

First Term Test - Grade 12-2019

Index No : ........................ General Information Technology (GIT) I One Hour

- Answer all questions.
- Underline the most suitable answer among given answers.
- Following diagram represent the process of withdrawing money from an automated teller machine (ATM). Answer the questions 1 to 4 by using that diagram.


1. What is the component which can be identified as issuing money from an ATM?
i. Input
ii. Process
iii. Storage
iv. Output
2. How can you identify the first step of the above process?
i Input
ii. Process
iii. Storage
iv. Output
3. According to the above system, what is the component which can be used as input and output device?
i. Keyboard
ii. Thermal printer
iii. Touchscreen
iv. Closed Circuit Television (CCTV)
4. What is the memory that is used to store username, password and amount of money during a transaction?
i. Random access memory (RAM). ii. Read only memory (ROM).
iii. Hard disk
iv. Memory card
5. What is the answer that contains input devices only?
i. Mouse, Keyboard, Printer, Scanner.
ii. Mouse, Keyboard, Printer, Speaker.
iii. Joystick, Keyboard, Speaker, Scanner.
iv. Joystick, Keyboard, Mouse, Scanner.
6. What is the component of the computer given below that is not most important?
i. Clock speed of a CPU.
ii. Capacity of the hard disk.
iii. Capacity of the main memory.
v. Size of the computer.
7. "A large number of users are exchanging, storing and retrieving data and information by connecting to a computer using a large number of terminals"
What is the type of computer that is explained in above sentence?
i. Mainframe computer.
ii. Workstation computers.
iii. Super computers.
v. Microcomputers.
8. What is the memory type that is used to store the programs POST and Bootstrap loader?
i. Random access memory (RAM).
ii. Hard disk.
iii. Read only memory (ROM).
iv. Memory registers.
9. The storage device which is used in first generation computers is?
i. Compact disks. ii. Floppy disks. iii. Blue ray disks. iv. Punch cards.
ii.
10. Integrated circuits are used in .....A..... computers and ........... are used in fourth generation computers.
What are the most suitable answers for A and B?
i. Second generation, Vacuum tubes.
ii. Second generation, Microprocessors.
iii. Third generation, Microprocessors.
iv. Fourth generation, Microprocessors.
11. What is the answer which contains characteristics of qualitative information?
i. High quality, Completeness, Accuracy.
ii. High quality, Timeliness, No tiredness.
iii. High quality, Completeness, Speed.
iv. High quality, Speed, No tiredness.
12. ......A. $\qquad$ can create detailed images of internal organs of the body and $\qquad$ B....... creates 3D images of internal organs of the body.
What is the most suitable answer for A and B ?
i. A-CAT machine $\quad \mathrm{B}$ - MRI machine.
ii. A-MRI machine

B - CAT machine.
iii. A-MRI machine $\quad B-E C G$ machine.
iv. A-MRI machine $\quad B-E E G$ machine.
13. What is the disadvantage of online shopping to the customer?
i. 24 hours service.
ii. Intangibility.
iii. Using credit cards for the transactions.
iv. Ordering goods at anywhere.
14.
........... printer can be identified as $\qquad$ printers. $\qquad$ and high quality printouts can be taken by using $\qquad$ printers.
i. Laser, cost effective, Dot matrix, expensive.
ii. Dot matrix, cost effective, expensive, laser.
iii. Expensive, laser, dot matrix, cost effective.
iv. Cost effective, Laser, expensive, dot-matrix.
15. When components are connected to the computer, keyboard is connected to $\qquad$ A....... Computer is connected to a network via $\ldots \ldots . . \mathrm{B} . \ldots$. and multimedia projector is connected through ........C C.........

