsheet
   D. delete unnecessary data (2 marks)

28. The name of the cord that is used to connect devices together on a network to transfer broadband data is known as _____.
   A. network interface card
   B. microwave
   C. ethernet cable
   D. repeater (2 marks)

29. Which one of the following characters can be used when naming spreadsheet files?
   A. Forward slash (/)
   B. Backslash (\)
   C. Greater-than-sign (>)
   D. Underscore (_) (2 marks)

30. Which direction does a Quick Response (QR) code need to be scanned in order to be read correctly?
   A. Up-to-down
   B. Left-to-right
   C. Right-to-left
   D. Any direction (2 marks)

31. Which one of the following is network cable category that is widely used for 100Base-T and 1000Base-T networks that provide performance to allow data at 100 Mbps?
   A. Cat 4
   B. Cat 5
   C. Cat 3
   D. Cat 2 (2 marks)

32. What does the term "Bug" mean in computer programming?
   A. Logical errors in the program
   B. Software error
   C. Syntax error in the program
   D. Runtime error (2 marks)

33. A network topology that is least susceptible to network failures and traffic congestion is known as _____.
   A. bus
   B. ring
   C. star
   D. mesh (2 marks)

34. Which one of the following illustrates a formula with absolute row references and relative column references?
   A. =$A12+$B12
   B. =A$12+B$12
   C. =$A$12+$B$12
   D. =A12+B12 (2 marks)

35. Which one of the following statement describes a utility program?
    A. System programs which provide a useful services to the user of the computer
    B. System software that manages computer hardware and software resources
    C. Operates or controls a particular type of device that is attached to computer
    D. Provides the interface between the user and the computer (2 marks)

36. In network operating system, identify the user account that provides full permissions to make system changes including those that will affect other users?
    A. Guest
    B. Local user
    C. Administrator
    D. Regular user (2 marks)

37. Which one of the following is an advantage of Command Line Interface (CLI)?
    A. A user must have prior knowledge of the command and its outcome
    B. The learning curve of CLI is steep since users will have to learn all the commands and how and where to use them
    C. It requires much less Random Access Memory in order to use
    D. The command has to be typed precisely the way it should and if it has any spelling or syntax error it won't execute (2 marks)

38. Which software allows a personal computer to be used as a publishing and design tool facilitating production of top quality document internally while reducing printing costs?
    A. Word processing
    B. Desktop publishing
    C. Operating system
    D. Presentation (2 marks)

39. Which one of the following printers prints one line at a time?
    A. Laser printers
    B. Drum Printers
    C. Inkjet Printers
    D. Chain printers (2 marks)

40. Which one of the following is a disadvantage of a laser printer?
    A. Higher cost per page
    B. Slower printing speed
    C. Limited color options
    D. Lower resolution (2 marks)

41. An example of device used to provide hard copies is a _____.
    A. computer monitor
    B. cathode ray tube
    C. printer
    D. card reader (2 marks)

42. Which one of the following is a security technique that regulates who or what one can view or use resources in a computing environment?
    A. Authorisation
    B. Authentication
    C. Access control
    D. Biometric control (2 marks)

43. Which one of the following is a network component that connects two or more packet-switched networks, manages traffic between these networks and allows multiple devices to use the same Internet connection?
    A. Switch
    B. Repeater
    C. Router
    D. Bridge (2 marks)

44. Which one of the following information system security goals is protected by data encryption?
   A. Confidentiality
   B. Integrity
   C. Accessibility
   D. Non-Repudiation (2 marks)

45. Which one of the following is a point-to-point connectivity medium that can transmit data without distance limitations?
   A. Coaxial cable
   B. Fiber optic cable
   C. Twisted pair cable
   D. Cat 6 cable (2 marks)

46. Which one of the following is **NOT** a data backup device?
   A. Solid state drive
   B. External hard drive
   C. Internal memory cards
   D. Network drive (2 marks)

47. Which one of the following types of networks can connect several Local Area Networks (LANs) for a company with offices in Uganda, Kenya and Burundi.
   A. Metropolitan area network
   B. Personal area network
   C. Wide area network
   D. Distributed area network (2 marks)

48. The term _____ refers to processed data.
   A. field
   B. file
   C. information
   D. record (2 marks)

49. Identity the computer generation based on Very Large Scale Integrated (VLSI) technology?
   A. 4th
   B. 5th
   C. 2nd
   D. 3rd (2 marks)

50. A malicious software that enters a user's computer, gathers data from the device and user, and sends it to third parties without their consent is known as?
   A. Spyware
   B. Worm
   C. Time Bomb
   D. Logic Bomb (2 marks)

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CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 23 April 2024. Morning Paper.   **Time Allowed: 2 hours.**

This paper is made up of fifty (50) Multiple Choice Questions. Answer ALL questions by indicating the letter (A, B, C or D) that represents the correct answer. Each question is allocated two (2) marks. Do NOT write anything on this paper.

1.   Which of the following statements **BEST** describes a computer?
      A.   A set of programs, associated documentation and data
      B.   The study or use of systems for storing, retrieving, and sending information
      C.   An electronic device that transforms data to information
      D.   A group of interrelated elements that act according to a set of rules to form a unified whole   (2 marks)

2.   The following technology support communication **EXCEPT** _____.
      A.   Blogs
      B.   Social media
      C.   Email
      D.   Database   (2 marks)

3.   Choose a characteristic of third generation of computers.
      A.   Use of medium scale integrated circuits
      B.   Use of large scale integrated circuits
      C.   Use of artificial intelligence
      D.   Use of transistors as basic technology   (2 marks)

4.   The following are disadvantages of computer networks, **EXCEPT** _____.
      A.   Increased security concerns
      B.   Increased virus and malware attacks
      C.   Increased storage capacity
      D.   Lack of independence   (2 marks)

5.   Choose a logical control measure that is **NOT** used in Information Communication Technology (ICT) security.
      A.   Passwords
      B.   Vetting employees
      C.   Firewall
      D.   Intrusion detection systems   (2 marks)

6.   Identify the device below:

A. Hard disk drive
B. DVD drive
C. Floppy drive
D. Zip drive (2 marks)

7. The following are hardware requirements when setting up a computer network:
(i) Bridge
(ii) Ethernet cables
(iii) Satellite
(iv) Switch
(v) Network interface card
Identify the hardware that is necessary when setting up a local area network (LAN).
A. (i), (ii) & (iii)
B. (i), (iii) & (v)
C. (ii), (iii) & (iv)
D. (ii), (iv) & (v) (2 marks)

8. Choose a characteristic of high-level computer programming languages.
A. They are machine dependent
B. Their source code is written using mnemonics
C. They require the longest coding time
D. They are machine independent (2 marks)

9. Choose the computer keyboard shortcut key that can be used to switch between open applications.
A. Alt + Tab
B. Ctrl + Tab
C. Alt + A
D. Ctrl + P (2 marks)

10. The following are characteristics of non-impact printers **EXCEPT** _____.
A. They are fast printers
B. They use laser technology to provide printouts
C. They produce good quality printouts
D. They are noisy printers (2 marks)

11. Which of the following spreadsheet functions will help in rearranging data in ascending or descending order?
A. AutoFill
B. Conditional formatting
C. Filter function
D. Sort function (2 marks)

12. Which PowerPoint tool will allow computer users to view and edit different slides simultaneously?
A. Presentation Master
B. Slide Sorter
C. Slide Master
D. Outline Viewer (2 marks)

13. Which of the following statements describes a function of a file extension?
A. It determines the file type
B. It encrypts the file contents
C. It compresses the file size
D. It changes the file permissions (2 marks)

14. A small, portable wireless device that provides users with a permanent WiFi hotspot wherever they go is referred to as _____.
A. PDA
B. GPS
C. MiFi
D. USB (2 marks)

15. Which of the following keys can be used to adjust a document margin in Microsoft word?
    A.   Backspace
    B.   Spacebar
    C.   Indent
    D.   Enter   (2 marks)

16. Identify a keyboard shortcut that can be used to insert a new sheet in the current workbook in Microsoft Excel.
    A.   Shift + F9
    B.   Shift + F11
    C.   Shift + F10
    D.   Shift + F12   (2 marks)

17. Which of the following Microsoft Excel functions can be used to find the lowest score by students in the mathematics paper?
    A.   Max()
    B.   Min()
    C.   Average()
    D.   Low()   (2 marks)

18. Which of the following statements is **NOT** an activity that can be performed by computer users when formatting tables in Microsoft word?
    A.   Aligning text in cells
    B.   Resizing columns and rows
    C.   Adding borders
    D.   Adding folders   (2 marks)

19. Which of the following types of Microsoft Excel charts uses vertical bars to represent data?
    A.   Pie charts
    B.   Line charts
    C.   Column charts
    D.   Vertical charts   (2 marks)

20. Which of the following devices **CANNOT** be classified as a document reader?
    A.   Optical character reader
    B.   Bar code reader
    C.   Graphics tablet reader
    D.   Magnet ink character recognition   (2 marks)

21. Identify a special visual effect that is used to introduce a slide during a slide show.
    A.   Slide transition
    B.   Slide timing
    C.   Slide animation
    D.   Slide preview   (2 marks)

22. Choose an advantage of using pre-written software.
    A.   Greater flexibility and customisation options
    B.   More control over the software's functionality
    C.   Lower cost and quicker implementation
    D.   Better compatibility with other applications   (2 marks)

23. Which type of software is specifically designed to manage financial transactions and record keeping?
    A.   Enterprise resource planning (ERP) software
    B.   Customer relationship management (CRM) software
    C.   Accounting software
    D.   Project management software   (2 marks)

24. The component of Microsoft Windows operating system that provides the ability to view and change system settings is known as _____.
    A.   Control Panel
    B.   Computer Manager
    C.   Recycle Bin
    D.   Network   (2 marks)

25. Identify a type of operating system that enables computer users to load several applications in to computer memory and use them either simultaneously or at different intervals.
    A. Multi-user operating system
    B. Multi-tasking operating system
    C. Real time operating system
    D. Timesharing operating system   (2 marks)

26. The following are examples of an operating system **EXCEPT** _____.
    A. Windows 10
    B. Linux
    C. Android
    D. Apache Spark   (2 marks)

27. The type of computer user account that enables a user to change system settings and that does not affect other users is referred to as _____.
    A. Standard User account
    B. Administrator account
    C. Programmer account
    D. Guest account   (2 marks)

28. Which of the following statements is a characteristic of in-house software?
    A. It is readily available
    B. It allows internal specialists to master their skills in software development
    C. It does not solve the user's unique needs
    D. It is characterised by low acquisition cost   (2 marks)

29. _____ is an input device.
    A. Floppy disk
    B. Touch screen
    C. Projector
    D. Braille embosser   (2 marks)

30. Which type of network can be used to connect a bluetooth earpiece to a smartphone?
    A. Local area network (LAN)
    B. Personal area network (PAN)
    C. Metropolitan area network (MAN)
    D. Wide area network (WAN)   (2 marks)

31. The following are reasons why a computer file should be given a unique name **EXCEPT** _____.
    A. To appear organised
    B. To be able to count number of files
    C. To makes it easier to identify it
    D. To be able to retrieve it later   (2 marks)

32. The following are suitable measures used to protect an organisation against computer misuse **EXCEPT** _____.
    A. Close down chat rooms
    B. Reduce email spamming
    C. Regular backups and security
    D. Restriction of unauthorised access   (2 marks)

33. Which of the following statements describes the purpose of disk defragmentation utility?
    A. Scanning for viruses and malware
    B. Creating backups of files
    C. Organising disjointed data on the hard drive
    D. Compressing files to save disk space   (2 marks)

34. The following are features of star network topology **EXCEPT** _____.
    A. Fault detection is easily manageable
    B. Chances of collision of data are relatively lower
    C. A cut cable will affect many nodes
    D. Failure of the central connectivity device will affect the entire network   (2 marks)

35. Which one of the following statements **BEST** describes a remote user in networking?
    A.   A user who is operating from an off-site location
    B.   A person operating in a remote location away from civilisation
    C.   A primitive user who has no knowledge of computer
    D.   A user account with limited privileges that will be used for general tasks such as reading email and surfing the Web   (2 marks)

36. A quick-repair job to a software designed to resolve functionality issues, improve security or add new features is known as _____.
    A.   Patch
    B.   Upgrade
    C.   Debug
    D.   Code   (2 marks)

37. A system within a computer or device, consisting of a connector or set of wires, that provides transportation for data is known as _____.
    A.   Ethernet
    B.   Cable
    C.   Bus
    D.   Port   (2 marks)

38. Identify the type of computer memory that improves the system's overall performance by freeing up RAM space and enhances the overall system functionality.
    A.   Cache memory
    B.   Random access memory (RAM)
    C.   Read only memory (ROM)
    D.   Virtual memory   (2 marks)

39. Identify the program that translates mnemonics into machine notation for use by a computer system.
    A.   Interpreter
    B.   Compiler
    C.   Assembler
    D.   Converter   (2 marks)

40. The following are characteristics of a mainframe computer **EXCEPT** _____.
    A.   It has a higher memory capacity than supercomputer
    B.   It is larger in size than minicomputers
    C.   It is more expensive than a mini computer
    D.   Supports multiprocessing   (2 marks)

41. Which of the following is **NOT** a type of social engineering attack?
    A.   Baiting
    B.   Phishing
    C.   Denial of service
    D.   Scareware   (2 marks)

42. Which of the following statements **BEST** describes an attack campaign in which an intruder establishes an illicit, long-term presence on a network in order to mine highly sensitive data?
    A.   Man in the middle attack
    B.   Denial of service threat
    C.   Advanced persistent threat
    D.   Malware attack   (2 marks)

43. The data communication component that filters network addresses in a network environment is referred to as _____.
    A.   Repeater
    B.   Bridge
    C.   Hub
    D.   Router   (2 marks)

44. _____ is a type of intrusion detection system.
    A.   Stand-alone based intrusion detection system
    B.   Computer-based intrusion detection system
    C.   Host-based intrusion detection system
    D.   User-based intrusion detection system   (2 marks)

45. The type of data backup where all files that have changed since the last backup occurred are backed up is referred to as _____.
    A.   Full backup
    B.   Incremental backup
    C.   Differential backup
    D.   Complete backup   (2 marks)

46. The following are types of keyboard **EXCEPT** _____.
    A.   Mechanical
    B.   Non mechanical
    C.   Ergonomic
    D.   Wireless   (2 marks)

47. Which category of CAT cables offers better performance than CAT 6?
    A.   CAT 5
    B.   CAT 5e
    C.   CAT 6a
    D.   CAT 3   (2 marks)

48. Identify a reason why plotters are still being used despite the availability of high quality printers.
    A.   Plotters are more affordable than printers
    B.   Plotters offer better accuracy and precision for large drawings
    C.   Printers cannot handle graphical outputs
    D.   Plotters have faster printing speeds than printers   (2 marks)

49. Transmission media is a pathway that carries the information from sender to receiver. It can be bound or unbound. Which of the following is **NOT** a type of unbound transmission media?
    A.   Twisted pair
    B.   Bluetooth
    C.   Infrared
    D.   Microwave   (2 marks)

50. The following are characteristics of an antivirus software **EXCEPT** _____.
    A.   Searches for known threats and monitors the behaviour of all programs
    B.   Seeks to block or remove malware as quickly as possible
    C.   Helps protect your computer against malware and cybercriminals
    D.   Manages the hardware components connected to a computer   (2 marks)

....

CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 5 December 2023. Morning Paper. **Time Allowed: 2 hours.**

This paper is made up of fifty (50) Multiple Choice Questions. Answer ALL questions by indicating the letter (A, B, C or D) that represents the correct answer. Each question is allocated two (2) marks. Do NOT write anything on this paper.

