



PROVINCIAL DEPARTMENT OF EDUCATION  
NORTHERN PROVINCE  
**SECOND TERM EXAM – 2023**



**INFORMATION COMMUNICATION TECHNOLOGY I, II**

**Grade 10**

**Time: 3 hours**

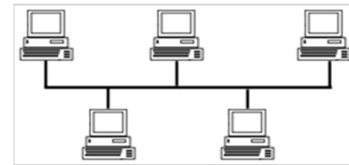
Select and write the correct answer.

- 1) The following diagram shows that, how data can be changed in to Information.  
Data X  $\longrightarrow$   $\longrightarrow$  Information . Which of the following answer is suitable for X?  
(1)Input      (2) Output      (3) storage      (4) Process
- 2) **We can renew our Motor vehicle license through online system.** Which of the following E-Government system is suitable for that **statement**?  
(1)G2E      (2) G2C      (3) G2B      (4) G2G
- 3) Which is not an element of a system?  
(1)Input      (2) Output      (3) Process      (4) Storage
- 4) Select the statement which can be considered as Information?  
(1)Price of a good      (2) Mathematics marks  
(3) Highest rainfall in Sri Lanka      (4) Height of Kamal
- 5) Which of the following technology used in second generation computer?  
(1)Vacuum tube      (2) IC      (3) transistors      (4) Processor
- 6) The generation which was used the Graphical user Interface in Operating system?  
(1)Third Generation      (2) Fourth Generation  
(3) Second Generation      (4) First Generation
- 7) Which of the following ICT tool is used to read the details of cheque in bank?  
(1)OMR      (2) MICR      (3) NIC      (4) Mouse
- 8) Consider the following devices.  
**A-Mouse      B- keyboard      C-Touchscreen**  
Which of the following device / devices can be used as input and output device?  
(1) A,B      (2) B,C      (3) B only      (4) C only
- 9) ..... is a solid state devices?  
(1)Memory card      (2) Hard Disk      (3) CD      (4) RAM
- 10) The port which is used to connect network routers?  
(1)parallel port      (2) RJ-45      (3) Audio port      (4) HDMI

- 11) Select the appropriate answer which contains only unguided media?  
 (1) Radio Wave, Microwaves, Infrared      (2) Radio Wave, Twisted Pair, Infrared  
 (3) Twisted Pair, Coaxial cable, Infrared      (4) Radio Wave, Microwaves, Fiber Optics

12) Which topology is indicated by the picture?

- (1) Star topology      (2) Bus topology  
 (3) Ring topology      (4) Tree topology



13) Which is not included classification of computer according to the size?

- (1) Super computer      (2) Mainframe computer  
 (3) Minicomputer      (4) Digital computer

14) The binary equivalent value of decimal number 75 is .....

- (1) 1001011<sub>2</sub>      (2) 1001011<sub>2</sub>      (3) 1001011<sub>2</sub>      (4) 1001011<sub>2</sub>

15) What is the decimal equivalent value of 11100110<sub>2</sub>?

- (1) 430      (2) 230      (3) 110      (4) 515

16) Which is the binary equivalent value of 175<sub>8</sub>?

- (1) 11001011<sub>2</sub>      (2) 1001011<sub>2</sub>      (3) 1111101<sub>2</sub>      (4) 1001011<sub>2</sub>

17) What is the Hexadecimal equivalent value of 111110110111<sub>2</sub>?

- (1) A97<sub>16</sub>      (2) BB7<sub>16</sub>      (3) FA6<sub>16</sub>      (4) FB7<sub>16</sub>

18) If Character "B" is denote as 1000001<sub>2</sub> in ASCII coding system, then what is the value of D?

- (1) 1000101      (2) 1000111      (3) 1001101      (4) 1010101

19) A Gigabyte is equal to.....?

- (1) 2<sup>10</sup>KB      (2) 2<sup>20</sup>bytes      (3) 2<sup>20</sup>KB      (4) 2<sup>30</sup>MB

20) Which value is not included in BCD?

- (1) 1001      (2) 1000      (3) 1010      (4) 0011

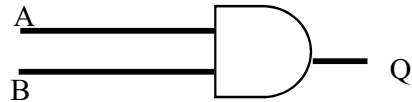
21) What is the Octal equivalent value of 329<sub>16</sub>?

