PROVINCIAL DEPARTMENT OF EDUCATION NORTH WESTERN PROVINCE THIRD TERM TEST 2020

Grade 11 INFORMATION \& COMMUNICATION TECHNOLOGY - I
One Hour.
Name / Index No. :

- Answer all questions.

1. Consider the following statements about second generation computers.
a. Punch cards were used to input data to the computers
b. Transistors are used as the main hardware technology.
c. Producing operating systems.
d. Floppy disks and tapes were used as secondary storage devices.

Of the above statements, What are the true statements?

1. Only A and D
2. Only B and D
3. Only A, B and C
4. All A, B, C and D
5. Consider the following statements related with Data and Information
A. Dasun is the tallest boy in the class.
B. Age of Dasun is 14 .
C. Price of a pen which is in the items list purchased by Akalanka is Rs. 20.00.

Select the correct answer by considering above statements.

1. $A$ and $B$ statements belong to information.
2. $\mathrm{A}, \mathrm{B}$ and C statements belong to data.
3. $A, B$ and $C$ statements belong to information.
4. B and C statements belong to data.
5. Which of the following contains output devices only?
6. Computer screen, Web camera, Touch screen, Flatbed scanner.
7. Computer screen, Multimedia projector, Printer, Speaker.
8. Multimedia projector, Printer, Bar code reader, Web camera.
9. CCTV Camera, Touchscreen, Digital camera, Speaker.
10. 

.....A $\qquad$ devices are used to store data and information permanently and they can be divided into many categories. The basic concept of categorizing is $\qquad$
$\qquad$
Select the couple of words that are suitable to fill in the above blanks respectively.

1. Primary memory, storage capacity.
2. Secondary memory, storage capacity.
3. Secondary memory, Technology.
4. Storage capacity, Size.
5. Select the correct statement about computer processor.
6. Core I 3 is the manufacturer of the processor.
7. Performance of the computer is not depend on the speed of the processor.
8. Speed of the processor is calculated by using number of instructions that are executed per second.
9. Processor is located inside the hard disk.
10. What is the binary number that is equivalent to the hexadecimal number $4 \mathrm{EF}_{16}$ ?
11. $100011101111_{2}$
12. $10011101111_{2}$
13. $10111101111_{2}$
14. $11110101111_{2}$
15. Which of the following answer that represents the ascending order of the numbers $1 \mathrm{E}_{16}$, $10101001_{2}, 89_{10}, 115_{8}$ ?
16. $1 \mathrm{E}_{16}, 89_{10}, 10101001_{2}, 115_{8}$
17. $1 \mathrm{E}_{16}, 115_{8}, 10101001_{2}, 89_{10}$
18. $89_{10}, 115_{8}, 1 \mathrm{E}_{16}, 10101001_{2}$
19. $1 \mathrm{E}_{16}, 115_{8}, 89_{10}, 10101001_{2}$
20. What is the octal number that is equivalent to the hexadecimal number $2 \mathrm{BC}_{16}$.
21. 12748
22. 13248
23. 5568
24. 13548
25. Akalanka uses a flash drive with the capacity of 8 MB . What is the answer that includes the equal value to that capacity?
26. 8 X 1024 X 1024 kilobytes
27. $1024 \times 1024$ kilobytes
$4 \times 1024 \times 1024 \times 8$ bytes
28. $8 \times 1024 \times 1024 \times 8$ bits
29. Following is the set of coding systems that are used to represent data in the computer. Select the answer that includes the number of bits and characters in each of them respectively.
$\begin{array}{ll}\text { A. } & \text { ASCII } \\ \text { B. } & \text { BCD } \\ \text { C. } & \text { EBCDIC }\end{array}$
30. A-4bits and 16 characters / B -7 bits and 128 characters / C- 8 bits and 256 characters
31. A-4bits and 16 characters $/ \mathbf{B}-8$ bits and 128 characters $/ \mathbf{C}-7$ bits and 256 characters
32. A-7bits and 128 characters $/ \mathbf{B}-4$ bits and 16 characters $/ \mathbf{C}-8$ bits and 256 characters
33. A- 7 bits and 128 characters / B - 4 bits and 16 characters / C- 16 bits and 65536 characters
34. Consider the following $\mathrm{P}, \mathrm{Q}$ and R statements
$\mathrm{P}=(\mathrm{A}>\mathrm{B}) \mathrm{AND} \operatorname{NOT}(\mathrm{C}>\mathrm{D}) \quad \mathrm{Q}=(\mathrm{A}<\mathrm{B}) \mathrm{OR}(\mathrm{C}>\mathrm{D}) \quad \mathrm{R}=\mathrm{NOT}((\mathrm{A}<\mathrm{B}) \mathrm{OR}(\mathrm{A}>\mathrm{B})$
The values of A, B, C and D are 30, 45, 63, 36 respectively. What is the correct answer?
35. True, False, True
36. False, True, True
37. True, False, False
38. False, True, False
39. Due to the spreading of Covid 19 virus, it is essential to wear face mask (A) and washing hands (B) but not essential to match the last digit of NIC number (C). What is the Boolean expression that is suitable for the above statement?
40. AAND B ANDC
41. $(\mathrm{AORB}) \mathrm{ANDC}$
42. (AAND B) OR C
43. AOR B ORC
44. What are the wireless media that are represented by following symbols?