1. In a spreadsheet application, what is the name of the alphanumeric value used to identify a specific cell?
   A. Cell reference
   B. Cell location
   C. Cell coordinate
   D. Cell number (2 marks)

2. Which of the following statements is **CORRECT** with reference to Random Access Memory (RAM) and Read Only Memory (ROM)?
   A. RAM is permanent memory while ROM is temporary memory
   B. RAM is non-volatile memory while ROM is volatile memory
   C. RAM is volatile memory while ROM is non-volatile memory
   D. RAM is used to store startup programs while ROM is used to store application programs being executed (2 marks)

3. Which of the following is **NOT** an example of an application software?
   A. Corel Draw
   B. Microsoft Word
   C. Device driver
   D. Microsoft Excel (2 marks)

4. The computer program that acts as an interface between computer users and computer hardware is referred to as?
   A. Utility program
   B. Operating system
   C. User program
   D. Database application (2 marks)

5. Which of the following is **NOT** an important feature in a word processing software?
   A. Spell checker and grammar
   B. Search and replace
   C. Filtering
   D. Insert table (2 marks)

6. Which of the following is **NOT** an example of a computer security threat?
   A. Malware
   B. Spyware
   C. Adware
   D. Firmware (2 marks)

7. The following are advantages of command line interface (CLI) **EXCEPT?**
   A. It is possible to automate the most frequently used commands
   B. The CLI system uses fewer system resources
   C. It is efficient and fast
   D. It is designed to be used by all levels of users from basic end users to system administrators (2 marks)

8. There are various types of input devices used in a point of sale (POS) system in supermarkets or large stores. Which one of the following is **NOT** applicable in a POS?
    A. Optical character reader
    B. Barcode reader
    C. Card reader
    D. Mouse (2 marks)

9. The following are advantages of using a flash disk for data storage **EXCEPT?**
    A. Volatile memory
    B. Readily available
    C. Increased durability
    D. Fast transfer speeds (2 marks)

10. Which of the following is **NOT** a feature of an accounting software?
    A. Tax preparation
    B. Cloud accounting
    C. Mining accounting
    D. Expense tracking (2 marks)

11. Which of the following is **NOT** an attribute that makes a server ideal in an organisation?
    A. Reliable
    B. Versatile
    C. Attractive
    D. Diligence (2 marks)

12. The following are methods that a network engineer can use to connect a user to the Internet **EXCEPT?**
    A. Dial up
    B. Ethernet
    C. Router
    D. Wireless (2 marks)

13. Identify the name of the input device shown below:

    A. Bar code reader
    B. MICR reader
    C. Scanner
    D. Printer (2 marks)

14. A hardware device that allows a computer to be connected to an external network is known as _____.
    A. Network interface card
    B. Switch
    C. Repeater
    D. Router (2 marks)

15. Which generation of computers introduced transistors as a replacement for vacuum tubes?
    A. First generation
    B. Second generation
    C. Third generation
    D. Fourth generation (2 marks)

16. Which of the following computers is characterised by high cost, fast processing speeds, large physical size and a large storage capability?
    A. Midrange computer
    B. Mainframe computer
    C. Microcomputer
    D. Minicomputer (2 marks)

17. Which of the following is a characteristic of the first-generation programming languages?
    A. Easy to read and understand
    B. Portability across different systems
    C. Utilises binary codes
    D. Supports interactive debugging   (2 marks)

18. Which of the following can be classified as a benefit of graphical user interface (GUI)?
    A. It allows for easier navigation and interaction
    B. It requires less memory and processing power
    C. It provides a command line interface
    D. It offers higher security measures   (2 marks)

19. The feature that allows computer users to perform calculations using formulas in a spreadsheet program is referred to as _____.
    A. Autocomplete
    B. Conditional formatting
    C. Function library
    D. Pivot table   (2 marks)

20. Which of the following is a two-axis spreadsheet chart that displays a series of data points with straight line segments connecting them with the space underneath the line segments shaded?
    A. Line chart
    B. Area chart
    C. Bar chart
    D. Pie chart   (2 marks)

21. From the table shown below, select the cell reference for the formula that can be used to find the total price of mangoes.

	A	B	C	D	E
1					
2		ITEM NAME	ITEM UNITS	UNIT PRICE	TOTAL PRICE
3		Oranges	30	20	
4		Mangoes	60	35	
5		Pinneaples	58	80	
6		Apples	45	72	

    A. =D3*C3
    B. =C4*D4
    C. =C5*D5
    D. =D6*C6   (2 marks)

22. Which of the following is **NOT** a feature of the slide sorter PowerPoint presentation view?
    A. It shows small versions of all the slides arranged in horizontal rows
    B. It enables slides to be easily deleted or rearranged quickly
    C. It simultaneously displays the slide, the outline and notes
    D. Transition and sound effects can be added to several slides simultaneously   (2 marks)

23. Which of the following is a PowerPoint program feature that removes all formatting and styles from a text selection?
    A. Delete formatting
    B. Clear formatting
    C. Clear text
    D. Edit formatting   (2 marks)

24. Which of the following elements of PowerPoint application offers an efficient way of applying formatting and design elements consistently to every slide in a presentation?
    A. Slide sorter
    B. Slide editor
    C. Slide formatting
    D. Slide master   (2 marks)

25. Which of the following is an input device?
   A. Monitor
   B. Speaker
   C. Microphone
   D. Printer (2 marks)

26. Which of the following is **NOT** an advantage of fiber-optic cable?
   A. Highly scalable
   B. Difficult to tap
   C. High bandwidth
   D. Easy to work with (2 marks)

27. Which of the following network topology has direct connection to every other node creating redundant and robust network structure?
   A. Ring
   B. Bus
   C. Mesh
   D. Star (2 marks)

28. The use of messaging systems to send multiple unsolicited messages to large numbers of recipients for commercial advertising is known as?
   A. Pop-ups
   B. Spamming
   C. Cookies
   D. Jamming (2 marks)

29. The network device that regenerates signals as they travel over long distances is referred to as?
   A. Repeater
   B. Bridge
   C. Modem
   D. Firewall (2 marks)

30. Which type of connector is commonly used with CAT6 cable?
   A. RJ-45
   B. SATA
   C. USB
   D. HDMI (2 marks)

31. The type of computer network that connects computers in a global setup is known as?
   A. Local area network
   B. Wide area network
   C. Metropolitan area network
   D. Personal area network (2 marks)

32. Which of the following is **NOT** a property of a folder?
   A. Space occupied
   B. Location
   C. Date created
   D. Path (2 marks)

33. Which of the following gives the purpose of a file extension?
   A. To determine the file's physical location
   B. To identify the file's owner
   C. To indicate the file's content or format
   D. To prevent unauthorised access to the file (2 marks)

34. Which of the following **BEST** describes the security measure that can be used to verify the authenticity of a user account creator?
   A. Asking for a recent utility bill
   B. Requesting a fingerprint scan
   C. Sending a verification code to a registered phone number or email address
   D. Offering a secret handshake (2 marks)

35. The software created by people who are willing to give it away for the satisfaction of sharing or knowing they helped to simplify other people's lives is known as?
   A.   Freeware
   B.   Shareware
   C.   System software
   D.   Antivirus   (2 marks)

36. The type of user account that enables computer users to have full control of the computer resources is referred to as _____.
   A.   Full control account
   B.   Standard user account
   C.   Administrative account
   D.   End user account   (2 marks)

37. The security policy that dictates how network traffic is authorised to pass in each direction is referred to as_____.
   A.   Data security
   B.   Firewall security
   C.   Authentication security
   D.   Encryption security   (2 marks)

38. Which of the following refers to the assurance that the owner of a signature key pair that was capable of generating an existing signature corresponding to certain data cannot convincingly deny having signed the data?
   A.   Non-repudiation
   B.   Integrity
   C.   Confidentiality
   D.   Authentication   (2 marks)

39. Which of the following terms refers to a system that can be setup to lure cyber attackers so as to detect and study hacking attempts to gain unauthorised access to information systems?
   A.   Backtracing
   B.   Encryption
   C.   Honeypots
   D.   Access control   (2 marks)

40. Which of the following is **NOT** a type of computer backup?
   A.   Incremental backup
   B.   Full backup
   C.   Differential backup
   D.   Half backup   (2 marks)

41. Which of the following **BEST** describes the type of data security process that enables organisations to manage who is authorised to access corporate data and resources?
   A.   Access encryption
   B.   Access control
   C.   Data authentication
   D.   Firewall   (2 marks)

42. Which of the following is **NOT** a service provided by an operating system?
   A.   Program execution
   B.   Repairing hardware devices
   C.   File management
   D.   Communication   (2 marks)

43. Which of the following is a program that will translate high level language source code to machine code in a statement by statement manner?
   A.   Assembler
   B.   Compiler
   C.   Interpreter
   D.   Mnemonic   (2 marks)

44. The time required to locate and retrieve stored data from a storage unit in response to a program instruction is known as?
    A.   Access time
    B.   Latency time
    C.   Transfer time
    D.   Storage time   (2 marks)

45. The social engineering attack where victims are bombarded with false alarms and fictitious threats is referred to as?
    A.   Baiting
    B.   Phishing
    C.   Scareware
    D.   Pretexting   (2 marks)

46. Which of the following is **NOT** an advanced persistent threat (APT) feature?
    A.   Lateral movement
    B.   Reconnaissance
    C.   Corruption of operations
    D.   Exploitation   (2 marks)

47. Consider the following features of a computer booting process
    • Not very common
    • Can severely affect the system causing data loss
    • Power- on self- test is not included
    The above features refer to which type of the booting process?
    A.   Cold
    B.   Hot
    C.   Dump
    D.   Warm   (2 marks)

48. Which of the following is **NOT** a physical threat to data in an organisation?
    A.   Theft and loss of devices
    B.   Environmental factors
    C.   Malicious employees
    D.   Hacking   (2 marks)

49. Which of the following is **NOT** a characteristic of off-the-shelf software?
    A.   They are readily available
    B.   They satisfy the unique needs of users
    C.   They are well documented
    D.   They are well tested   (2 marks)

50. The computer network device that manages traffic between these networks by forwarding data packets and allowing multiple devices to use the same internet connection is referred to as _____.
    A.   Bridge
    B.   Hub
    C.   Gateway
    D.   Router   (2 marks)

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CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 22 August 2023. Morning Paper.   **Time Allowed: 2 hours.**

This paper is made up of fifty (50) Multiple Choice Questions. Answer ALL questions by indicating the letter (A, B, C or D) that represents the correct answer. Each question is allocated two (2) marks. Do NOT write anything on this paper.

1.   Which of the following devices would you recommend for the marking of multiple choice examination questions?
      A.   OCR
      B.   MICR
      C.   OMR
      D.   Document scanner   (2 marks)

2.   The Basic Input Output System (BIOS) is an example of?
      A.   Software
      B.   Firmware
      C.   Driver
      D.   Battery   (2 marks)

3.   Which of the following is **NOT** a characteristic of Read Only Memory (ROM)?
      A.   ROM is volatile
      B.   ROM stores startup programs
      C.   ROM is permanent memory
      D.   ROM is non volatile   (2 marks)

4.   Baraka was given the task of classifying computers by their processing power. He realised that computer A was more powerful than computer B. Computer C was less powerful than computer B, but more powerful than computer D. State the name of computer C:
      A.   Microcomputer
      B.   Mini-computer
      C.   Mainframe computer
      D.   Supercomputer   (2 marks)

5.   Mary found a computer that had the following specification:
      "HP All-in-One 27-dp0208nh Core i5 8GB 1TB W10 Pro 27"-2D4Z6EA". Explain the meaning of 27″.
      A.   Horizontal width of the screen is 27 inches
      B.   Vertical height of the screen is 27 inches
      C.   Diagonal length of the screen is 27 inches
      D.   Orthogonal length of screen is 27 inches   (2 marks)

6.   Which of the following statements **BEST** describes a public domain software?
      A.   Public domain software is written and sold by professionals
      B.   Public domain software is provisioned from the company's infrastructure
      C.   On-premises software is hosted on a remote server in a remote facility
      D.   Public domain software is freely available without license requirements   (2 marks)

7. Which of the following **BEST** describes the cost savings brought about by cloud computing?
   A. A business does not have to invest in managing hardware, software and networking resources
   B. A business does not have to predict the capacity requirements for its customers
   C. A business has more control over its hardware, software and networking resources
   D. A business does not have to worry about internet connectivity and related issues (2 marks)

8. Which of the following components will issue out instructions to synchronise the activities of a computer system?
   A. Arithmetic and Logic Unit (ALU)
   B. Control unit
   C. Input device
   D. Command unit (2 marks)

9. Which of the following is **NOT** a characteristic of indexed sequential file organisation method?
   A. It is characterised by high and low hit rates
   B. It supports sequential data accessibility
   C. It supports selective data accessibility
   D. Data is not organised in a particular order within the file (2 marks)

10. Which of the following is a security measure that involves the conversation of data into codes before transmission?
   A. Digital certificate
   B. Encryption
   C. Passwords
   D. Digital signature (2 marks)

11. Which of the following devices is designed to offload communication processing task from the host computer so that the host computer can be dedicated for application of data processing tasks.
   A. Modem
   B. Front end processor
   C. Router
   D. Switch (2 marks)

12. Which of the following is **NOT** an advantage of cloud computing?
   A. Data accessibility without regional barriers
   B. Cost savings and scalability
   C. Better data backup and recovery
   D. Reliable data security (2 marks)

13. Which programming language requires the programmer to use mnemonics when writing the source code program?
   A. Machine code language
   B. High level language
   C. Second generation language
   D. Fourth generation language (2 marks)

14. Which network topology is characterised by all nodes being attached to the same cable?
   A. Star
   B. Ring
   C. Bus
   D. Mesh (2 marks)

15. Which of the following is the keyboard shortcut that is used to select all the text in a word processing application?
   A. Ctrl + S
   B. Ctrl + A
   C. Ctrl + V
   D. Ctrl + P (2 marks)

16. Which of the following is an advantage of star topology?
   A. It allows for isolation of each device within the network
   B. Data passes through each workstation attached
   C. Cable length restricts the number of devices connected
   D. A central server is not required for its management (2 marks)

17. Which of the following cables does **NOT** expose signals to electromagnetic interference and noise?
    A. Fiber optic
    B. Twisted pair
    C. Coaxial
    D. Wireless   (2 marks)

18. Which of the following is **NOT** a reason why an organisation should implement data security systems?
    A. To ensure confidentiality of data
    B. To ensure data integrity
    C. To ensure data is easily accessible
    D. To facilitate data modularity   (2 marks)

19. An interactive business providing a space where multiple buyers and suppliers can engage in e-commerce is referred to as?
    A. Electronic marketplace
    B. Electronic business
    C. Digital marketing
    D. Affiliate marketplace   (2 marks)

20. Which of the following is a measure of the resolution of a printed document or digital scanner?
    A. Pixel
    B. Dots per inch
    C. Inch per dot
    D. Inch per pixel   (2 marks)

21. The process of retaining of data at a secure place for long-term storage is known as?
    A. Data archiving
    B. Archival Storage
    C. Disposal of Data
    D. Backup   (2 marks)

22. The type of computer software that controls the functioning of the computer system is referred to as?
    A. Application software
    B. Application package
    C. System software
    D. Control software   (2 marks)

23. Which is the most appropriate chart in a spreadsheet for comparing the performance of sales of two products?
    A. Row chart
    B. Column chart
    C. Pie chart
    D. Line chart   (2 marks)

24. Which of the following topologies uses the least cable length?
    A. Star
    B. Mesh
    C. Ring
    D. Bus   (2 marks)

25. Which of the following threats will keep track of every online activity the victim engages in, compiles all the data in the background and sends it to a third party?
    A. Adware
    B. Malware
    C. Spyware
    D. Orgware   (2 marks)

26. The process of improving a website in order to increase its visibility is referred to as?
    A. Search engine optimisation
    B. Website call to action
    C. Social media marketing
    D. Software as a service   (2 marks)

27. Which of the following is **NOT** true about data backups?
    A.   Automated backup and scheduling is preferred over manual operations
    B.   A backup is as useful as its associated restore strategy
    C.   The more important the data, the greater the need for backing it up
    D.   Storing the backup copy near to its original site is best strategy   (2 marks)

28. Which of the following is **NOT** a key advancement in computer hardware?
    A.   Quantum computing
    B.   Virtual reality
    C.   Optical computing
    D.   Overhead projectors   (2 marks)