What is the answer that contains the most suitable ports in a computer or $\mathrm{A}, \mathrm{B}$ and C .
i. HDMI. USB, RJ45.
ii. USB, RJ45, HDMI
iii. PS/2, USB, HDMI
iv. HDMI, RJ45, Video
16. The computer identifies all the things as,
i. Numbers
ii. Letters
iii. Images
iv. Electronic signals
17. What is the binary number equivalent to the Decimal number 83 ?
i. $\quad 1000101_{2}$
ii. $1010011_{2}$
iii. $1011101_{2}$
iv. $1100001_{2}$
18. What is the decimal number of $10001_{2}$
i. $\quad 17$
ii. 93
iii. 71
iv. 117
19. What is the ascending order of the numbers $1001_{2}, 2_{10}, \mathrm{~A}_{16}, 78$ ?
i. $\quad 78, \mathrm{~A}_{16}, 11001_{2}, 26_{10}$
ii. $78, \mathrm{~A}_{16}, 26_{10}, 11001_{2}$
iii. $\mathrm{A}_{16}, 7_{8}, 11001_{2}, 26_{10}$
iv. $7_{8}, 26_{10}, 11001_{2}, \mathrm{~A}_{16}$
20. A - Decimal number 78 is equivalent to the binary number $1001110_{2}$.

B - The ASCII code of M letter is equivalent to the decimal number 78
Of those two statements, what is the correct one?
i. A only. ii. B only. iii. A and B iv. None of the above
21. It is essential to insert both username and password correctly to create an user account in a computer.

What is the logic gate that explains above incident clearly?
i. AND gate.
ii. OR gate.
iii. NOT gate. iv. AND and NOT gates.
22. What is the Boolean expression that is represented in following truth table?

| $A$ | $B$ | $X$ |
| :--- | :--- | :--- |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

i. A.B
ii. $\quad(\mathrm{A}+\mathrm{B})^{\prime}$
iii. $\mathrm{A}+\mathrm{B}$
iv. (A.B)
23. ASCII code of the letter A is $1000001_{2}$. What is the ASCII value of letter C?
i. $\quad 1000010_{2}$
ii. $1000011_{2}$
iii. $1100011_{2}$
iv. $1100010_{2}$
24. $\qquad$ coding system is used to represent many languages in the world. What is the best answer for the blank?
i. ASCII
ii. BCD
iii. UNICODE
iv. EBCDIC
25. In windows operating system, what does it happen when select the run command and type as 'cmd'?
i. Popup an error message.
ii. Search the files which are with the name cmd
iii. Open the command prompt
iv. Nothing happens
26. Active speed of hardware, Amount of information, their values and the direction of flowing information. Which of the following method is used to manage above tasks?
i. Memory management
ii. Process management
iii. Device management
iv. File management
27. What is the best word which can be used to explain an operating system?
i. Hardware
ii. Liveware
iii. Software
iv. Shareware
28. Select the answer that explains 'Application software'.
i. Keep the connection between hardware components
ii. Keep the smoothness of an operating system
iii. Completing user requirements and coming into operation on operating system
iv. Converting human languages to machine language
29. Which of the following software can be considered as utility software?
i. Disk partitioning ii. Spreadsheet software
iii. Word processing software iv. Database
30. Select the answer that contains graphical user interfaces only?
i. Dos, Windows, Ubuntu
ii. Unix, Linux, Windows
iii. Mac OS, Windows, Dos
iv. Linux, Windows, Mac OS
31. A word processing software that can be used in tablet PC's and Smart phones.
i. Libre Office Writer
ii. Libre Office Calc
iii. Office 365 Word
iv. Document To Go
32. File extensions .docx, .pdf, .txt, .doc are used in,
i. Word processing software
ii. System software
iii. Antivirus software
iv. Utility software
33. What are the shortcut keys which can be used to print a letter?
i. $\mathrm{Ctrl}+\mathrm{C}$
ii. $\mathrm{Ctrl}+\mathrm{V}$
iii. $\mathrm{Ctrl}+\mathrm{P}$
iv. $\mathrm{Ctrl}+\mathrm{M}$
34. What is the combination of shortcut keys which can be used to redo operation in a word processing software?
i. $\mathrm{Ctrl}+\mathrm{R}$
ii. $\mathrm{Ctrl}+\mathrm{Y}$
iii. $\mathrm{Ctrl}+\mathrm{O}$
iv. $\mathrm{Ctrl}+\mathrm{Z}$
35. Which of the following output that consist of toggle case format of the words "Good morning"?
i. Good Morning
ii. GOOD MORNING
iii. good morning
iv. gOOD MORNING
36. A task that can be done by only using a word processing software is,
i. Mail Merge
ii. Copying
iii. Printing
iv. Cut and Paste
37. Consider the following sentences regarding the page layout of a word processing software.
a. Page margins are identified as Top, Bottom, Left, Right.
b. Page orientation types are portrait and landscape.
c. Some of page sizes used in word processing software are A4, Letter and Legal.