- (1) 145<sub>8</sub>      (2) 155<sub>8</sub>      (3) 165<sub>8</sub>      (4) 115<sub>8</sub>

22) Which of the following represents the given four numbers in the descending order?

- (1) 10011110<sub>2</sub>, 157<sub>10</sub>, 9C<sub>16</sub>, 233<sub>8</sub>      (2) 157<sub>10</sub>, 110011110<sub>2</sub>, 9C<sub>16</sub>, 233<sub>8</sub>  
 (3) 233<sub>8</sub>, 10011110<sub>2</sub>, 157<sub>10</sub>, 9C<sub>16</sub>      (4) 9C<sub>16</sub>, 233<sub>8</sub>, 10011110<sub>2</sub>, 157<sub>10</sub>

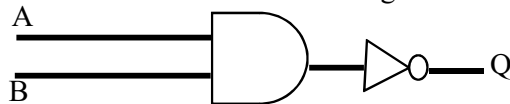
23) Consider the following logic gates?



When B=1, then what would definitely be the output of Q?

- (1) A (2) B (3) A+B (4) A.B

24) Select the correct truth table for the logic circuit?



- (1) (2) (3) (4)

A	B	Q
0	0	0
0	1	0
1	0	0
1	1	1

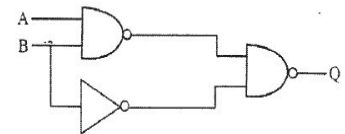
A	B	Q
0	0	0
0	1	1
1	0	0
1	1	1

A	B	Q
0	0	1
0	1	1
1	0	0
1	1	1

A	B	Q
0	0	1
0	1	1
1	0	1
1	1	0

25) Find the correct Boolean expression for the following logic circuit?

- (1)  $(A.B).B$  (2)  $\overline{\overline{(A.B).B}}$   
 (3)  $(A.B).(A.B).B$  (4)  $A.B.B.A$



26) Which of the following is not an Operating System?

- (1) Android (2) Ubuntu (3) Linux (4) Ms Word

27) Which of the following is an Application Software?

- (1) Android (2) Ubuntu (3) Linux (4) Ms Excel

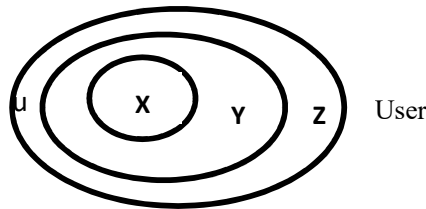
28) Which type of Operating System used in ATM Machine?

- (1) Single user (2) Real time (3) multi user (4) multi-tasking

29) Which application software is used in Operating system for increasing the size of the disk without any necessary file delete?

- (1) Disk Defragmentation (2) Backup software  
 (3) Disk scanner (4) File compression

30) What are indicated by X, Y and Z respectively?



- |                         |                         |                         |
|-------------------------|-------------------------|-------------------------|
| (1) X-Hardware          | Y- System software      | z- Operating System     |
| (2) X- Operating System | Y- Hardware             | z- Application Software |
| (3) X- Hardware         | Y- Application Software | z- Operating System     |
| (4) X- Hardware         | Y- Operating System     | z- Application Software |

31) Select the correct pair of shortcut keys for cut and paste respectively?

- |                       |                       |
|-----------------------|-----------------------|
| (1) Ctrl+V , Ctrl+X   | (2) Ctrl+X , Ctrl+C   |
| (3) ) Ctrl+X , Ctrl+V | (4) ) Ctrl+V , Ctrl+O |

32) Which of the following facility is not found in Ms Word processing Software?



- |                      |                         |
|----------------------|-------------------------|
| (1) Insert Table     | (2) Mail merge          |
| (3) Recording speech | (4) Creating invitation |

33) Select the correct alignment tools of the indicating picture menu respectively?

- |                                  |                                  |
|----------------------------------|----------------------------------|
| (1) Right, Left, Center, Justify | (2) Left, Center, Right, Justify |
| (3) Right, Left, Justify, Center | (4) Left, Center, Justify, Right |

34) Which of the following is not an example for Microsoft Word Processing Software?