29. Which of the following is **NOT** a factor that determines the processing power of a digital computer?
    A.   Microprocessor clock speed
    B.   The size of Read Only Memory
    C.   The available hard disk space
    D.   The size of the data bus   (2 marks)

30. The reduction in file size to reduce download times and storage requirements is referred to as?
    A.   Data optimisation
    B.   Data defragmentation
    C.   Data compression
    D.   Data fragmentation   (2 marks)

31. Which of the following is a transmission medium that can reliably transmit signals up to 100m?
    A.   Fiber optic cable
    B.   Coaxial cable
    C.   Twisted pair cable
    D.   Satellite communication   (2 marks)

32. Which of the following is a computer with very high processing and large storage capabilities?
    A.   Mini computer
    B.   Mainframe computer
    C.   Micro computer
    D.   Supercomputer   (2 marks)

33. The computer that performs computations using quantities represented as bits, usually in the binary number system is called?
    A.   Analog computers
    B.   Digital computers
    C.   Hybrid computers
    D.   Medieval computers   (2 marks)

34. Which of the following is a type of operating system that allows computer users to load several programs into memory and execute them either simultaneously or at different intervals?
    A.   Multi user operating system
    B.   Timesharing operating system
    C.   Multitasking operating system
    D.   Real time operating system   (2 marks)

35. Which key on the keyboard erases letters to the left of the cursor?
    A.   Backspace
    B.   Delete
    C.   Shift Delete
    D.   Control Delete   (2 marks)

36. Which of the following are impact printers?
    A.   Thermal printer and inkjet
    B.   Inkjet printer and Dot matrix
    C.   Daisy wheel printer and laser printer
    D.   Dot matrix printer and Daisy wheel printer   (2 marks)

37. Which of the following is **NOT** an example of an operating system?
    A.   FORTRAN
    B.   LINUX
    C.   WINDOWS
    D.   UNIX   (2 marks)

38. Which of the following is **NOT** a direct access storage device?
    A.   CDROM
    B.   DVD
    C.   Hard disk
    D.   Magnetic tape   (2 marks)

39. The software that allows internet users to surf the web is called?
    A.   Internet website
    B.   Web browser
    C.   Home page
    D.   Uniform resource locator   (2 marks)

40. Which of the following is a bi-directional transmission mode that uses two channels?
    A.   Simplex mode
    B.   Half duplex mode
    C.   Full duplex mode
    D.   Parallel mode   (2 marks)

41. Which of the following is a type of computer network hardware that connects two or more network segments that are designed using the same network hardware and configured using the same communication protocols?
    A.   Gateway
    B.   Bridge
    C.   Router
    D.   Repeater   (2 marks)

42. The type of internet service that allows two or more people who are simultaneously connected to the internet to hold live, interactive conversations is known as?
    A.   Internet telephony
    B.   Telnet
    C.   Chatting
    D.   Usenet newsgroup   (2 marks)

43. Which of the following is the technology that allows computing devices to communicate via short-range wireless signals?
    A.   Infrared technology
    B.   Wifi technology
    C.   Microwave systems
    D.   Satellite systems   (2 marks)

44. Which of the following is **NOT** a symptom of a computer virus?
    A.   Slow computer performance
    B.   Unexpected pop-up windows
    C.   Frequent computer restarts
    D.   Blue screen   (2 marks)

45. The type of computer network that connects computers in a limited geographical area is referred to as?
    A.   Metropolitan area network
    B.   Wide area network
    C.   Local area network
    D.   Personal area network   (2 marks)

46. Which of the following terms describe the commissioning of non-illegal acts through the use of a computer system?
    A.   Computer security
    B.   Computer crime
    C.   Computer abuse
    D.   Computer theft   (2 marks)

47. The word processing feature that allows computer users to quickly apply the same formatting such as color, font style and size or border style to multiple pieces of text or graphics is referred to as?
    A.   Thesaurus
    B.   Format painter
    C.   Automatic text correction
    D.   Pre-formatting   (2 marks)

48. Which of the following **BEST** describes the type of presentation view that displays the notes, slide and outline?
    A.   Slide sorter view
    B.   Normal view
    C.   Slide view
    D.   Outline view   (2 marks)

49. In a spreadsheet application, which of the following are cell references that change automatically when they are copied?
    A.   Absolute references
    B.   Relative references
    C.   Filter references
    D.   Worksheet references   (2 marks)

50. The following are popular communication internet applications **EXCEPT**.
    A.   Team viewer
    B.   Google Meet
    C.   Zoom
    D.   WhatsApp   (2 marks)

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CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 25 April 2023. Morning Paper. **Time Allowed: 2 hours.**

This paper is made up of fifty (50) Multiple Choice Questions. Answer ALL the questions by indicating the letter (A, B, C or D) that represents the correct answer. Each question is allocated two (2) marks. Do NOT write anything on this paper.

1. Which one of the following is a shared peripheral device?
    A. Keyboard
    B. Flash disk
    C. Mouse
    D. Monitor (2 marks)

2. Which of the following is a **KEY** feature that describes proprietary software?
    A. Software continually evolving
    B. Regular updates available
    C. No vendor lock-in
    D. Source code open to the public (2 marks)

3. Which of the following interface on the motherboard is not used to connect hard disk storage?
    A. IDE
    B. SATA
    C. PS/2
    D. EIDE (2 marks)

4. Which of the following statements is **FALSE** about a computer folder?
    A. A folder occupies a certain amount of memory
    B. A folder can be shared on a network
    C. A folder does not have extension
    D. A folder is a way to organise files into groups (2 marks)

5. Which of the following helps execute commands, open programs or documents quickly?
    A. Text
    B. Voice
    C. Image
    D. Icon (2 marks)

6. There are thousands of file extensions associated with one or more applications.
    Which of the following is **NOT** a valid picture file extension?
    A. .bmp
    B. .gif
    C. .jpg
    D. .prg (2 marks)

7. Which invention enabled the reduction of computer sizes and therefore becoming more affordable?
    A. Logic gates
    B. Vacuum tubes
    C. Transistors
    D. Quantum computing (2 marks)

8. The following are common features of a presentation software, **EXCEPT?**
   A. Animation effects
   B. Table of contents
   C. Slide master
   D. Transitions effects (2 marks)

9. Which of the following is **NOT** a component of system unit?
   A. Processor
   B. Random access memory
   C. Flash disk
   D. Power supply unit (2 marks)

10. In a graphical user interface (GUI), what is the name of the row of buttons, often near the top of an application window, which controls software functions?
    A. Task bar
    B. Title bar
    C. Tool bar
    D. Status bar (2 marks)

11. What is the name of a small, battery-backed memory bank in a computer that holds configuration settings?
    A. RAM
    B. ROM
    C. Cache
    D. CMOS (2 marks)

12. Which of the following statement **BEST** gives the function of a computer software?
    A. To direct all of the peripheral devices on a computer
    B. To store information for future reference
    C. To introduce data for processing
    D. To produce a hard copy of output for filing (2 marks)

13. The following are secondary storage devices, **EXCEPT?**
    A. Floppy
    B. Magnetic tape
    C. Cache
    D. Flash disk (2 marks)

14. What is the name of settings associated with computer files that grant or deny certain rights to how a user or the operating system can access that file?
    A. File names
    B. File attributes
    C. File extensions
    D. File system (2 marks)

15. A computer designed to process requests and deliver data to another computer over the internet or a local network is known as?
    A. Client
    B. Server
    C. Node
    D. Workstation (2 marks)

16. What was the technology that was used in the second-generation computers?
    A. Transistors
    B. Integrated circuits
    C. Vacuum tubes
    D. Large scale integrated circuits (2 marks)

17. Updates or fixes to software programs, often released by the program's developers to address bugs or security issues are known as?
    A. Operating systems
    B. Firmware
    C. Patches
    D. Applications (2 marks)

18. The following are common formatting features in Ms Word, **EXCEPT?**
    A. Font Style, Size and Colour
    B. Set a page layout
    C. Add Word Art
    D. Spelling and Grammar   (2 marks)

19. Which computer control measure is defined as the ability to monitor and react to computer misuse?
    A. Intrusion detection
    B. Firewall
    C. Encryption
    D. Honeypot   (2 marks)

20. In _____ the ownership of the software remains with the creator.
    A. Closed software
    B. Open source software
    C. Proprietary software
    D. Processing software   (2 marks)

21. Which of the following statement explains the term device driver?
    A. It is a permanent software that is embedded in the computer's read only memory
    B. It is a software that helps to maintain the proper and smooth functioning of a Computer System
    C. It is a software that converts a program written in high-level language and assembly language to a form that the computer can understand
    D. It is the type of software that controls specific hardware, which is attached to a computer   (2 marks)

22. The following are ways in which computers are used at homes, **EXCEPT?**
    A. For entertainment.
    B. For automatic diagnosis of diseases
    C. For calculating and keeping home budgets
    D. For shopping purposes   (2 marks)

23. Which of the following is an example of a mobile operating system?
    A. Palm OS
    B. Windows 2019
    C. Unix
    D. Mac OS   (2 marks)

24. The following are some types of computers:
    • Robots used in a manufacturing industry for production only
    • Mobile phones used for communication only
    • Computers used in Digital watches
    • Computers used in Petrol pumps

    The above computers can be classified as?
    A. General purpose
    B. Analogue
    C. Hybrid
    D. Special purpose   (2 marks)

25. A document reader is an input device, which can read data directly from source documents.
    Which one of the following is **NOT** a document reader?
    A. Scanner
    B. Optical character reader
    C. Optical mark reader
    D. Keyboard   (2 marks)

26. A circuit board installed in a computer that provides a dedicated network connection to the computer is known as?
    A. Network interface card
    B. Modem
    C. Port
    D. Network interface cable   (2 marks)

27. Which of the following can be used to summarise, analyse, explore and present summary data of a company?
   A. Pie chart
   B. Line chart
   C. Pivot Table
   D. Bar chart (2 marks)

28. Which of the following is **NOT** an important factor that a buyer who is intending to acquire an application package should consider?
   A. Speed of the computer processor
   B. Whether there is maintenance support from the suppliers
   C. Portability of the package
   D. Whether easy to learn and use (2 marks)

29. Which of the following is defined as a copy of computer data taken and stored elsewhere so that it may be used to restore the original after a data loss event?
   A. Disaster plan
   B. Recovery
   C. Backup
   D. Copyright (2 marks)

30. The following are some of the attributes that make computers widely accepted and used in the day-to-day activities in our society, **EXCEPT?**
   A. Computers operate at very high speeds
   B. Computers store large amounts of data or instructions in a very small storage space
   C. Computers are usually not consistent
   D. Computers can be used in different places to perform a large number of different jobs (2 marks)

31. Which of the following can be used to provide references for text in a document?
   A. Letters and mailings
   B. Headers and footers
   C. Columns and margins
   D. Footnotes and endnotes (2 marks)

32. Which of the following software is **NOT** contained in Microsoft office suite?
   A. Word
   B. Publisher
   C. Outlook
   D. Sage (2 marks)

33. The following are sources of computer viruses, **EXCEPT?**
   A. Freeware and shareware
   B. Use of pirated software
   C. Fake games
   D. Dirty computer environment (2 marks)

34. The following are some features of a mobile phone
   I. It is portable
   II. It is an electronic device
   III. It is programmable
   IV. It is cheap
   V. It is easy to use

   Which of the features above make a mobile phone be regarded as a computer?
   A. I & II
   B. II & III
   C. III & IV
   D. IV & V (2 marks)

35. Which of the following is **NOT** a type of a server?
   A.   Print server
   B.   File server
   C.   Monitor server
   D.   Database server   (2 marks)

36. What is the unit of measuring micro-computer processor's speed?
   A.   Hertz
   B.   MIPS
   C.   Watts
   D.   BPs   (2 marks)

37. Which symbol in a spreadsheet indicates absolute cell references in formulas?
   A. $
   B.   %
   C.   =
   D.   &   (2 marks)

38. What is the name of the access control method used to verify the identity of an individual who is attempting to gain access into an information asset?
   A.   Accountability
   B.   Authorisation
   C.   Authentication
   D.   Non-repudiation   (2 marks)

39. The following are some characteristics of a programming language:
   •   They are not very easy to understand
   •   They are not portable
   •   They always require a translator

   Which programming language is this?
   A.   Machine
   B.   Low level
   C.   High level
   D.   Fourth generation   (2 marks)

40. Which type of a user interface is text-based and is used to run programs, manage computer files and interact with the computer?
   A.   Graphical
   B.   Menu based
   C.   Command line
   D.   Voice   (2 marks)

41. An electrical cable with a copper conductor, an insulator shielding around it and a braided metal mesh that prevents signal interference and cross talk is known as_____.
   A.   Unshielded twisted pair
   B.   Shielded twisted pair
   C.   Optical fibre
   D.   Coaxial   (2 marks)

42. What is the name of the flaws in software, firmware, or hardware that can be exploited by an attacker to perform unauthorised actions in a system called?
   A.   Vulnerabilities
   B.   Threats
   C.   Malware
   D.   Risks   (2 marks)

43. Which of the following statements **BEST** describes the main purpose of a firewall?
   A. To protect digital data confidentiality as it is stored on computer systems and transmitted using the internet or other computer networks
   B. To allow non-threatening traffic in and to keep dangerous traffic out
   C. To facilitate secure electronic communication and data exchange between people, systems, and devices online
   D. To detect and remove viruses and other kinds of malicious software from a computer   (2 marks)

44. Which of the following is **NOT** an advantage of high-level programming languages?
   A. They are much easier to write
   B. They are portable
   C. They are easy to learn
   D. They can directly communicate with hardware devices   (2 marks)

45. The following are different types of files which can be created in recent versions of Microsoft Word, **EXCEPT?**
   A. Word Document
   B. Bitmap File Format
   C. Portable Document Format
   D. Rich Text Format   (2 marks)

46. _____ is a common unit for measuring the speed of data transmission.
   A. Bytes per second
   B. Bits per second
   C. Baud
   D. Nibbles per second   (2 marks)

47. Which of the following is **NOT** a component of system software?
   A. Operating system
   B. Device driver
   C. Programming language
   D. Utility program   (2 marks)

48. Which of the following is the correct order of the four major functions of a computer?
   A. Input, a Process, an Output, Storage
   B. Process, an Output, an Input, Storage
   C. Input, Output, a Process, Storage
   D. Process, Storage, Input, Output   (2 marks)

49. Which of the following contain portable computers?
   A. Micro computers
   B. Super computers
   C. Mini computers
   D. Desktop computer   (2 marks)

50. A mechanism where a computer consumes little power and remembers the current state is known as_____.
   A. Restart
   B. Shutdown
   C. Sleep
   D. Hanging   (2 marks)

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CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 6 December 2022. Morning Paper.   **Time Allowed: 2 hours.**

This paper is made up of fifty (50) Multiple Choice Questions. Answer ALL the questions by indicating the letter (A, B, C or D) that represents the correct answer. Do NOT write anything on this paper.