What is/are true from above statements?
i. A only
ii. A and B only
iii. A and C only
iv. A, B and C
38. What is the correct answer that contains security technique in order to avoiding unauthorized accesses to a computer?
i. Antivirus software
ii. Firewall
iii. Stabilizer
iv. UPS
39. Which of the following answer that does not contain a bad result of using internet?
i. Addiction to the online chatting.
ii. Addiction to the social media.
iii. Pain in the body.
iv. Impact of malicious software.
40. What is managed by 3 R concept?
i. Social problems related to the information technology
ii. Legal problems related to the information technology.
iii. Moral problems related to information technology.
iv. Environmental problems related to information technology.


## Important

Answer all 07 questions given below.

1. a. What is a computer system?
b. Write two special characteristics of a computer.
c. Write two types of existences of data.
d. "Today's weather report is not suitable to decide weather conditions of tomorrow" What is the characteristic of qualitative information is explained in above sentence?
2. a. Write the difference between input and output devices.
b.


Above diagram represent the basic structure of CPU.

| i. | What are A and B? | (2 Marks) |
| ---: | :--- | :--- |
| ii. | Explain the task of B briefly. | (2 Marks) |
| iii. | What is the memory that gives data directly to the CPU? | (1 Mark) |
| iv. | What is the memory that consists of the starting program of a computer (BIOS)? | (1 Mark) |

3. Following table consists of number systems and coding systems used in the computer. Write the correct answers with their labels which are matched with the blanks.

| Number systems |  |  |  |
| :---: | :---: | :---: | :---: |
| Number system | Base | Numbers used | Maximum value |
| Binary | 2 | .................. | .................... |
| A........... | 10 | 0123456789 | 9 |
| Hexadecimal | B......... | 0123456789ABCDEF | .........E......... |
| Coding system |  |  |  |
| Coding system | Number of bits use | Number of characters | Representation |
| ASCII | ......... F .......... | 128 | ................... |
| ................... | 16 | 65536 |  |


| A |  | F |  |
| :--- | :--- | :--- | :--- |
| B |  | G |  |
| C |  | H |  |
| D |  | I |  |
| E |  | J |  |

4. Consider the following incident.

You can download the application form of GIT examination via the hyperlink www.Gitonlineexam.com /GIT application.pdf. After downloading it you have to create a folder with the folder name "GIT 2019" in the user interface of your computer and the application form should be copied to the above folder.
i. Write the steps of creating a folder in the user interface of the computer.
(1 Mark)
ii. Write the steps of renaming it as "GIT 2019"
iii. Write the steps of copying the application form (GITapplication.pdf) to the above folder.
iv. What are the shortcut keys that are used to copy the application to the folder?
v. Write the steps of following incident.

Taking a picture (Snapshot) of the graphical user interface of your computer and save it as picture.jpg in the folder "GIT 2019".
05. Main door of a house is voice recognized and it opens by identifying the instructions given by house owner or using a remote control.

- Consider the instructions given by the user as A and instructions given by using remote control as B.

| A | Giving owner's instructions | 1 |
| :--- | :--- | :--- |
|  | Not giving owner’s instructions | 0 |
| B | Giving instructions using remote control | 1 |
|  | Not giving instructions using remote control | 0 |

i. Write the outputs $(\mathrm{Z})$ of the following truth table.
(4 Marks)
ii. Write the name of the logic gate which is relevant to open the door.
iii. A


Write the Boolean expression of above circuit using $\mathrm{A}, \mathrm{B}$ and C as inputs.
(2 Marks)
iv. Inputs of A and B of the above circuit should be 1,0 respectively and C should be to get the output $(\mathrm{F})$ as 1 . Write the input of C .
06. i. Write 3 uses of word processing software.
(3 Marks)
ii. Provide answers for the following questions using the certificate which was designed by using word processing software.