A

1. A - Radio waves
2. A-Infarred
3. A-Infarred
4. A-Radio waves


B
B-Bluetooth
B-Bluetooth
B - Wifi
B - Bluetooth


C
C - Infarred
C-WiFi
C-Bluetooth
C-WiFi


D-WiFi
D-Infarred
D-Radio waves
D-Networing waves
14. Consider the following ways of connecting computer networks.

A - Router is used to connect a computer network with another external network or internet.
B - Command Line Interface is used when transferring a message to everyone connected with a computer network.
C - Transmission mode of the switch is full duplex and transmission mode of the Hub is half duplex.

1. Only A and C
2. Only A
3. Only A and B
4. All A, B and C
5. What is the picture that shows a hard disk which is after partitioning and formatting?

(1)

(2)

(3)

(4)
6. What is the answer that includes software with command line interface (CLI) and graphical user interface (GUI)?
7. Unix, Apple Mac
8. Ubuntu, Windows XP
9. Unix, Dos
10. Isuru Linux, Dos
11. Following picture shows a table which was created by using word processing software. What is the tool which was used to format the cells as A?
$\left.\begin{array}{|l|l|l|l|}\hline & & & \\ \hline & & & \\ \hline & & & \\ \hline & & & \\ \hline\end{array}\right\} A$ Ozఆc 2
(1)

(2)

(3)

(4)

12. A set of tools in a tab of a word processing software is as follows. What are the tools which were used to format the following document?

13. $\mathrm{A}-6, \mathrm{~B}-2, \mathrm{C}-7$
14. $\mathrm{A}-2, \mathrm{~B}-3, \mathrm{C}-4$
15. $\mathrm{A}-8, \mathrm{~B}-3, \mathrm{C}-4$
16. $\mathrm{A}-2, \mathrm{~B}-1, \mathrm{C}-4$
17. What is the answer If the formula $=\operatorname{COUNT}(\mathrm{A} 1: \mathrm{C} 3)$ is placed in the cell D 1 of the following spreadsheet?

|  | A | B | C | D |
| :--- | ---: | ---: | ---: | ---: |
| 1 |  |  | 5 | 9 |
| 2 | $10 B$ |  |  | 12 |
| 3 |  | 8 |  | 8 |
| 4 |  |  |  |  |

1. 6
2. 7
3. 5
4. 4

## Grade 11

-     - Answer questions 20 and 21 using the electronic spreadsheet below.

| 4 | CLN | CLO | CLP | CLQ | CLR |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 5929 |  |  |  |  |  |
| 5930 |  |  |  |  |  |
| 5931 |  | 5 | 7 | 35 |  |
| 5932 |  |  | 5 |  |  |
| 5933 |  |  |  |  |  |