1. A person who writes computer software for running the hardware of a computer is called a_____.
   A.   Systems analyst
   B.   Programmer
   C.   Systems designer
   D.   Data processor   (2 marks)

2. The purpose of computer software is to turn data into_____.
   A.   Information
   B.   Program
   C.   Knowledge
   D.   Object   (2 marks)

3. A set of parallel wires or electronic pathway used to transmit data, address and control signals in between the CPU and other components of the motherboard are known as_____.
   A.   Bus
   B.   Register
   C.   Processor
   D.   Port   (2 marks)

4. Identify an advantage of information communication technology (ICT) in the education sector.
   A.   ICT use in the classroom can be a distraction
   B.   ICT can detract students from social interactions
   C.   ICT use motivates learning
   D.   ICT can foster cheating   (2 marks)

5. The type of an operating system which allows a single CPU to execute what appears to be more than one program at the same time is called_____.
   A.   Multiprocessing
   B.   Multiprogramming
   C.   Multiuser
   D.   Parallel   (2 marks)

6. Which of the following is **NOT** part of a Computer processor?
   A.   Register
   B.   Cache
   C.   Bus
   D.   RAM   (2 marks)

7. What is the name given to a computer network for interconnecting electronic devices within an individual person's workspace?
   A.   Personal area network (PAN)
   B.   Metropolitan area network (MAN)
   C.   Wide area network (WAN)
   D.   Virtual private network (VPN)   (2 marks)

8. The following are basic file operations by an operating system **EXCEPT**_____.
   A. Create
   B. Read
   C. Delete
   D. Manage (2 marks)

9. Which of the following is **NOT** a feature of third generation of computers?
   A. Technology used was of integrated circuits
   B. Smaller, cheaper, more efficient and faster than second generation computers
   C. Single-chip processor and the single-board computer emerged
   D. Used high-level programming languages (2 marks)

10. Which of the following devices converts analogue signals to digital signals and vice versa?
   A. Hub
   B. Modem
   C. Router
   D. Switch (2 marks)

11. Which of the following refers to a security measure system that acts as a trap for hackers and can be used to study hacking attempts on a system?
   A. Honeypots
   B. Encryption
   C. Backups
   D. Controls (2 marks)

12. Which of the following terms refer to a computer animation technique used to convert images from one form to another?
   A. Modeling
   B. Framing
   C. Morphing
   D. Scarping (2 marks)

13. Identify two advantages of using new technology in businesses.
   I. Easier, faster and more effective communication
   II. Increased dependency on technology
   III. Require regular updates
   IV. Ability to develop new, innovative approaches

   A. I and II
   B. II and III
   C. I and IV
   D. II and IV (2 marks)

14. A set of step-by-step instructions, used to solve a problem or perform a computation is known as _____.
   A. Algorithm
   B. Flowchart
   C. Artefact
   D. Accumulator (2 marks)

15. Which one of the following is **NOT** an example of an antivirus software?
   A. Kaspersky
   B. McAfee
   C. Acrobat
   D. Avira (2 marks)

16. The main part of the computer that contains all the essential hardware components is known as _____.
   A. System unit
   B. Monitor
   C. Processor
   D. Power supply (2 marks)

17.   A_____ consists of two or more computers connected together.

    A. Network
    B. Server
    C. Client
    D. Cable   (2 marks)

18.   Which of the following devices can be used to input sound into a device?
    A.   Speakers
    B.   Sound card
    C.   Microphone
    D.   Earphones   (2 marks)

19.   The Internet is an example of a _____.
    A.   Metropolitan Area Network
    B.   Campus Area Network
    C.   Wide Area Network
    D.   Local Area Network   (2 marks)

20.   Which of the following attacks involve a hacker intercepting and relaying messages between two parties who believe they are communicating with each other?
    A.   Advanced persistent threats
    B.   Man-in-the-middle attack
    C.   Drive-by attacks
    D.   AI powered attacks   (2 marks)

21.   Which of the following statements is **CORRECT**?
    A.   A translator translates object code to source code
    B.   Interpreter translates entire program before execution
    C.   Interpreter saves the object program
    D.   Interpreter is effective in statement by statement error correction   (2 marks)

22.   Which of the following is **NOT** an advantage of command line interface?
    A.   Command line interface can handle repetitive tasks easily
    B.   Command line interface requires less memory than other interfaces
    C.   Command line interface does not require windows and a low-resolution monitor can be used
    D.   Command line interface is very user friendly   (2 marks)

23.   Which of the following statements is correct as used in ICT?
    A.   Machine language use mnemonics
    B.   Machine language use abbreviations
    C.   Machine language use binary notation
    D.   Assembly language use binary notation   (2 marks)

24.   What is the function of uninterruptible power supply (UPS)?
    A.   It is a device that stores chemical energy and converts it to electrical energy
    B.   It provides enough electricity to a computer during a power outage so that the user can save files before shutting down the computer
    C.   It is a device which converts mains AC to low-voltage regulated DC power for the internal components of a computer
    D.   It means electric energy or capacity supplied by an electric utility to replace electric energy ordinarily generated by a qualifying facility's own electric generation equipment during an unscheduled outage of the qualifying facility   (2 marks)

25.   Which of the following software acquisition statements is **FALSE**?
    A.   Off-the-shelf software is cheap
    B.   Off-the-shelf software is less error prone
    C.   Off-the-shelf software has high quality documentation
    D.   Off-the-shelf software rarely gives an organisation competitive advantage   (2 marks)

26. Which of the following is the major limitation of bus topology?
   A. Uses a lot of cabling in comparison to other topologies
   B. Failure of the central cable will bring the whole network down
   C. Failure of the central computer will cause the network to break down
   D. Easy to detect faults and to add new sites to the network (2 marks)

27. Which of the following artificial intelligence technologies, incorporates the use of voice recognition, voice synthesis and language comprehension systems?
   A. Virtual reality systems
   B. Natural language processing
   C. Computer aided detection
   D. Magnetic resonance imaging (2 marks)

28. Which of the following statements **BEST** explains "wireless fidelity" (Wi-Fi)?
   A. A set of standards for facilitating wireless networks in a local area, enabling devices to connect to the Internet when in range of an access point.
   B. A website or similar online resource which allows anyone to set up a resource in which content can be created collectively
   C. A worldwide Interoperability for Microwave Access, a telecommunication technology aimed at providing wireless data over long distances.
   D. It is a computer network connecting millions of computers all over the world and provides communications to governments, businesses, universities, schools and homes. (2 marks)

29. Which of the following features is **NOT** part of a database?
   A. Tables
   B. Records
   C. Fields
   D. Worksheets (2 marks)

30. Identify the statement which **BEST** defines throughput as used in computing?
   A. The volume of work or information flowing through a system.
   B. The execution of more than one program, apparently at the same time, on a computer.
   C. It is a measure of the number of pixels or small dots displayed on a computer display screen, printer or scanner.
   D. The process and outcome of successfully adapting to difficult or challenging life experiences especially, through mental, emotional, and behavioral flexibility and adjustment to external and internal demands. (2 marks)

31. Select the **BEST** statement that defines a computer chipset
   A. A device for storing and processing data, typically in binary form, according to instructions given to it in a variable program.
   B. A technique through which multiple operating systems can be kept within the boot sequence on the same computer.
   C. A collection of integrated circuits which are designed to function together as a unit, especially to perform a particular task within a computer system.
   D. A printed circuit board containing the principal components of a computer or other device, with connectors for other circuit boards to be slotted into. (2 marks)

32. State the function of name box feature found in a spreadsheet window.
   A. To display the active cell address or the name of the selected cell, range, or object.
   B. To enter information or formulas into a cell.
   C. To display various messages as well as the status of the Num Lock, Caps Lock, and Scroll Lock keys on your keyboard.
   D. To display the name of the program and the name of the current workbook. (2 marks)

33. Which one of the following is **NOT** a function of a computer network?
   A. Users can easily share or exchange information
   B. The computers in a network can share resources such as printers and scanners
   C. Enhances user's security
   D. Data backup can be achieved easily (2 marks)

34.   What is the name of the network topology shown below?
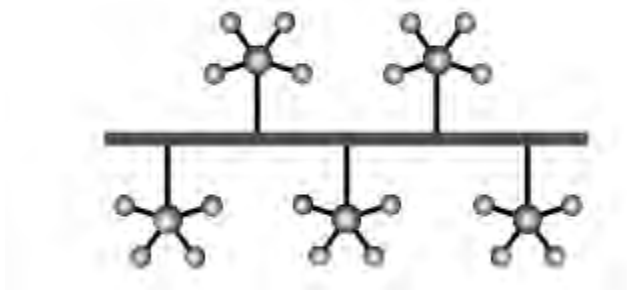
        A.   Star
        B.   Bus
        C.   Ring
        D.   Tree   (2 marks)

35.   Which of the following network devices can connect similar types of local area networks, while keeping local data inside its own network?
        A.   Bridges
        B.   Repeaters
        C.   Routers
        D.   Switches   (2 marks)

36.   Which of the following is **NOT** a reason for parallel lines not being used for long distance data transmission?
        A.   Cost factor
        B.   Signal attenuation
        C.   Number of transmission channels
        D.   Low speed   (2 marks)

37.   All of the following are techniques B2C e-commerce companies use to attract customers, with the exception of?
        A.   Registering with search engines
        B.   Virtual marketing
        C.   Viral marketing
        D.   Online ads   (2 marks)

38.   Which of the following statements **BEST** describes the function of magnetic ink character recognition (MICR) method of capturing data?
        A.   Converts the physical action to be measured into an electrical equivalent and processes it so that the electrical signals can be easily sent and further processed.
        B.   Verifies the legitimacy or originality of paper documents, especially bank cheques.
        C.   Converts an image of text into a machine-readable text format.
        D.   Scans and captures the optical marks on such documents as the multiple choice scoring sheets. (2 marks)

39.   The following are examples of system software **EXCEPT**?
        A.   Operating system
        B.   Word processor
        C.   Utility
        D.   Device driver   (2 marks)

40.   Which of the following is **NOT** a back up storage device?
        A.   Hard disk
        B.   DVD
        C.   Cache
        D.   CD   (2 marks)

41.   FORTRAN, BASIC, COBOL are examples of?
        A.   High level programming languages
        B.   Low level programming languages
        C.   Assembly languages
        D.   Application software   (2 marks)

42. Which of the following is measured using "dots per inch"?
    A. Screen size
    B. Data speeds for modems
    C. Resolution of an image
    D. Processing speed (2 marks)

43. Which one of the following statements, **BEST** describes the function of a slide master view?
    A. It allows you edit and create your own layouts.
    B. It shows the layout of your presentation as it is printed out on paper.
    C. It allows to change the layout for every single notes section in your project.
    D. It allows a colourful presentation to be shown. (2marks)

44. Which **ONE** of the following is **NOT** an example of an operating system?
    A. MacOS
    B. Android
    C. Oracle
    D. Linux (2 marks)

45. Printers can be impact or non-impact. Which one of the following is a non-impact printer?
    A. Dot Matrix
    B. Daisy Wheel
    C. Chain printer
    D. Inkjet printer (2 marks)

46. Select from the list below one disadvantage of a client-server network?
    A. When server is not on, clients do not power up.
    B. Clients cannot connect wirelessly to the server
    C. Dependent on server if server goes down clients stop working
    D. Clients are more expensive than the server (2 marks)

47. Which **ONE** of the following is neither an input nor output device?
    A. Flash disk
    B. Mouse
    C. LaserJet
    D. Sensor (2 marks)

48. Which of the following is **NOT** an ethical issue in computing?
    A. Privacy
    B. Security
    C. Tomography
    D. Cyberslacking (2 marks)

49. Which of the following refers to a grid in spreadsheet software consisting of cells, rows and columns?
    A. Worksheet
    B. Workbook
    C. Gridlines
    D. Workflow (2 marks)

50. The section at the bottom of a page reserved for displaying information that is common to the whole document is referred to as?
    A. Footnote
    B. Task bar
    C. Footer
    D. Endnote (2 marks)

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CAMS LEVEL I

PILOT PAPER

FUNDAMENTAL ICT SKILLS

November 2021.   **Time Allowed: Two Hours**

This paper has three sections. Section One has forty (40) multiple choice questions. Section Two has twenty (20) short response questions. Section Three has one (1) essay question. All questions are compulsory.

SECTION ONE [40 MARKS] [40 MINUTES]

1. Name the process of determining what the authenticated entity is allowed to access and what operations they are allowed to perform. (1 mark)

2. Identify the science of measuring physiological characteristics that include hand prints, fingerprints, voice, or the entire face. (1 mark)

3. Name a Microsoft Word feature used that allows one to send copies of the same letter to multiple recipients. (1 mark)

4. A device that uses the best possible path to forward data packets from one network to another is. (1 mark)

5. Data and instructions inside the computer are represented using two states of electricity, that is, on and off. This is referred to as: (1 mark)

6. Name the software that uses rows and columns to manipulate numerical data. (1 mark)

7. Which generation of computers supports artificial intelligence? (1 mark)

8. State true or false: Absolute references are cell references that change when a formula is copied from one cell to another. (1 mark)

9. State true or false: System software includes programs designed to help end users solve specific problems or perform specific tasks using the computer. (1 mark)

10. State true or false: Linux, Windows and Android are examples of application software. (1 mark)

11. State true or false: Cut and paste is used to move the original content from one document to a new location without creating a duplicate. (1 mark)

12. State true or false: A standard user account gives full control access and permissions including installing applications and changing security settings. (1 mark)

13. State true or false: A compiler executes the source program line by line. (1 mark)

14. State true or false: A router broadcasts data to all connected devices. (1 mark)

15. State true or false: In a peer to-peer network, each workstation can act both as a client and server share all or part of its resources. (1 mark)

16. State true or false: Device drivers are used to convert fragmented files into contiguous files to enable faster loading of files. (1 mark)

17. In a computer network, a switch can be used to: (1 mark)
   (a) Deliver data packets to the intended destination port.
   (b) Ensure data packets use the best possible route to get to the destination.
   (c) Translate data from one kind of protocol to another.
   (d) Link two or more network segments together.

18. You have been advised to purchase a Category 6 cable to connect your laptop to a router. This cable is an example of: (1 mark)
   (a) Fibre optic cables
   (b) Shielded twisted pair cables
   (c) Unshielded twisted pair cables
   (d) Coaxial cables.

19. The gap between those who have and those who do **NOT** have the ability to use technology is called.
   (1 mark)
   (a) Grid computing
   (b) Internet of things
   (c) Radio Frequency Identification
   (d) Dig*i*tal divide

20. The Slide Master view in power point allows a user to: (1 mark)
   (a) Encrypt a PowerPoint document
   (b) Make uniform changes to all the slides in the presentation
   (c) Check for compatibility issues
   (d) Insert a SmartArt graphic in a document.

21. One limitation of Server based networks is: (1 mark)
   (a) Scalability
   (b) Increased costs
   (c) Centralised administration
   (d) Multiple users may share files on the server.

22. The fastest computers used by large organisations to execute computationally demanding tasks involving very large data sets are. (1 mark)
   (a) Mainframe computers
   (b) Minicomputers
   (c) Supercomputers
   (d) Microcomputers.

23. Mary wants to transfer data from a laptop to a tablet computer using unguided media. Select the best option to use for this purpose from the following: (1 mark)
   (a) Bluetooth
   (b) Microwave transmission
   (c) Fiber optic cables
   (d) Coaxial cables.

24. Instructions needed when starting the computer are stored in the: (1 mark)
   (a) Random Access Memory
   (b) Read Only Memory
   (c) Processor
   (d) Joystick.

25. Viruses, trojans and worms are examples of: (1 mark)
    (a) Firewalls
    (b) Malware
    (c) Social engineering
    (d) Natural hazards.

26. Laptops, desktops and thin clients are examples of: (1 mark)
    (a) Mainframe computers
    (b) Supercomputers
    (c) Minicomputers
    (d) Microcomputers.

27. The following are functions of an operating system **except**: (1 mark)
    (a) Data backup
    (b) File management
    (c) Loading application software
    (d) Provides security.

28. Which of the following is an example of an output device? (1 mark)
    (a) Mouse
    (b) Speakers
    (c) Processor
    (d) Flash disk.

29. Utility software includes: (1 mark)
    (a) Random access memory
    (b) Central processing unit
    (c) Honeypots
    (d) Antivirus.

30. One characteristic of third generation computers is the use of: (1 mark)
    (a) Transistors
    (b) Integrated circuits
    (c) Vacuum tubes
    (d) Parallel processing.

From questions 31 – 35, match the five items on the left with their definition or example on the right:

31.	Peripheral devices	Hard disks, Memory cards and DVD drives	(1 mark)
32.	Storage devices	Random access memory	(1 mark)
33.	Input devices	Used to produce hardcopy output	(1 mark)
34.	Primary storage	Touch screen, Microphones and Light pens	(1 mark)
35.	Printers	Keyboard, Speakers and Scanners	(1 mark)

From questions 36 – 40, match the five items on the left with their definition on the right:

36.	Firewalls	Scrambling and altering of data to prevent unauthorised access.	(1 mark)
37.	Digital certificates	Used to verify the identity of a user or device, and establish authenticity of online transactions.	(1 mark)
38.	Encryption	The process of verifying the real identity of a user, for example, by using passwords.	(1 mark)
39.	Computer forensics	Used to filter incoming and outgoing network traffic based on predetermined security rules.	(1 mark)
40.	Authentication	Investigation and analysis of data held in computers as evidence in a court of law.	(1 mark)

(Total: 40 marks)

SECTION TWO
[40 MARKS] [1 Hour]

You are advised not to exceed forty words in answering each question.