- |                           |                       |
|---------------------------|-----------------------|
| (1) Microsoft Office Word | (2) IWork             |
| (3) Libre Office writer   | (4) Libre Office Calc |

35) Who introduced Adding Machine?

- |                  |                   |                     |                     |
|------------------|-------------------|---------------------|---------------------|
| (1) Ada Lovelace | (2) Blaise Pascal | (3) Charles Babbage | (4) Joseph Jacquard |
|------------------|-------------------|---------------------|---------------------|

36) What is the example for fourth Generation computers?

- |                    |            |              |              |
|--------------------|------------|--------------|--------------|
| (1) Honey well 400 | (2) UNIVAC | (3) Apple II | (4) IBM 7030 |
|--------------------|------------|--------------|--------------|

37) What are the elements of CPU?

- |                              |                               |
|------------------------------|-------------------------------|
| (1) ALU, CU, Memory Register | (2) ALU, RAM, Memory Register |
| (3) ALU, CU, RAM             | (4) ALU, RAM, ROM             |

38) Select the descending order of the following devices according to the speed of accessing data?

- |  |
|--|
| (1) Flash Memory, Register Memory, Cache Memory        |
| (2) Register Memory, Cache Memory, Flash Memory        |
| (3) Cache Memory, Flash Memory, Register Memory        |
| (4) Flash Memory, Cache Memory, Flash Memory, Register |

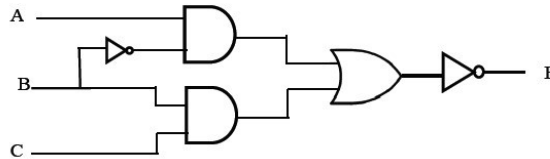
- 39) Which of the following can be used to temporary store data?  
 (1) Hard Disk      (2) Magnetic Tape      (3) Random Access Memory (4) Flash drive
- 40) Which printer is used to print the bus ticket issued during the bus journey?  
 (1) Laser printer      (2) Ink-Jet printer  
 (3) Dot-Matrix printer      (4) Thermal printer

**Part II**

**Answer first question and any other four questions.**

1)

- I) Write two qualities of an information?  
 II) Convert the Decimal number of  $150_{10}$  into Octal number?  
 III) What are the two basic function of an Operating system?  
 IV) Draw Truth table for the following Logic circuit?



- v) Copy the following table to your answer sheet and fill the blanks.

Generation	Technology used
First	
Second	
Third	
Fourth	

- vi) Which tools are used to create the following text formatting? This is a Picture. ***This is a Picture.***

- vii) Write two advantages of Networking?

- viii) Match and Write the correct answer with label.

A	B
1) Operating System	A) Mouse
2) Guided media	B) Operating system
3) System software	C) Linux
4) Pointing device	D) Fibre optics

- ix) Give two Input devices and Storage devices?  
 x) Give two devices that can be connected with PS/2 port? (10 X 2=20 Marks)

2) I) Convert the decimal number into binary number?

(a) 455

(b) 244

II) Convert the binary number into octal number?

(a)  $101101_2$

(b)  $11010_2$

III) Convert the binary number into hexa-decimal number?

(a)  $101101001_2$

(b)  $1101011110_2$

IV) Draw the truth table and Logic circuit for the following Boolean expression?

(a)  $\overline{(A.B)}+C$

(2+2+2+2+2=10 Marks)

3) Answer the following question using the following diagram?

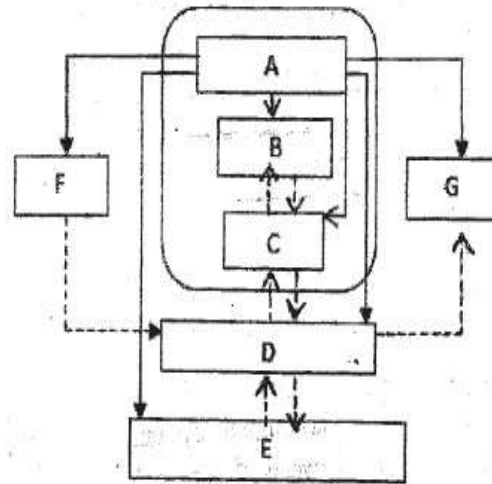
I) Name A,B,C,D,E,F and G?