20. The formula $=$ CLO $\$ 5931 *$ CLP5931 was written in the cell CLQ5931. If this formula is copied in to the cell CLQ5932, what is the correct formula which can be in the cell CLQ5932?
21. $=$ CLO $\$ 5931$ *CLP5932
22. $=$ CLO $\$ 5931 *$ CLP $\$ 5932$
23. $=$ CLO5931*CLP\$5932
24. $=$ CLO\$5931*CLP\$5932
25. If the above formula is copied in to the cell CLQ5932, what is the answer of the cell CLQ5932?
26. 35
27. 30
28. 25
29. 0
30. The following are some of the shortcut keys used in working with electronic spreadsheet software.

| Statements | Shortcut keys |  |
| :---: | :--- | :--- |
| A | $\mathrm{Ctrl}+\mathrm{N}$ | Receives a new slide |
| B | F 5 | A slide can be seen across the entire window |
| C | $\mathrm{Ctrl}+\mathrm{M}$ | Receives a new submission |
| D | $\mathrm{Ctrl}+\mathrm{C}$ | Cutting letters / objects |

1. Only B
2. A, B and C
3. A and B
4. All A, B, C and D
5. What is the incorrect statements about creating a Relational database?
6. If one record in a table is linked to one record in another table, then there is a one-to-one relationship.
7. When building a relationship between two tables, one field of the two tables must be at least one or the same.
8. When constructing a relationship between two tables, the principal fields of the two tables must be the same.
9. If each record in a table is linked to several records in a table, then there is a one to many relationship between the two tables.
10. What is the answer that includes the correct number of fields and records of the following spreadsheet respectively?

| Add-No | Name | DateofBirth | IndexNO | Marks |
| :--- | :--- | ---: | ---: | ---: |
| 1001 | Sithum | $1 / 10 / 20142324$ |  | 75 |
| 1002 | Kanishka | $2 / 20 / 20042025$ |  | 80 |
| 1003 | Kavindu | $3 / 5 / 20042110$ |  | 68 |
| 1004 | Theeekshaí | $6 / 8 / 20042828$ |  | 90 |

1. 5,5
2. 5,4
3. 4,5
4. 9,4
5. Figure 4 shows the objects used in a database management system,
6. Record
7. Table
8. Query
9. Form

10. The most appropriate answer is to include the blank words in clauses A to D, which are considered when sending an email.
a. Email address and $\qquad$ must be present in an email account.
b. Sending an e-mail address to another person is called. $\qquad$
c. Separate unrelated files sent with email addresses are called.
d. $\qquad$ is mandatory for both sender and recipient of e-mail.
11. Password/Forward/Attachments/Electronic Mail account
12. Attachments / Forward / Electronic / Mail account/Attachments
13. IPAddress / Backward / File / Computer
14. Web address / sender / attachment/signature
15. The basic building block of a digital graphics is the pixel. If the color size of a pixel is 9 , what is the correct answer for the number of bits?
16. 256
17. 512
18. 3
19. 81
20. What is the tool used to apply color or pattern to a selected part of the GIMP software which is a graphic design software?

(1)

(2)

(3)

(4)
21. Select false statement regarding digital graphics
22. Changing the physical scale of a graphic does not change the pixels.
23. Changing the size of a graphic can be as large or as small as the pixel size.
24. As the pixel size of graphic increases, so does its quality.
25. Enlarging a graphic with a smaller pixel size reduces the quality.
26. Consider the following tools in Audacity as software that can be used in audio editing.


Tools used to select the desired portion of a created audio stream and move the audio portion over time

1. A and E
2. A and F
3. B and F
4. A and C
5. Rhino Soft is a software development company. There are several ways to test a system development life cycle.