41. Distinguish between the following terminologies:
    - (a) A Workbook and Worksheet in Microsoft Excel. (2 marks)
    - (b) Command line interface and Graphical user interface. (2 marks)
    - (c) Antivirus and Backups (2 marks)
    - (d) Denial-of-service attacks and Distributed Denial-of-Service attacks. (2 marks)
    - (e) Personal area network and Wide area network. (2 marks)

42. Identify two benefits of:
    - (a) Accounting software. (2 marks)
    - (b) Presentation software (2 marks)

43. Highlight two causes of hardware obsolescence. (2 marks)

44. List two icons found on a Windows desktop. (2 marks)

45. Identify two to factors to consider when selecting a printer. (2 marks)

46. State two options available when aligning text in Microsoft Excel. (2 marks)

47. Explain two factors to consider when selecting an operating system. (2 marks)

48. Highlight two computer application areas. (2 marks)

49. In Word processing software, page orientation can be displayed in two ways. Outline these two ways. (2 marks)

50. Explain two basic features of accounting software. (2 marks)

51. Outline two disadvantages of low-level languages. (2 marks)

52. Explain two ways in which information technology has transformed organisations. (2 marks)

53. Discuss the impact of cyber security education. (2 marks)

54. Describe the role of hyperlinks in Microsoft Word. (2 marks)

55. Explain two ways that can be used to make a Microsoft PowerPoint presentation attractive. (2 marks)

(Total: 40 marks)

SECTION III

[20 MARKS] [20 MINUTES]

56. Create a new blank workbook in Microsoft Excel. Name the workbook *Westlands Sales Report*. Enter the data as it appears below: (1 mark)

MONTH / SALESPERSON	Jan	Feb	Mar	Apr	May	Total Sales
Renee	356	900	566	890	380	
Talia	860	680	590	650	760	
Moses	345	560	210	745	120	
Rose	240	320	380	740	900	

(a)   Insert a row before the first row and type WESTLANDS SALES REPORT in cell A1.   (2 marks)

(b)   Insert a new row between Talia and Moses. In the new row, type in the following: (1 mark)
       John   890   211   340   691   720

(c)   Calculate the Totals in Column G.   (2 marks)

(d)   Type the word Minimum in cell I2. Calculate the Minimum Sales.   (2 marks)

(e)   Type the word Maximum in cell J2. Calculate the Maximum Sales.   (2 marks)

(f)   Merge and Center cell A1 to J1.   (1 mark)

(g)   Save the document as Westlands Sales report.

(h)   Create a *2-DClustered column chart* showing the Total sales for each Sales person.   (3 marks)

(i)   Edit the Title of the chart to display the data **WESTLANDS SALES REPORT**.   (1 mark)

(j)   Insert data labels on the *Inside end* showing the Total sales for each Sales person.   (2 marks)

(k)   Move the chart to Sheet 2, pasting it in cell B2.   (2 marks)

(l)   Rename Sheet 1 as *Sales Data* and Sheet 2 as *Chart*.   (2 marks)
       (Total: 20 marks)

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CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 2 August 2022. Morning paper. **Time Allowed: 2 hours.**

This paper is made up of fifty (50) Multiple Choice Questions. Answer ALL the questions by indicating the letter (A, B, C or D) that represents the correct answer. Do NOT write anything on this paper.

1. _____ is a type of memory that can speed up computer processing.
   A. Random Access Memory
   B. Read Only Memory
   C. Cache Memory
   D. Programmable Read Only Memory   (2 marks)

2. _____ is the number of bytes in a Kilobyte.
   A. 1000
   B. 8
   C. 2024
   D. 1024   (2 marks)

3. Select the appropriate storage capacity of the following storage media:
   Floppy disk, DVD, Blu-ray disk, Compact disk
   A. Floppy disk-25GB, DVD-4.7GB, Blu-ray disk-1.44MB, Compact disk-650MB
   B. Floppy disk-1.44MB, DVD-4.7GB, Blu-ray disk-25GB, Compact disk-650MB
   C. Floppy disk-1.44MB, DVD-650MB, Blu-ray disk-4.7GB, Compact disk-25GB
   D. Floppy disk-650MB, DVD-4.7GB, Blu-ray disk -25GB, Compact disk-1.44GB   (2 marks)

4. _____ is a device for converting handwritten impressions into coded characters and positional coordinates for input to a computer.
   A. Wand
   B. Mouse
   C. Writing tablet
   D. Touch panel   (2 marks)

5. Optical Mark Recognition (OMR) devices sense the input based on _____.
   A. Handwritten document
   B. Printed magnetic ink
   C. Text present on paper
   D. Presence or absence of mark such as a pencil mark   (2 marks)

6. Which computer screen is not good for your health (eye strain, headache)?
   A. LCD
   B. TFT
   C. CRT
   D. OLED   (2 marks)

7. _____ is another name for main memory.
   A. Immediate access storage
   B. Auxiliary storage
   C. Backing storage
   D. Secondary storage   (2 marks)

8. Hard disks, optical disks and floppy disks are all types of _____.
   A. Serial access storage
   B. Direct access storage
   C. Volatile access storage
   D. Non-impact access storage (2 marks)

9. _____ is the process of reading data from main memory and writing it to a secondary storage.

   A. Writing the data
   B. Reading the data
   C. Saving the data
   D. Loading the data (2 marks)

10. Identify the component of CPU responsible for comparing the contents of two pieces of data.
   A. ALU
   B. Register
   C. Control unit
   D. Bus (2 marks)

11. Utility program is an example of_____.
   A. Firmware
   B. Operating system
   C. Application software
   D. System software (2 marks)

12. Which of the following is equal to a Terabyte
   A. 512 GB
   B. 1024GB
   C. 1024MB
   D. 1024KB (2 marks)

13. _____ is used to measure processor speed.
   A. Nanoseconds
   B. Kilo-second
   C. Gigahertz
   D. Megabyte (2 marks)

14. Consider the following path C:\ICT\Module\Module1.exe. What is the name of the file in this path?
   A. ICT
   B. Module
   C. Module1.exe
   D. C (2 marks)

15. In a presentation of PowerPoint, the special effects used to introduce slides are known as _____.
   A. Custom animation
   B. Transitions
   C. Annotations
   D. Slide (2 marks)

16. A set of instructions that a computer follows in order to perform a particular task is known as_____.
   A. Program
   B. Hardware
   C. Firmware
   D. Code (2 marks)

17. Society has come to rely heavily on computers. Which of the following is a disadvantage of computers?
   A. Increases user productivity
   B. Stores vast amounts of information
   C. Helps sort, organise, and search through information
   D. Increases waste affecting the environment (2 marks)

18. _____ are lined across the top of the keyboard and act as shortcuts, performing certain tasks, like saving files, printing data, or refreshing a page.
    A. Alphabetic keys
    B. Navigation keys
    C. Function keys
    D. Special keys (2 marks)

19. Which one of the following is NOT a characteristic of second generation computers?
    A. Main electronic components were transistors
    B. Supported machine and assembly languages
    C. Main memory was of magnetic drums
    D. Input/output devices included punched cards and magnetic tape. (2 marks)

20. A network technology that connects computers via cables to each other and to the Internet is known as?
    A. Ethernet
    B. Intranet
    C. Extranet
    D. Wi-Fi (2 marks)

21. A graphics package is used to produce and manipulate artwork. Which one of the following is an example of this package?
    A. Corel Draw
    B. Page Maker
    C. Power Point
    D. Ms Word (2 marks)

22. Identify among the following devices one which is NOT a magnetic storage device.
    A. Floppy disk
    B. Hard disk
    C. Zip disk
    D. Flash disk (2 marks)

23. Which of the following is a file management utility available in Windows operating system?
    A. Windows Explorer
    B. Notepad
    C. Internet Explorer
    D. Paint (2 marks)

24. A _____ is a small piece of information you may be asked to accept when connecting to certain servers via a web browser.
    A. Cookie
    B. Shopping cart
    C. Spam
    D. Virus (2 marks)

25. Identify the statement below which best describes a remote user in networking.
    A. A person situated far from the main centres of population.
    B. A user who is operating a hardware device or accessing software from an off-site location.
    C. A primitive user who has no knowledge of computers.
    D. A user account with limited privileges that will be used for general tasks such as reading email and surfing the Web. (2 marks)

26. One of the typical accounting modules that is available in accounting software packages is accounts receivable. Which one of the following is **NOT** handled by this module?
    A. Invoicing of customers
    B. Processing of customer payments.
    C. Tracking money due to vendors, discounts and payment.
    D. Aging report which shows money due to the business by the customers (2 marks)

27. A port is a physical docking point on which an external device can be connected to the computer for example VGA Port. Which device is connected through VGA port?
    A. Monitor
    B. Printer
    C. Keyboard
    D. Mouse   (2 marks)

28. Which one of the following is the keyboard shortcut keys to permanently delete a file from folder?
    A. Shift + Delete
    B. Ctrl + Delete
    C. Alt + Delete
    D. Shift + End   (2 marks)

29. Which utility tool allows a user to remove files that are no longer needed or that can be safely deleted?
    A. Disk cleanup
    B. Disk defragmenter
    C. Disk management
    D. Antivirus   (2 marks)

30. Which one of the following statements **BEST** describes a computer worm?
    A. A malicious piece of code intentionally inserted into a software system that will set off a malicious function when specified conditions are met
    B. A malicious program that replicates itself, automatically spreading through a network
    C. A malicious code or program written to alter the way a computer operates and is designed to spread from one computer to another
    D. A malicious code or software that looks legitimate but can take control of your computer   (2 marks)

31. Which of the following can be used to improve the security of a system?
    A. Audit log
    B. Dumpster diving
    C. Shoulder surfing
    D. Threat monitoring   (2 marks)

32. _____ is a type of channel that moves data relatively slowly.
    A. Narrowband channel
    B. Wideband channel
    C. Voiceband channel
    D. Broadband channel   (2 marks)

33. Passwords enable users to perform which of the following tasks?
    A. Get into the system quickly
    B. Retain confidentiality of files
    C. Simplify file structures
    D. Make efficient use of time   (2 marks)

34. Which of the following shortcut keys is used to change line height to 1.5 in word processing application?
    A. Ctrl + 5
    B. Ctrl + 3
    C. Ctrl + 2
    D. Ctrl + 1   (2 marks)

35. What is the name of a program designed to destroy data on your computer which can travel to "infect" other computers?
    A. Virus
    B. Torpedo
    C. Hurricane
    D. Disease   (2 marks)

36. A proxy server is used for which of the following?
   A.   To provide security against unauthorised users
   B.   To process client requests for database access
   C.   To provide TCP/IP
   D.   To process client requests for web pages   (2 marks)

37. Which of the following is an invalid edition of Microsoft PowerPoint?
   A.   MS PowerPoint 2001
   B.   MS PowerPoint 2010
   C.   MS PowerPoint 2007
   D.   MS PowerPoint 2003   (2 marks)

38. Which of the following do NOT harm computer resources?
   A.   Virus
   B.   Trojan horse
   C.   Firewall
   D.   Computer worm   (2 marks)

39. _____ is a network that is part of your intranet but is extended to users outside your organisation and is accessible from the internet.
   A.   An internet
   B.   An extranet
   C.   Virtual private network
   D.   Wide area network   (2 marks)

40. Which type of network needs "terminator" to function correctly?
   A.   Ring
   B.   Mesh
   C.   Star
   D.   Bus   (2 marks)

41. In case you accidentally delete a file you can _____ it again from the Recycle Bin.
   A.   Retake
   B.   Restore
   C.   Recreate
   D.   Share   (2 marks)

42. Which of the following would most likely **NOT** be a symptom of a virus?
   A.   The Web browser opens to an unusual home page
   B.   Odd messages or images are displayed on the screen
   C.   The CD-ROM stops functioning
   D.   Existing program files and icons disappear   (2 marks)

43. Which one of the following is checked by a computer for user names and passwords for a match before granting access?
   A.   Network
   B.   Website
   C.   Backup file
   D.   Database   (2 marks)

44. Which of the following is placed at the end of a document?
   A.   Foot Note
   B.   Footer
   C.   Header
   D.   End Note   (2 marks)

45. Which of the following is the most used rule for backup?
   A.   3-2-1 Rule
   B.   4-3-1 Rule
   C.   4-2-1 Rule
   D.   4-3-2 Rule   (2 marks)

46. Which of the following is the process of retaining or keeping of data at a secure place for long-term storage?
   A. Archival Storage
   B. Disposal of Data
   C. Backup
   D. Data archiving (2 marks)

47. _____ is not useful for the secure disposal of data.
   A. Destroy the data
   B. Destroy access
   C. Destroy the device
   D. Keep careful records (2 marks)

48. _____ is a property indicating how much data a file contains.
   A. Executable
   B. File
   C. File size
   D. Extension (2 marks)

49. _____ is the space left between the margin and the start of a paragraph.
   A. Indentation
   B. Spacing
   C. Gutter
   D. Alignment (2 marks)

50. Data is converted into light and transferred at high speeds in_____
   A. Hub
   B. Modem
   C. Router
   D. Fibre optic cable (2 marks)

....

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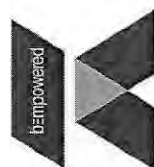
CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 5 April 2022. Morning paper.   **Time Allowed: 3 hours.**

This paper is made up of a hundred (100) Multiple Choice Questions. Answer ALL questions by indicating the letter (a, b, c or d) that represents the correct answer. Do NOT write anything on this paper.