II) Write the function of B?

III) Give two examples for G?

IV) Give two examples for E?

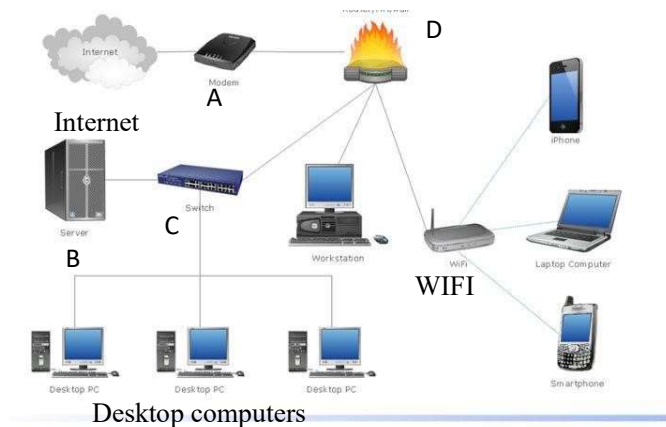
V) Give two examples for D?



(10 Marks)

4) I) Write the data transmission modes and give one example for each of them?

II) Write the answers of the following questions using that diagram?



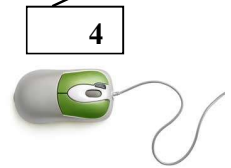
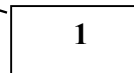
- A) Name A,B,C,D?
- B) Briefly explain the purposes of A and D?
- C) What unguided media is used in WIFI?

(2+2+4+2=10 Marks)

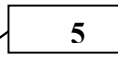
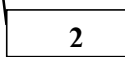
5) Answer the following questions using the given word document.

The functioning of a computer system is based on the combined usage of both input and output devices. Using an input device we can give instructions to the computer to perform an action and the device reverts to our action through an output device.

1. Monitor

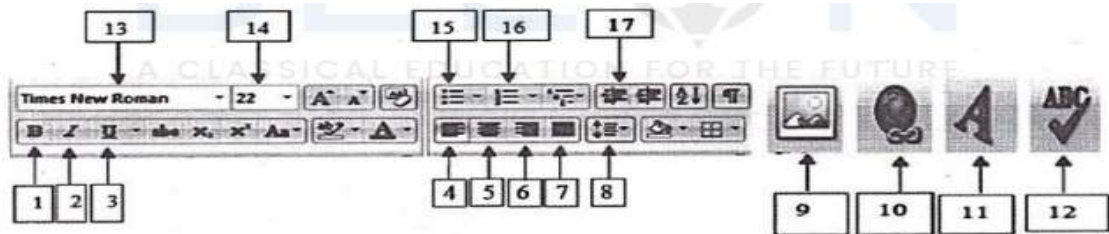


- The device which displays all the icons, text, images, etc. over a screen is called the Monitor
- When we ask the computer to perform an action, the result of that action is displayed on the monitor
- Various types of monitors have also been developed over the years



[For further details click here](#)

Answer the following questions using the tools given below?



- 1) a) Write the number of the tool which is used to create the label 1?
- b) Write the number of the tool which is used to create the label 2?
- c) Write the number of the tool which is used to create the label 3?
- d) Write the number of the tool which is used to create the label 4?
- e) Write the number of the tool which is used to create the label 5?

2) Write the tool which are used to create the following formatting of the text?

Before formatting	After formatting	Used tool
Copy and paste	<b><u>Copy and paste</u></b>	
H2O	H <sub>2</sub> O	
X2	X <sup>2</sup>	
Copy	<b>Copy</b>	

(10X1=10 Marks)

6) (I) Give two examples of utility software?

(II) Write the types of Software and give two examples for each one?

(III) Describe following terms

a. Disk Partitioning    b. Disk Formatting

(IV) According to the functions what are the types of Operating systems? Give an example for each type.

(2+2+2+4=10 Marks)