List of tools
Shapes, Bold, Italic, Underline, justify, Margins, Picture, Word Art, Drop Cap, Page Borders, Font face, superscript, columns, Thesaurus, Center
(Consider - One tool should not be used more than one place in the answer. If it is marks are not given)
a. What are the tools that are used to setup/ format the above A, B, C, D?
b. Which of the above tool can be used to format the date ( E ) in the document?
c. What is the tool which can be used to align the contents center?
07. a. Write three uses of information and communication technology in the classroom.
b. Write three situations of using information and communication technology in entertainments? (2 Marks)
c. Write two institutions which provides information and communication facilities established by the government of Sri Lanka.
d. Write two special characteristics of the newest generation computers.
e. What is the architecture which is used to create new computers?
(2 Marks)

## First Term Test - 2019

## Grade 12

General Information Technology

| 1. iv | 11.1 | 21. i | 31. iv |
| :---: | :---: | :---: | :---: |
| 2. i | 12. ii | 22. iii | 32. i |
| 3. iii | 13. ii | 23. ii | 33. iii |
| 4. i | 14. ii | 24. iii | 34. iv |
| 5. iv | 15. ii | 25. iii | 35. iv |
| 6. iv | 16. i | 26. iii | 36.1 |
| 7. i | 17. ii | 27. iii | 37. iv |
| 8. iii | 18. i | 28. iii | 38. ii |
| 9. iv | 19. i | 29. i | 39. iii |
| 10. iii | 20. iii | 30. iv | 40. iv |

## Part II

1. 

a. A computer system is a set of integrated devices that input, output, process, and store data and information
b. Speed, Accuracy, Efficiency, Versatility, Save and Retrieving.
c. Text, Numbers,(Alpha Numeric), Audio, Video, Symbols.
d. Timeliness
02.
a. An input device is any hardware device that sends data to a computer

An output device is any device used to send data from a computer to another device or user.
b.
i. A- Memory Registers B- Arithmetic and Logical Unit
ii. B An arithmetic logic unit (ALU) is a digital circuit used to perform arithmetic and logic operations
iii. Main Memory/RAM
iv. ROM
03.
a.

| A | Decimal | F | $\mathbf{7}$ |
| :--- | :--- | :--- | :--- |
| B | 16 | G | Text, Number, Symbols |
| C | 01 | H | Unicode |
| D | 1 | I | Graphics |
| E | F | J | Videos/sounds |

4. 

i. Right click on the desktop $\rightarrow$ New $\rightarrow$ Folder
ii. Right click on the Folder $\rightarrow$ rename $\rightarrow$ Type "GIT2019"
iii. Windows explore $\rightarrow$ Open Down lord Folder $\rightarrow$ select GIT application.pdf file $\rightarrow$ Copy $\rightarrow$ open Folder GIT2019 Folder $\rightarrow$ Past or Relevant answer (2 Marks)
iv. Copy:- Ctrl+C Paste :- Ctrl+P
v. Accessories $\rightarrow$ "Snipping" $\rightarrow$ new $\rightarrow$ Select the area of image $\rightarrow$ save as Picture.jpg on Folder GIT2019
Search $\rightarrow$ "Snipping" $\rightarrow$ new $\rightarrow$ Select the area of image $\rightarrow$ save as Picture.jpg on Folder GIT2019
(2 Marks)
05. i

| $A$ | $B$ | $Z$ |
| :--- | :--- | :--- |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

ii. OR Gate (2 Marks) iii. $F=(A+B) \cdot C^{\prime}(2$ Marks $) \quad$ iv. $C=0 \quad$ (1 Marks)
06.
I. Making documents, letters and letterhead, memos, card creation Posters, Invitations, labels, Notes and notices etc..
(03 Marks)
II. a .

A- Picture
B - Font face
C - Italic
D - Page Borders
b. E- superscript
(1.5 Marks)
c. Center
(1.5 Marks)

07
a. Use Presentations, videos, Internet, learning CD Making Assessments, or Relevant answers
b. Social Networks ,Audio, Video, Films, Games, E-books and news etc ...
c. ICTA, Nenasala, Vidatha, CERT
d. Use ULSIC, Small devices, Nano technology, Artificial Intelligent etc.. or Relevant answers
e. Von Neumann Architecture