1.   Identify the name of keys present on the top row of a typical keyboard.
     (a)   Navigation.
     (b)   Typewriter.
     (c)   Numeric.
     (d)   Function.   (1 mark)

2.   _____ is a device used to provide a hard copy.
     (a)   Computer monitor.
     (b)   Cathode Ray Tube.
     (c)   Printer.
     (d)   Card reader.   (1 mark)

3.   _____ is a device used to connect two computers using a telephone line.
     (a)   Multiplexer.
     (b)   Router.
     (c)   Concentrator.
     (d)   Modem.   (1 mark)

4.   _____ is a light sensitive device that converts printed texts, drawings and other images into digital form.
     (a)   Optical mark reader.
     (b)   Optical character reader.
     (c)   Scanner.
     (d)   Plotter.   (1 mark)

5.   Which of the following is **NOT** a pointing device?
     (a)   Touch screen.
     (b)   Magnetic Ink Character Reader.
     (c)   Light pen.
     (d)   Joystick.   (1 mark)

6.   Which of the following file names is **NOT** properly matched with the proper application?
     (a)   Employee.zip _____Compressed file.
     (b)   Employee.jpg _____ picture.
     (c)   Employee.htm _____ Web page.
     (d)   Employee.Mdb _____ Excel.   (1 mark)

7.   Which of the following is **NOT** an advantage of database approach?
     (a)   It is easy to design and develop a database.
     (b)   There is data independence.
     (c)   There is controlled data redundancy.
     (d)   There is data integrity.   (1 mark)

8.   Which of the following statements is **NOT** true about databases?
     (a)   Relational database is of 1:1 relation.
     (b)   Network database is of 1: Many relationship.
     (c)   Hierarchical database is of 1: Many relationship.
     (d)   Network database is of Many: Many relationships.   (1 mark)

18. Which of the following is **NOT** a feature of a firewall?
    (a) Web creating.
    (b) Intrusion prevention system.
    (c) Bandwidth control and monitoring.
    (d) Malware filtering (1 mark)

19. Which of the programming languages are described by the following statement: "They are procedural and problem oriented languages"?
    (a) Machine.
    (b) Assembly.
    (c) High level.
    (d) Fourth generation. (1 mark)

20. Which software allows a personal computer to be used as a publishing and design tool facilitating production of top quality document internally while reducing printing costs?
    (a) Word processing.
    (b) Desktop publishing.
    (c) Operating system.
    (d) Presentation. (1 mark)

21. Which of the following is **NOT** an accounting package?
    (a) Sage.
    (b) Quick books.
    (c) Tally.
    (d) Quattro pro. (1 mark)

22. This is very special type of high speed memory whose main function is to make the programs and data available to the CPU very fast. Which of the following type of memory is described in this statement.
    (a) Virtual memory.
    (b) Cache memory.
    (c) Random access memory.
    (d) Register. (1 mark)

23. Which of the following is **NOT** a physical security control measure?
    (a) Smart card.
    (b) Security Guard.
    (c) Closed-circuit Television Monitor.
    (d) Biometric Access Control. (1 mark)

24. Name the component which takes digital data from computer system and turns it into visible images.
    (a) Printer.
    (b) Keyboard.
    (c) Monitor.
    (d) Scanner. (1 mark)

25. Which one of the following is **NOT** a definite advantage of fiber optic cables over coaxial cables?
    (a) Greater bandwidth.
    (b) Faster speeds.
    (c) More flexibility for the future.
    (d) Lower cost of installation. (1 mark)

26. Identify the statement which best describes an information security risk?
    (a) The likelihood that something bad will happen that causes harm to an informational asset.
    (b) A weakness that could be used to endanger or cause harm to an informational asset.
    (c) Anything man-made or occurring naturally that has the potential to cause harm.
    (d) The act of ensuring that data is not lost when critical issues arise such as; natural disasters, computer/server malfunction, physical theft among others. (1 mark)

27. Which of the following is **NOT** a computer port?
    (a) Chipset.
    (b) Universal Serial Bus (USB).
    (c) Video Graphics Adapter.
    (d) Ethernet. (1 mark)

38. To execute an instruction, the CPU will first decode the instruction into a sequence of electrical signals controlling the connections amongst the logic gates.
    Which of the following unit is responsible for generating such signals?
    (a) Register.
    (b) Control unit.
    (c) ALU.
    (d) Cache. (1 mark)

39. Which of the following is considered to be the heart of a computer?
    (a) CPU.
    (b) Memory.
    (c) I/O Unit.
    (d) Disks. (1 mark)

40. Which of the following is used as secondary storage?
    (a) Semiconductor memory.
    (b) Random access memory.
    (c) Magnetic field.
    (d) Magnetic tapes. (1 mark)

41. Data is a stream of _____ representing events occurring in an organisation?
    (a) Raw facts.
    (b) Meaningful information.
    (c) Information.
    (d) Numbers. (1 mark)

42. Which of the following components could be upgraded to improve the performance of your computer?
    (a) Monitor.
    (b) CPU.
    (c) Keyboard.
    (d) Printer. (1 mark)

43. Which of the following is a storage area used to store data to compensate for the difference in speed at which the different units can handle data?
    (a) Memory.
    (b) Accumulator.
    (c) Address.
    (d) Buffer. (1 mark)

44. Which of the following has the quickest access?
    (a) Direct access from a magnetic tape.
    (b) Direct access from a floppy disk.
    (c) Direct access from a cassette tape.
    (d) Direct access from a hard disk. (1 mark)

45. Which of the following best describes an internal network designed to provide and disseminate information to internal staff by using the look and feel of the World Wide Web?
    (a) Extranet.
    (b) Local Area Network.
    (c) Intranet.
    (d) Internet. (1 mark)

46. Which of the following network security features is the best in terms of preventing users on a network from using programs and information that they do not need to access?
    (a) Right of entry.
    (b) Password rights.
    (c) Access rights.
    (d) Protocol rights. (1 mark)

56. Which of the following constitutes the major forms of multiplexing for computer networking?
    (i) Frequency Division Multiplexing (FDM).
    (ii) Time Division Multiplexing (TDM).
    (iii) Spread spectrum.
    (iv) Wavelength multiplexing.

    (a) (i) and (ii) only.
    (b) (i) and (iii) only.
    (c) (i), (ii) and (iii) only.
    (d) (i) and (iv) only.   (1 mark)

57. Which of the following best describes protecting the data from unauthorised access?
    (e) Data inaccessibility.
    (f) Data encryption.
    (g) Data security.
    (h) Data validity.   (1 mark)

58. Which of the following software is generally used for what if analysis?
    (a) Word-processing.
    (b) Spread sheet.
    (c) Presentation package.
    (d) Database management.   (1 mark)

59. Which of the following best describes what software documentation refers to?
    (a) The linking of one document to another.
    (b) Anything written about how the software is designed or functions.
    (c) The documents which, the user has to sign before using the software legally.
    (d) The compatibility of the software with IBM-PC.   (1 mark)

60. Identity the computer generation based on Very Large Scale Integrated (VLSI) technology?
    (a) 5th.
    (b) 4th.
    (c) 3rd.
    (d) 2nd.   (1 mark)

61. Which of the following statements is true for the second generation computers?
    (a) They use vacuum tubes.
    (b) They use magnetic drum for data storage.
    (c) They use transistors.
    (d) They use small scale integrated circuit.   (1 mark)

62. Central processing unit is made up of the following components?
    (a) Main memory and control unit.
    (b) Arithmetic logic unit and control unit.
    (c) Main Memory, Control Unit and Arithmetic Logic Unit.
    (d) Main Memory and Arithmetic Logic Unit.   (1 mark)

63. Which of the following is **NOT** a pointing device?
    (a) Light pen.
    (b) Joystick.
    (c) Trackball.
    (d) Microphone.   (1 mark)

64. _____ is also known as a desktop computer?
    (a) Laptop.
    (b) Notebook.
    (c) Minicomputer.
    (d) Personal computer.   (1 mark)

74. _____ refers to moving from one website to another.
   (a) Attachment.
   (b) Uploading.
   (c) Browsing.
   (d) Downloading.   (1 mark)

75. _____ is used to add an attachment to an email?
   (a) Stationary icon.
   (b) Emoji icon.
   (c) Paper clip icon.
   (d) GIF icon.   (1 mark)

76. What is the easiest way to place some graphics in some place in all slides?
   (a) Place graphics in Notes Master.
   (b) Place graphics in Slide Master.
   (c) Place graphic in Handout Master.
   (d) Place graphic manually in all slides.   (1 mark)

77. _____ is the space between the margin and the start of a paragraph.
   (a) Indentation.
   (b) Alignment.
   (c) Spacing.
   (d) Gutter.   (1 mark)

78. Spreadsheets capability to allow a pie chart to be generated is known as _____ ?
   (a) Function.
   (b) Charting.
   (c) Decoration.
   (d) Graphing.   (1 mark)

79. _____ feature makes it easier to add repetitive data to worksheet?
   (a) Sort.
   (b) Filter.
   (c) Autosum.
   (d) Autocomplete.   (1 mark)

80. Identify network topology that uses a single cable to connect all the computers?
   (a) Star.
   (b) Ring.
   (c) Bus.
   (d) Mesh.   (1 mark)

81. The data in ring topology moves in _____ direction(s)?
   (a) Two.
   (b) Three
   (c) Four.
   (d) One.   (1 mark)

82. _____ has an inner conductor and an outer conductor separated by insulation?
   (a) Twisted wires.
   (b) Coaxial wires.
   (c) Wire pairs.
   (d) Fiber optic cable.   (1 mark)

83. What is a multiplexer?
   (a) A device that converts digital signals to analog signals.
   (b) A device that converts analog signals to digital signals.
   (c) A device that allow several devices to share a transmission line.
   (d) A device that performs communication processing in a network.   (1 mark)

94. Which of these is **NOT** a characteristic of good information?
    (a)   Up-to-date.
    (b)   Relevant.
    (c)   Complete.
    (d)   Dynamic.   (1 mark)

95. Which data capture method would be the most appropriate for reading the codes on packages, books and tins?
    (a)   Optical Mark Reader.
    (b)   Optical Character Reader.
    (c)   Barcode reader.
    (d)   Magnetic Ink Character Reader.   (1 mark)

96. MICR is commonly used _____.
    (a)   Scanning products at supermarket counter.
    (b)   To scan images printed with laser printer.
    (c)   Read characters printed in a special ink used mostly in bank cheques.
    (d)   Used for tracking hospital devices along with bar code.   (1 mark)

97. _____ is an intangible computer output represented on screen.
    (a)   Desktop.
    (b)   Softcopy.
    (c)   Software.
    (d)   Window.   (1 mark)

98. _____ is a language that is close to human language and it's easy to write, debug and maintain.
    (a)   A high level language.
    (b)   A low level language.
    (c)   An algorithm.
    (d)   Machine code.   (1 mark)

99. Which of the following programming language types was created first?
    (a)   Procedural.
    (b)   Object oriented.
    (c)   Machine.
    (d)   Assembly.   (1 mark)

100. _____ is a proprietary software where the source code is **NOT** revealed to the public?
    (a)   Open source.
    (b)   Closed source.
    (c)   Freeware.
    (d)   Shareware.   (1 mark)

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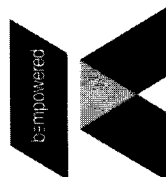
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CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

THURSDAY: 16 December 2021.   **Time Allowed: 3 hours.**

This paper has three sections. SECTION I has forty (40) multiple choice questions. SECTION II has twenty (20) short response questions. SECTION III has one (1) essay question. All questions are compulsory. Marks allocated to each question are shown at the end of the question.

SECTION I – 40 MARKS

1. Which one of the following devices functions only as an input device?
   (a) Hard disk drive
   (b) Computer memory
   (c) Computer monitor
   (d) Scanner   (1 mark)

2. What was the technology used in the third generation computers?
   (a) Integrated circuits
   (b) Vacuum tube
   (c) Transistor
   (d) Very large scale integration   (1 mark)

3. Which type of software that is best defined by the following; "Software which allows end users to perform and fulfil their tasks"?
   (a) Operating system
   (b) Application software
   (c) Utilities software
   (d) Programming software   (1 mark)

4. What is the name of a circuit board which connects most of the other devices on a computer?
   (a) Processor
   (b) Expansion slot
   (c) Motherboard
   (d) Monitor   (1 mark)

5. Which of the following is a primary feature of an operating system?
   (a) Virus scanning
   (b) File management
   (c) Creating databases
   (d) Web browsing   (1 mark)

6. A company needs to develop a computerised system to manage its sales. Who is the most appropriate person to study this company's requirements?
   (a) Programmer
   (b) Web designer
   (c) Systems analyst
   (d) System administrator   (1 mark)

7. In graphical user interface (GUI), what does the acronym WYSIWYG stand for?
   (a) What You See Is What You Get
   (b) Why you saw Is What You Got
   (c) Where You See Is Where You Got
   (d) What You See Is What You Got   (1 mark)

8.	Consider the following devices:
	X - Digital camera
	Y - Speaker
	Z - Hard disk	(1 mark)

	Which of the above is/are usually used as an output device/devices of a computer?
	(a)	X only
	(b)	Y only
	(c)	X and Y only
	(d)	Y and Z only	(1 mark)

9.	In relation to e-mail, what does **RE:** or **Re:** in the subject box stand for?
	(a)	Receive
	(b)	Reference
	(c)	Reply
	(d)	Remember	(1 mark)

10.	Which one of the following is **NOT** a symptom of internet addiction disorder?
	(a)	Improved access to distance learning and online tutorials
	(b)	Difficulty maintaining healthy relationships when not online
	(c)	A sudden and drastic increase in your internet usage
	(d)	Friends and family expressing concern for the amount of time you spend online	(1 mark)

11.	Which of the following is **NOT TRUE** about the Internet?
	(a)	Nobody owns the Internet
	(b)	There is no centralised control
	(c)	It is a network of computer networks
	(d)	All the information available is accurate and reliable	(1 mark)

12.	Which of the following is considered as raw data?
	(a)	Marks obtained by students in a class
	(b)	Sorted list of marks obtained by students in a class
	(c)	Maximum marks obtained by students in a class
	(d)	Average marks obtained by students in a class	(1 mark)

13.	What is the function of the CTRL + Z keyboard shortcut?
	(a)	Undo
	(b)	Copy
	(c)	Paste
	(d)	Cut	(1 mark)

14.	Which of the following input devices recognises the position of marks on paper?
	(a)	MICR
	(b)	OCR
	(c)	MIDI
	(d)	OMR	(1 mark)

15.	Which of the following is *NOT* a network device?
	(a)	Hub
	(b)	Printer
	(c)	Router
	(d)	OMR	(1 mark)

16.	Which of the following is not a type of user interface?
	(a)	Command driven interface
	(b)	Menu driven interface
	(c)	Efficient based interface
	(d)	Direct manipulation interface	(1 mark)

17. The ability to combine names and addresses with a standard document is called _____
  (a) Document formatting
  (b) Database management
  (c) Mail merge
  (d) Form letters
                                                                              (1 mark)

18. A spreadsheet function that displays only the data in column(s) according to specified criteria is called a_____
  (a) Formula
  (b) Sorter
  (c) Filter
  (d) Pivot
                                                                              (1 mark)

19. What type of diagram would you use to compare performance of two employees in the year 2020?
  (a) Column chart
  (b) Line chart
  (c) Pie chart
  (d) Dot chart
                                                                              (1 mark)

20. The _____ feature of spreadsheet application quickly completes a series of data.
  (a) Auto Complete
  (b) Auto Fill
  (c) Fill Handle
  (d) Sorting
                                                                              (1 mark)

21. Which type of field will you select if you need to enter long text in that field?
  (a) Text
  (b) Memo
  (c) Currency
  (d) Hyperlink
                                                                              (1 mark)

22. The columns in a database application table are also called _____
  (a) Rows
  (b) Records
  (c) Fields
  (d) Columns
                                                                              (1 mark)

23. Which of the following factors is not used when determining the processing power of a computer?
  (a) Clock speed
  (b) RAM size
  (c) Register size
  (d) Computer price
                                                                              (1 mark)

24. Which of the following data transmission modes is not valid?
  (a) Simplex
  (b) Double duplex
  (c) Full duplex
  (d) Half duplex
                                                                              (1 mark)

25. Which transmission medium is most appropriate to carry data in a computer network that is exposed to electromagnetic interference?
  (a) Unshielded twisted pair
  (b) Coaxial cable
  (c) Microwave
  (d) Optical fibre
                                                                              (1 mark)

26. Which of the following is a valid email address?
  (a) tunaweza@point.com
  (b) gmail.com
  (c) tunawezapoint@.com
  (d) tunawezapoint@business
                                                                              (1 mark)

27. Which of the following types of software best represents the software designed to perform a specific task?
    (a)   Application software
    (b)   Synchronous software
    (c)   Package software
    (d)   System software   (1 mark)

28. Which network topology requires a central hub?
    (a)   Bus
    (b)   Star
    (c)   Mesh
    (d)   Ring   (1 mark)

29. The process of linking of computers with a communication system is called_____
    (a)   Networking
    (b)   Pairing
    (c)   Interfacing
    (d)   Assembling   (1 mark)

30. Which of the following statements about asynchronous transmission is **NOT** correct?
    (a)   Each character is framed with a start bit and a stop bit
    (b)   Transmission medium is idle during time intervals between transmitting characters
    (c)   Data is transmitted a block of characters at a time
    (d)   It is slow   (1 mark)

31. WLAN stands for _____
    (a)   Wire Lost Area Network
    (b)   Wireless Local Ambiguity Network
    (c)   Wired Local Area Network
    (d)   Wireless Local Area Network   (1 mark)

32. Which of the following is an example of a system software?
    (a)   Microsoft Excel
    (b)   Microsoft Word
    (c)   Microsoft Windows
    (d)   Opera   (1 mark)

33. Which of the following items are part of information technologies?
    (i)   Digital camera
    (ii)   Mobile phone
    (iii) Internet

    (a)   (i) and (ii)
    (b)   (ii) and (iii)
    (c)   (i) and (iii)
    (d)   (i), (ii) and (iii)   (1 mark)

34. What is the name of a network that uses a server to meet the needs of the other computers on the network?
    (a)   Local area network
    (b)   Client/server network
    (c)   Immediate network group
    (d)   Groupware network   (1 mark)

35. Which of the following is used as a primary storage device?
    (a)   Hard disk
    (b)   Magnetic tape
    (c)   PROM
    (d)   Floppy disk   (1 mark)

36. Which of the following enables a computer to "boot"?
    (a) Operating system
    (b) Compiler
    (c) Loader
    (d) Assembler

(1 mark)

37. Information is a set of data that have been shaped into a form that is:
    (a) Meaningless and useless to human being
    (b) Meaningful and useful to human being
    (c) Meaningless and useless to information systems
    (d) Meaningful and useful to information systems

(1 mark)

38. Which of the following best describes the Central Processing Unit?
    (a) It is operated from the control panel.
    (b) It controls all input, output and processing.
    (c) It is controlled by the input data entering the system
    (d) It controls the auxiliary storage unit

(1 mark)

39. Which of the following best describes the measure of the output quality of a printer?
    (a) Dots per inch
    (b) Dots printed per unit time
    (c) Dots per square inch
    (d) Type of ink used

(1 mark)

40. The difference between memory and storage is that memory is _____ and storage is _____
    (a) Permanent, temporary
    (b) Slow, fast
    (c) Temporary, permanent
    (d) Cheap, expensive

(1 mark)

SECTION II – 40 MARKS

In questions 41 to 45, indicate whether the statement is True or False.