- Unit test
- Overall test
- System testing
- Reception test

There are some of the methods which are used to test the system at Rhino Soft?
The answer is,

1. A
2. A and B
3. $\mathrm{A}, \mathrm{B}$ and C
4. All of the above
5. Which of the following statements is true regarding the benefits of e-government?
A. The services of the Government Information Center fall under the services provided by the Government to the employees.
B. The e-Government is a government that uses information technology to communicate with its citizens, governmental and non-governmental organizations, as well as governments of other countries.
C. Issuing gazette notifications and circulars is a service provided by the government to the citizens.
6. B
7. $B$ and $A$
8. B and C
9. $\mathrm{A}, \mathrm{B}$ and C
10. To insert a hyperlink into a web page, select the most appropriate code
(1) <a href='http://www.moe.gov.lk'>Ministry of Education, Sri Lanka</a>
(2) <a hyperlink=' Ministry of Education, Sri Lanka'>http://www.moe.gov.lk</a>
(3) $<$ a $>$ http://www.moe.gov.lk</a>
(4) <a src=' http://www.moe.gov.lk'>Ministry of Education, Sri Lanka</a>
11. Choose incorrect clauses about HTML picks and their functions used in web design.
12. Uses $<\mathrm{ol}>\ldots</ \mathrm{ol}>$ supports to start a numbered list.
13. $<b r>$ to show the end of a sentence
14. The $<t r>$ lift is used to add a new line to a table.
15. The Rowspan attribute is used to combine several columns to form a cell.
16. Listed from A to B at the bottom left are some of the problems with the use of information and communication technology. Examples are P to S in the right-hand lane

| A | A legal issue | P | Neurological disorders, cancer and skin diseases |
| :--- | :--- | :---: | :--- |
| B | A moral issue | Q | Theft of intellectual property |
| C | In an environmental problem | R | Cybercrime |
| D | A social problem | S | Stealing written things |

Which of the following shows the most suitable P to Q examples for IT problems labeled A to B ?

1. $\mathrm{A} \rightarrow \mathrm{R}, \mathrm{B} \rightarrow \mathrm{P}, \mathrm{C} \rightarrow \mathrm{S}, \mathrm{D} \rightarrow \mathrm{Q}$
2. $\mathrm{A} \rightarrow \mathrm{R}, \mathrm{B} \rightarrow \mathrm{S}, \mathrm{C} \rightarrow \mathrm{P}, \mathrm{D} \rightarrow \mathrm{Q}$
3. $\mathrm{A} \rightarrow \mathrm{Q}, \mathrm{B} \rightarrow \mathrm{S}, \mathrm{C} \rightarrow \mathrm{P}, \mathrm{D} \rightarrow \mathrm{R}$
4. $\mathrm{A} \rightarrow \mathrm{R}, \mathrm{B} \rightarrow \mathrm{S}, \mathrm{C} \rightarrow \mathrm{Q}, \mathrm{Q} \rightarrow \mathrm{P}$
5. This is a technique that can be used for the logical security of a computer system
6. Uninterrupted Power Supply
7. Backup
8. Closed Circuit TV
9. Hardware Firewall
10. Study the Pascal program shown on the right and look for its output.
11. 0,2
12. $0,1,2$
13. $0,2,4$
14. $0,1,3$
```
Program project1;
Var a,b:integer;
begin
a:=0;
for b:= o to 2 do
    begin
    a:=a+b;
    writeln(a);
    end;
readln;
end.
```

38. Which of the following statements / clauses regarding computer programming languages is correct?
A. Machine languages can be implemented directly in a computer in a language.
B. Interpreters and compilers are two translation programs.
C. High-level languages are machine-independent.
39. A and B
40. B and C
41. A
42. A, B and C

## Grade 11

THIRD TERM TEST 2020 INFORMATION \& COMMUNICATION TECHNOLOGY - I
39. The following is a field program prepared using the Pascal programming language. Thisfields what is the number of erroneous lines in the program?

```
Program one(input,output):
    Vara, sum; integer;
        Begin
\(\mathrm{a}=50\);
sum :=0;
    If \(\mathrm{a}<=100\) Then
sum \(=\) sum +a ;
\(\mathrm{a}:=\mathrm{a}+10\);
    Writeln (sum)
End.
2. 4
3. 5
3
```

1. 6
2. Consider the flow chart shown below.


Select the answer that correctly indicates the output of the flow chart.

1. $1,2,4,6,11$
2. $1,2,4,7,11,16$
3. $1,2,4,7,11,16,16$
4. $1,2,4,7,11,16,22$