41. Information Communication Technology refers to the technology that merges computing with high speed communication links carrying data, sound and video.

(1 mark)

42. Second Generation Computers used integrated circuits for their internal operations.

(1 mark)

43. Expansion Slot is an interface on a computer to which you connect a device.

(1 mark)

44. Fiber-optic cable is a media of choice for backbone networks.

(1 mark)

45. Shareware is any copyrighted software, application or program that may be freely downloaded, installed, used and shared.

(1 mark)

You are advised not to exceed forty words in answering questions number 46 to 60.

46. Write the appropriate file extension against the following software:

Software	File extension
Notepad	
Ms Word	

(2 marks)

47. Match each of the following network topologies with its main advantage outlined below the table:

Bus	
Star	
Ring	
mesh	

- Data can be transmitted from different devices simultaneously
- Easy to implement
- Point to point connection of devices
- Equal access for all users
- Centralised control

(4 marks)

48. Identify the category of the following devices either as input, output or storage device.

Digital Video Disk	
Touch pad	

(2 marks)

49. State the type of software below either as operating system, utility or application.

Linux	
QuickBooks	
Editor	
Ms Access	

(4 marks)

50. Define the term "network firewall". (2 marks)

51. _____ is working from home using telecommunication tools. (2 marks)

52. _____ is the practice of using a network of remote servers hosted on the internet to store, manage and process data rather than local servers. (2 marks)

53. _____ refers to electronic movement of standard business documents between or within firms. (2 marks)

54. The use of human biological and behavioral characteristics to recognise authorised users of a system is known as _____ (2 marks)

55. _____ is a network that uses public telecommunication infrastructure to connect private remote offices. (2 marks)

56. _____is a document that has been output from a computer, some extra information added to it, and then returned to become an input document. (2 marks)

57. _____ is the most powerful computer in the world. (2 marks)

58. _____ refers to raw facts awaiting processing. (2 marks)

59. State two functions used in spreadsheet application. (2 marks)

60. Outline two features of a word processing application. (2 marks)

SECTION III – 20 MARKS

61.   (i)   Outline the steps followed to create a folder called **KASNEBCAMICT** on the desktop.   (4 marks)

        (ii)   Outline the procedure of creating a word processing file called "KasnebExams" on the desktop.

                                                                                       (4 marks)

        (iii)   Using four short sentences, demonstrate the following features of a word processor program; bold, double underline, bullet and italics.   (4 marks)

        (iv)   Describe three ways of starting a spreadsheet program.   (6 marks)

        (v)   Using a simple illustration, describe a slide in the context of presentation application.   (2 marks)

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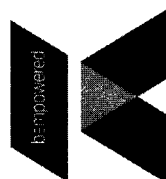
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CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 31 August 2021.   **Time Allowed: 3 hours.**

Answer any FIVE questions.   **ALL questions carry equal marks.**

QUESTION ONE

(a)   Highlight four advantages of using open source software in a business environment.   (4 marks)

(b)   State four uses of a super computer in a business environment.   (4 marks)

(c)   Explain two commonly supported features in a word processing software.   (2 marks)

(d)   List four application areas of intelligent systems in business.   (4 marks)

(e)   Citing two examples, define a digital product in the context of an e-commerce environment.   (3 marks)

(f)   State three hardware specifications that would appear in an invitation to tender document for a graphic design company.   (3 marks)

(Total: 20 marks)

QUESTION TWO

(a)   Highlight three uses of information communication technology (ICT) in business.   (3 marks)

(b)   As an accountant, explain two ways you could benefit from incorporating a spreadsheet into everyday tasks.
                                                                                                         (4 marks)

(c)   Describe five features which make an accounting package superior than a spreadsheet in accounting functions.
                                                                                                         (5 marks)

(d)   Evaluate four reasons why it is important to manage computer files.   (4 marks)

(e)   Examine two positive and two negative impacts that information communication technology (ICT) has on families.   (4 marks)

(Total: 20 marks)

QUESTION THREE

(a)   Outline four objectives of file organisation methods.   (4 marks)

(b)   In each case, explain an application of the following methods of file access in business:

    (i)   Sequential file access.   (2 marks)

    (ii)   Random file access.   (2 marks)

(c)   Highlight four disadvantages of computer use.   (4 marks)

(d)   Using a well labelled diagram, explain the major elements of a computer system.   (8 marks)

(Total: 20 marks)

QUESTION FOUR

(a)   Explain two reasons why source data entry techniques are preferred to the keyboard mode of data entry.   (4 marks)

(b)   Using an illustration, differentiate between "command line interface" and "graphical user interface".   (4 marks)

(c)   (i)   Describe three characteristics of a good information system.   (6 marks)

        (ii)   List three components of an information system.   (3 marks)

(d)   Draw and label parts of a typical computer mouse.   (3 marks)
(Total: 20 marks)

QUESTION FIVE

(a)   Highlight three main services offered by the internet.   (3 marks)

(b)   Explain four negative impacts of the internet on the society.   (4 marks)

(c)   Identify four security threats likely to face an information system.   (4 marks)

(d)   With the aid of a diagram, describe the following types of network transmission media:

        (i)   Coaxial cable.   (2 marks)

        (ii)   Twisted pair cable.   (2 marks)

        (iii)   Fibre optic.   (2 marks)

(e)   Explain the following controls as used in information system:

        (i)   Biometrics.   (1 mark)

        (ii)   Encryption.   (1 mark)

        (iii)   Passwords.   (1 mark)
(Total: 20 marks)

QUESTION SIX

(a)   Describe four advantages of using star topology when setting up a local area network.   (4 marks)

(b)   Describe the following file characteristics:

        (i)   Growth.   (2 marks)

        (ii)   Volatility.   (2 marks)

        (iii)   Hit rate.   (2 marks)

(c)   There is no information system that is one hundred per cent secure. Therefore, organisations need to come up with contingency measures to help in data recovery.

        With reference to the above statement, explain three data recovery procedures that could assist in recovery of lost data.   (6 marks)

(d)   The best way to have a secure password is to create a strong password.

        Formulate four guidelines on how to create a strong password.   (4 marks)
(Total: 20 marks)

QUESTION SEVEN

(a)   Distinguish between the following types of computers:

       (i)   "Special purpose computer" and "general purpose computer".   (2 marks)

       (ii)   "Digital computer" and "analogue computer".   (2 marks)

(b)   Give two reasons why operating systems were developed.   (2 marks)

(c)   List three things that accompany a newly purchased software.   (3 marks)

(d)   Using an illustration, explain a slide layout as used in presentation software.   (2 marks)

(e)   ABC Ltd. intends to acquire input devices for it's firm. The firm has approached you to give your input on the requirements.

      Explain four factors to be considered when selecting input devices.   (4 marks)

(f)   GIGO (Garbage in Garbage Out) is the concept that flawed, or nonsense input produces nonsense output. In other words, the quality of output is determined by the quality of input.

      In relation to the above statement, describe five ways to minimise errors during data input.   (5 marks)

(Total: 20 marks)

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CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 18 May 2021.   **Time Allowed: 3 hours.**

Answer any FIVE questions.   **ALL questions carry equal marks.**

QUESTION ONE
(a)   List two technological trends of each of the following computer generations:

   (i)   Second generation.   (2 marks)

   (ii)   Third generation.   (2 marks)

   (iii)   Fourth generation.   (2 marks)

(b)   Highlight seven components of a computer's motherboard.   (7 marks)

(c)   Outline four functions of uninterrupted power supply (UPS) device in a computer system.   (4 marks)

(d)   Identify three ways in which information communication technology (ICT) could be used in the efficient running of a hospital.   (3 marks)
                                                              (Total: 20 marks)

QUESTION TWO
(a)   Describe the following types of information systems:

   (i)   Transaction processing system.   (1 mark)

   (ii)   Management information system.   (1 mark)

   (iii)   Decision support system.   (1 mark)

   (iv)   Executive support system.   ·   (1 mark)

(b)   State five functions of an operating system.   (5 marks)

(c)   Analyse five benefits of using accounting software packages in an organisation.   (5 marks)

(d)   Summarise six features of an ideal word processing software.   (6 marks)
                                                              (Total: 20 marks)

QUESTION THREE
(a)   Citing an example in each case, explain the following types of computer files:

   (i)   Report file.   -   (2 marks)

   (ii)   Reference file.   (2 marks)

   (iii)   Backup file.   (2 marks)

   (iv)   Sort file.   (2 marks)

(b)   Ujuzi Limited is a large manufacturing company with over 30 branches spread countrywide. The company employs a total of 1,000 casual employees who are paid weekly wages based on the actual number of hours worked and the employee job grade level. The company uses a centralised computer system in the processing of its payroll.

Required:
(i)   List six types of data that you expect to find in the employee record stored in the payroll's master file.

(6 marks)

(ii)   Suggest three validation controls that should be applied to the input data of the payroll system.   (3 marks)

(c)   A medium sized company is in the process of acquiring a computer software for use by one of its employees who is visually impaired.

Advise the company on three factors to consider in selecting the appropriate software.   (3 marks)

(Total: 20 marks)

QUESTION FOUR
(a)   Describe the following components of a computer network:

(i)   Node.   (1 mark)

(ii)   Packet.   (1 mark)

(iii)   Network operating system.   (1 mark)

(b)   (i)   Define a "mesh network topology".   (1 mark)

(ii)   Outline two advantages and two disadvantages of a mesh network topology.   (4 marks)

(c)   The world has become one global village through the use of the internet and increased adoption of social networking sites.

Discuss four ethical challenges posed by the increased adoption of social networking sites.   (4 marks)

(d)   State four advantages and four disadvantages of online banking.   (8 marks)

(Total: 20 marks)

QUESTION FIVE
(a)   Define the following terms as used in data security:

(i)   Hacking.   (1 mark)

(ii)   Fraud.   (1 mark)

(iii)   Piracy.   (1 mark)

(iv)   Computer virus.   (1 mark)

(b)   Identify five signs of a computer infected with a virus.   (5 marks)

(c)   Evaluate five ways in which an organisation could protect its computer systems from hacking.   (5 marks)

(d)   Joyce Mwamba owns and runs an auditing firm whose operations are manually based. Most of the related businesses in the neighbourhood as well as her business associates have adopted computer based platforms for their operations. However, Joyce Mwamba is hesitant to follow suit in the adoption of computerisation.

Justify six reasons for Joyce Mwamba's fears.   (6 marks)

(Total: 20 marks)

QUESTION SIX

(a) Describe the following data transmission media, stating an advantage and a disadvantage of each. (3 marks)

    (i) Twisted pair cables. (3 marks)

    (ii) Coaxial cables. (3 marks)

    (iii) Optical fibre cable. (3 marks)

(b) An international airline company is in the process of introducing an information system for its operations. The management of the company is eager to enhance the efficiency of operations through adoption of the system.

    Required:
    (i) Discuss four factors that the management of the company should consider in selecting the appropriate information system for its operations. (4 marks)

    (ii) Highlight four operations of the company that could be undertaken by the information system. (4 marks)

    (iii) Suggest three security measures that the company should put in place during implementation of the information system. (3 marks)

    (Total: 20 marks)

QUESTION SEVEN

(a) List four storage media that could be used as auxiliary storage. (4 marks)

(b) Outline four services that users can access from a smartphone. (4 marks)

(c) The recent surge of Covid-19 pandemic globally has forced many organisations to adopt a work-from-home policy for their employees, in a bid to curb the spread of the disease and also as one of the organisation's continuity measures. This has availed numerous benefits and posed a number of challenges to both the employees and the organisation.

    Required:
    Summarise three advantages and three disadvantages of a work-from home policy to:

    (i) The employees. (6 marks)

    (ii) The organisation. (6 marks)

    (Total: 20 marks)

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CAMS LEVEL 1

FUNDAMENTAL ICT SKILLS

TUESDAY: 24 November 2020.   **Time Allowed: 3 hours.**

Answer any FIVE questions.   **ALL questions carry equal marks.**

QUESTION ONE

(a) Contrast between "proprietary operating system software" and "open source operating system software" using the following criteria:

     (i) Security.   (2 marks)

     (ii) Application platform.   (2 marks)

(b) Highlight four major roles of data communication software.   (4 marks)

(c) State four functions of a mouse.   (4 marks)

(d) List the four factors that an instant messaging system must address in order to fulfil its business objective.   (4 marks)

(e) Highlight four uses of Information Communication Technology (ICT) in the health sector.   (4 marks)

         (Total: 20 marks)

QUESTION TWO

(a) State two commonly adopted e-commerce business model in the business environment today.   (2 marks)

(b) Explain three major file types that are supported by a file management system.   (6 marks)

(c) State four objectives of using wireless media in a network environment.   (4 marks)

(d) Highlight four properties found in a spreadsheet software for formatting chart objects.   (4 marks)

(e) State four computer hardware performance metrics.   (4 marks)

         (Total: 20 marks)

QUESTION THREE

(a) The use of internet and internet related services has created concern over data privacy issues:

Required:
     (i) Explain the term "data privacy".   (2 marks)

     (ii) Suggest two computer technologies that threaten the privacy stated in (a) (i) above.   (2 marks)

     (iii) Recommend two measures that could be used to protect data privacy   (2 marks)

(b) Citing two examples, explain the term "groupware".   (2 marks)

(c) Examine four major challenges faced by business from the use of management information systems.   (8 marks)

(d) Describe four tools needed to guarantee health safety of computer users involved in intensive typing.   (4 marks)

         (Total: 20 marks)

QUESTION FOUR

(a)   Explain the following information communication technology (ICT) terms:

        (i)   Clipboard.   (2 marks)

        (ii)   Gigabyte.   (2 marks)

        (iii)   Netizen.   (2 marks)

(b)   Distinguish between "multitasking" and "multiprogramming".   (4 marks)

(c)   Outline six common causes of data loss in a computer environment.   (6 marks)

(d)   Give two examples of transaction processing systems (TPS) and two examples of Management Information Systems (MIS).   (4 marks)

(Total: 20 marks)

QUESTION FIVE

(a)   Explain using an example, the term "commercial off-the-shelf (COTS)" software.   (2 marks)

(b)   Identify six technologies which make fifth generation of computers different from the fourth generation computers.
                                                                                                       (6 marks)

(c)   Highlight three factors that you would consider when selecting an input device.   (3 marks)

(d)   Contrast between a website and a web portal using the following criteria; features, interaction and management.
                                                                                                       (6 marks)

(e)   Describe three desktop computer operating systems from different software vendors.   (3 marks)

(Total: 20 marks)

QUESTION SIX

(a)   List five examples of computer file extensions citing the software which created the file.   (5 marks)

(b)   Distinguish between "cold booting" and "warm booting".   (4 marks)

(c)   Explain the following social media terms:

        (i)   Hootsuite.   (1 mark)

        (ii)   Snapchat.   (1 mark)

(d)   State four reasons why a commercial organisation should always use legally obtained and licensed software. (4 marks)

(e)   The reason behind explosion in email, instant messages, wireless computing, wireless internet and cell-phone is that businesses and managers derive extraordinary business value from participating in communication network.

Required:
Evaluate five business value impacts of the telecommunication revolution.   (5 marks)

(Total: 20 marks)

QUESTION SEVEN

(a)   Entering data through keyboards has been a major source of errors in computer inputs. Therefore, systems should be designed to use technologies which reduce or eliminate the possibility of input errors.

Required:
Describe three keyless data input devices.   (6 marks)

(b)   Explain three types of user interface that could be used to interact with an information system. (6 marks)

(c)   Describe four factors that an organisation should consider when selecting a file organisation method.   (8 marks)

(Total: 20 marks)

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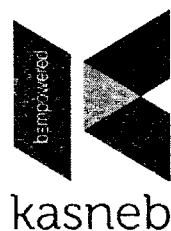
CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

WEDNESDAY: 27 November 2019.   Time Allowed: 3 hours.

Answer any FIVE questions.   ALL questions carry equal marks.

QUESTION ONE

(a)   (i)   Define the term "booting up process".   (1 mark)

       (ii)   Explain why booting process is essential.   (2 marks)

(b)   Examine six threats to data security in a business environment.   (6 marks)

(c)   State five hardware components of a computer system.   (5 marks)

(d)   Suggest six factors that could prevent small firms from actively adopting and using information communication technology (ICT) in their businesses.   (6 marks)

(Total: 20 marks)

QUESTION TWO

(a)   Describe three uses of information systems in an organisation.   (6 marks)

(b)   (i)   Identify two general types of computer files.   (2 marks)

       (ii)   Distinguish between a data file and a database.   (2 marks)

(c)   (i)   State three input devices and two output devices in a point of sale system in a supermarket.   (5 marks)

       (ii)   For each of the stated devices in (c) (i) above, explain why it is necessary in the point of sale system.
                                                                                               (5 marks)
(Total: 20 marks)

QUESTION THREE

(a)   Differentiate between a bit and a byte.   (2 marks)

(b)   Explain the function of the following keyboard keys:

       (i)   ESC.   (1 mark)

       (ii)   Home.   (1 mark)

       (iii) End.   (1 mark)

       (iv)   Insert.   (1 mark)

(c)   Distinguish between file maintenance and file updating.   (2 marks)

(d)   Highlight five factors that determine the processing power of a computer.   (5 marks)

(e)   Explain how the following applications are intended to help a computer user:

    (i)   Word processor.   (1 mark)

    (ii)   Spreadsheet.   (1 mark)

    (iii)   Database.   (1 mark)

(f)   Examine four factors that discourage the setting up of a network in an organisation.   (4 marks)
                                                                  (Total: 20 marks)

QUESTION FOUR

(a)   Outline two disadvantages of each of the following:

    (i)   Cache memory.   (2 marks)

    (ii)   Drum printer.   (2 marks)

    (iii)   Laser printer.   (2 marks)

    (iv)   CRT monitor.   (2 marks)

(b)   Computer software could be categorised into systems software and applications software.

    Required:
    (i)   Describe four types of systems software.   (8 marks)

    (ii)   Distinguish between horizontal market software and vertical market software.   (4 marks)
                                                                    (Total: 20 marks)

QUESTION FIVE

(a)   List four benefits associated with storing data in optical media over conventional magnetic disks.   (4 marks)

(b)   Identify three application areas where you would recommend the use of a supercomputer.   (3 marks)

(c)   Your friend has recommended you purchase a computer with the following specifications:

    •   Processor – Dual core 2.4GHz + i5 or i7 series Intel processor
    •   RAM – 16GB
    •   Hard Drive – 256GB or larger solid state hard drive
    •   Graphics card – Any with display port/HDMI support
    •   Monitor – 23" wide screen LCD
    •   Backup Device – External hard drive and or USB flash Drive

    Required:
    Using the above information:

    (i)   State the size of the screen.   (1 mark)

    (ii)   State the processor speed.   (1 mark)

    (iii)   Explain the meaning of Dual Core.   (1 mark)

    (iv)   Write the abbreviation HDMI in full.   (1 mark)

    (v)   Write the initials USB in full.   (1 mark)

(d)   Highlight four qualities of good information.   (4 marks)

(e)   Outline two advantages and two disadvantages of Bus network topology.   (4 marks)
                                                                    (Total: 20 marks)

QUESTION SIX

(a)   In each case, state two implications associated with node increase in the following network topologies:

      (i)   Star.   (2 marks)

      (ii)   Bus.   (2 marks)

      (iii)   Mesh.   (2 marks)

(b)   (i)   Examine four benefits of computerisation.   (4 marks)

      (ii)   Describe four roles played by information communication technology (ICT) in the globalisation process.
                                                                                                                      (4 marks)

(c)   Identify four factors that contribute to the digital divide.   (4 marks)

(d)   Outline two symptoms of repetitive strain injury (RSI).   (2 marks)

(Total: 20 marks)

QUESTION SEVEN

(a)   Giving an example in each case, differentiate between "random access media" and "direct access media".   (4 marks)

(b)   State the unit of measurements for the following computer performance metrics:

      (i)   Clock rate.   (1 mark)

      (ii)   Cache size.   (1 mark)

      (iii)   Word size.   (1 mark)

      (iv)   Bus width.   (1 mark)

(c)   Outline four computing tools designed to facilitate online personal interaction.   (4 marks)

(d)   One of the basic functions of an operating system is device management.

      Highlight two activities related to device management.   (2 marks)

(e)   Describe three challenges related to internet oriented marketing.   (6 marks)

(Total: 20 marks)

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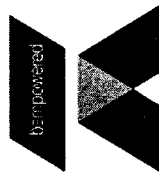
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CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 21 May 2019.   Time Allowed: 3 hours.

Answer any FIVE questions.   ALL questions carry equal marks.

QUESTION ONE
(a)   Define the term "topology" in relation to computer networks.   (2 marks)

(b)   Differentiate between a "mini computer" and a "micro computer".   (4 marks)

(c)   Identify four disadvantages to an organisation of using conventional file approach as compared to using a database system.   (4 marks)

(d)   List two examples of mobile operating system.   (2 marks)

(e)   Highlight:

        (i)   Two disadvantages of sequential file organisation.   (2 marks)

        (ii)   Two advantages of random file organisation.   (2 marks)

(f)   Differentiate between the following terms:

        (i)   "System software" and "application software".   (2 marks)

        (ii)   "Warm booting" and "cold booting".   (2 marks)
                                                                                        (Total: 20 marks)

QUESTION TWO
(a)   Highlight two functions of a firewall.   (2 marks)

(b)   Describe two benefits associated with multiprocessing.   (2 marks)

(c)   Internet has contributed greatly to globalisation:

        Required:
        (i)   Highlight two benefits brought about by globalisation.   (2 marks)

        (ii)   List two challenges of globalisation.   (2 marks)

(d)   State two functions of a "digitiser".   (2 marks)

(e)   Explain two features of a presentation software.   (4 marks)

(f)   Distinguish between the following terms:

      (i)   "Source code" and "object code".   (2 marks)

      (ii)   "Interpreter" and "compiler".   (2 marks)

      (iii)   "Assembly language" and "high level language".   (2 marks)
                                               (Total: 20 marks)

QUESTION THREE

(a)   State three benefits of transmitting data in digital form as opposed to analog transmission of data.   (3 marks)

(b)   Outline three advantages associated with the use of email compared to traditional mail.   (3 marks)

(c)   Evaluate four common barriers to the use of information communication technology (ICT) in small businesses.   (4 marks)

(d)   Giving a reason in each case, state the most appropriate input device for each of the tasks below:

      (i)   Entering electricity bills in the utility company's system.   (2 marks)

      (ii)   Processing book loans in a computerised library system.   (2 marks)

      (iii)   Entering a text description of repairing a car engine whilst carrying out the repair.   (2 marks)

(e)   List four actions which a company should take on a day-to-day basis to ensure data security.   (4 marks)
                                               (Total: 20 marks)

QUESTION FOUR

(a)   Suggest two factors that are used to determine a file organisation method.   (2 marks)

(b)   Compare the first and third generation computers using the following characteristics:

      (i)   Size.   (2 marks)

      (ii)   Programming languages used.   (2 marks)

(c)   State two wireless transmission media.   (2 marks)

(d)   Highlight four reasons why it is important to manage computer files.   (4 marks)

(e)   Ann intends to purchase a desktop computer for her office work. She has approached you seeking advice regarding the computer to buy.

      Advice Ann on four factors that she should consider in selecting the best desktop computer for her office work.   (4 marks)

(f)   In modern business perspectives, information systems have far reaching effects for smooth and effective operations.

      Outline four uses of information systems in business.   (4 marks)
                                               (Total: 20 marks)

QUESTION FIVE

(a)   Explain the following terms as used in a networking environment:

      (i)   Network Interface Card (NIC).   (2 marks)

      (ii)   Hub.   (2 marks)

      (iii)   Router.   (2 marks)

(b)   Explain two information systems which are classified based on the mode of data processing.   (4 marks)

(c)   Secondary storage hardware is frequently used by companies to store data:

    (i)   Citing an example, explain the term "secondary storage".   (2 marks)

    (ii)   Evaluate four reasons why secondary storage is used in a computer.   (4 marks)

(d)   ABC Ltd. is a transport company with ten trucks. The company is considering replacing the current manual system being used with a computerised system.

    Outline four advantages to ABC Ltd. which would result from the above change.   (4 marks)
                            (Total: 20 marks)

QUESTION SIX

(a)   Distinguish between the following pairs of terms:

    (i)   Field and record.   (2 marks)

    (ii)   Data and information.   (2 marks)

    (iii)   Printer and plotter.   (2 marks)

    (iv)   Hardware and firmware.   (2 marks)

(b)   Evaluate four ways in which businesses are using internet today.   (4 marks)

(c)   (i)   List four security threats that computer users face today.   (4 marks)

    (ii)   For each threat identified in (c) (i) above, explain how the threat can be mitigated.   (4 marks)
                            (Total: 20 marks)

QUESTION SEVEN

(a)   Describe one reason why an organisation would wish to leave a cookie on a customer's computer.   (2 marks)

(b)   (i)   Define the meaning of the term "encryption" in the context of data security.   (2 marks)

    (ii)   Explain why an organisation would wish to encrypt their data.   (2 marks)

(c)   Distinguish between the following terms:

    (i)   A "dumb terminal" and an "intelligent terminal".   (4 marks)

    (ii)   "Online storage" and "off-line storage".   (4 marks)

(d)   Mr. Kamau is a small scale businessman dealing with clearing and forwarding of customer goods. Recently, a friend advised him to buy a computer to increase his productivity. However, after acquiring the computer hardware, he realised that after connecting all the components, he could not operate the computer since it did not have an operating system installed.

    Explain three important factors that Mr. Kamau should consider when selecting the most suitable operating system for his computer.   (6 marks)
                            (Total: 20 marks)

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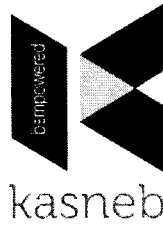
CAMS LEVEL I

FUNDAMENTAL ICT SKILLS

TUESDAY: 27 November 2018.   **Time Allowed: 3 hours.**

Answer any FIVE questions.   **ALL questions carry equal marks.**

QUESTION ONE

(a)   Outline four advantages of optical storage media over flash disks.   (4 marks)

(b)   State the applications used to create the following files:

      (i)   Employee.Docx   (1 mark)

      (ii)   Salary.Xlsx   (1 mark)

      (iii)   Student.Pptx   (1 mark)

      (iv)   Marks.Accdb   (1 mark)

(c)   Highlight four ways that could be used to improve the performance of a computer.   (4 marks)

(d)   Differentiate between email and instant messaging.   (2 marks)

(e)   Explain six ways in which the use of social media could enhance the growth of a business organisation.   (6 marks)
                                                                                  (Total: 20 marks)

QUESTION TWO

(a)   Compare pre-written software and bespoke software based on the following factors:

      (i)   Cost.   (2 marks)

      (ii)   Ability to meet specific (unique) user's needs.   (2 marks)

      (iii)   Documentation standards.   (2 marks)

      (iv)   Error rate.   (2 marks)

(b)   Outline two characteristics of each of the following storage medium:

      (i)   Primary storage.   (2 marks)

      (ii)   Secondary storage.   (2 marks)

(c)   Explain the area of application of each of the following peripheral devices:

      (i)   Joystick.   (1 mark)
      (ii)   Light pen.   (1 mark)
      (iii)   Scanner.   (1 mark)
      (iv)   MICR.   (1 mark)
      (v)   OCR.   (1 mark)
      (vi)   OMR.   (1 mark)

(d)   Highlight two advantages of using a mouse as an input device over a keyboard.   (2 marks)
                                                                                  (Total: 20 marks)

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QUESTION THREE

(a)   Explain the meaning of the following terms as used in computing:

     (i)   Register.   (2 marks)

     (ii)   Bus.   (2 marks)

     (iii)   Cache memory.   (2 marks)

(b)   Using examples, explain three components of a computer system.   (6 marks)

(c)   The Kenyan government has been promoting and setting up digital villages in the rural areas.

     (i)   Define the term "digital village".   (2 marks)

     (ii)   Describe two ways in which digital villages could benefit the youths.   (2 marks)

(d)   There has been concern over the need for your business to increase the protection and security of your data from illegal access by outside parties.

Required:
     (i)   Outline two ways that outside parties could access your data illegally.   (2 marks)

     (ii)   For each of the listed ways above, describe a measure you could put in place to prevent the illegal access.
                                                                                                                                 (2 marks)
                                                                                                                    (Total: 20 marks)

QUESTION FOUR

(a)   Define the term "dual core processor".   (2 marks)

(b)   Explain the importance of computer boot process.   (2 marks)

(c)   There are different types of application software that an organisation could use to increase productivity.

     Stating the use in each case, describe three of these software.   (6 marks)

(d)   Highlight three advantages and two disadvantages of installing a network in an organisation.   (5 marks)

(e)   One of the major functions of an operating system is resource management.

     Outline three resources that are managed by an operating system.   (3 marks)

(f)   Explain the meaning of the term "clock speed" as used in computing.   (2 marks)
                                                                                                                    (Total: 20 marks)

QUESTION FIVE

(a)   Describe the following software terms:

     (i)   Open source software.   (2 marks)
     (ii)   Integrated software.   (2 marks)

(b)   List four features of fifth generation computers.   (4 marks)

(c)   Citing appropriate examples, explain the following types of computer files:

     (i)   Flat file.   (2 marks)
     (ii)   Master file.   (2 marks)
     (iii)   Transaction file.   (2 marks)
     (iv)   Reference file.   (2 marks)

(d)   Explain the main function of the following parts of the central processing unit:

     (i)   Arithmetic logic unit.   (2 marks)
     (ii)   Control unit.   (2 marks)
                                                                                                                    (Total: 20 marks)

QUESTION SIX

(a)   Describe the following types of computers:

       (i)   Digital computer.   (2 marks)

       (ii)   Analog computer.   (2 marks)

       (iii)   Hybrid computer.   (2 marks)

(b)   Distinguish between "tactical decisions" and "operational decisions" as used in information systems.   (4 marks)

(c)   Describe the following types of enterprise systems:

       (i)   Supply chain management system.   (2 marks)

       (ii)   Enterprise resource planning system.   (2 marks)

       (iii)   Customer relationship management system.   (2 marks)

(d)   Summarise the four major components of computer hardware.   (4 marks)

(Total: 20 marks)

QUESTION SEVEN

(a)   Describe three components of an e-mail address.   (3 marks)

(b)   State three factors that influence the choice of a back up device.   (3 marks)

(c)   Explain the following elements of the data hierarchy:

       (i)   Character.   (2 marks)

       (ii)   Field.   (2 marks)

       (iii)   Record.   (2 marks)

       (iv)   File.   (2 marks)

(d)   Explain the following internet related concepts:

       (i)   Hot spot.   (2 marks)

       (ii)   World Wide Web.   (2 marks)

       (iii)   Web portal.   (2 marks)

(Total: 20 marks)

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