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Sabaragamuwa Provincial Department of Education

දෙවන වාර පරීක්ෂණය - 2018	11 ශ්‍රේණිය
Second Term Test – 2018	**Grade 11**

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තොරතුරු හා සන්නිවේදන තාක්ෂණය II	පැය දෙකයි
Information and Communication Technology II	**Two hours**

❖ Answer five questions including Question 01
❖ Question 1 will carry 20 marks and all other questions carry 10 marks each.

01.

1. I. Calculate the binary equivalent of octal number 253_8 (show the steps clearly)
   II. Calculate the hexadecimal equivalent of binary number 10101100_2

2. I. Write 2 applications of e-government.
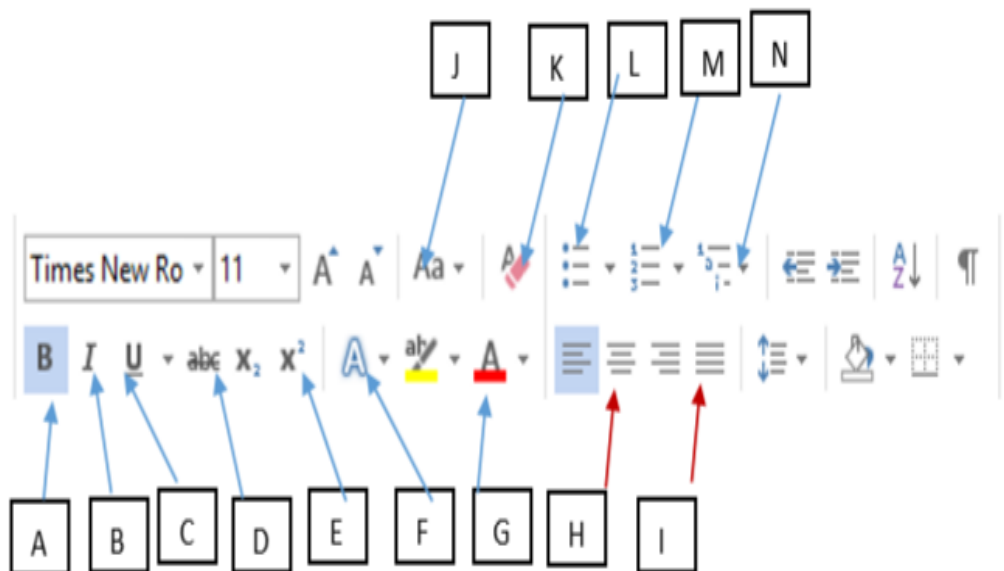   II. Write 2 applications of ICT in medical sector.

3.
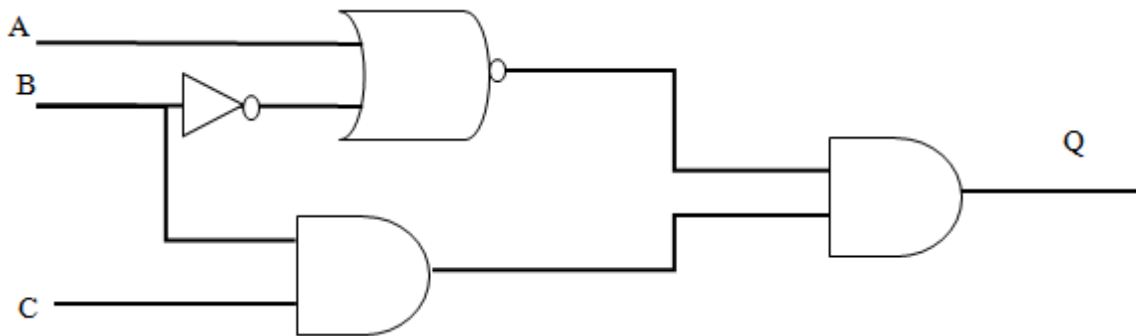
Construct the Boolean expression for above circuit.

4. Select and write the correct examples for below labels from brackets.
   A. name
   B. Uniform resource locater (URL)
   C. IP address
   D. Directory
   (STMP, 192.168.1.1, doenets.lk, http://www.edupub.lk)

5. Write 3 components of digital image

6. Write 2 services of cloud computing

7. This document is produced using Microsoft Word

Before Formatting	After Formatting
Producing Antibiotics Chemicals produced in the body of a microbe to destroy or sabotage another micro-organism are known as antibiotics. Fungi and bacteria are used to produce antibiotics. Antibiotics can kill bacteria and fungi but they do not fight against infections caused by viruses. Although, antibiotics are not much harmful to human they can cause side effects if used without medical advice. penicillin amoxicillin tetracycline erythromycin are used against bacterial infections while Griseofulvin is used against fungi infections.	**Producing Antibiotics** [1] **Chemicals produced in the body of a microbe to destroy or sabotage another micro-organism are known as antibiotics. Fungi and bacteria are used to produce antibiotics.** Antibiotics can <u>kill bacteria and fungi</u> but they do not fight against infections caused by viruses. [2] Although, antibiotics are not much harmful to human they can cause side effects if used without medical advice. ❖ PENICILLIN ❖ AMOXICILLIN [4] ❖ TETRACYCLINE [3] ❖ ERYTHROMYCIN are used against bacterial infections while Griseofulvin is used against fungi infections.

J   K   L   M   N

Times New Ro ▾ 11 ▾ A⁺ A⁻ Aa ▾ A | ☰ ▾ ☰ ▾ ☰ ▾ | ⇤ ⇥ | A↓ | ¶

B I U ▾ abc X₂ X² A ▾ ab ▾ A ▾ | ☰ ☰ ☰ ☰ | ‡☰ ▾ | ◊ ▾ ⊞ ▾

A   B   C   D   E   F   G   H   I

Identify the tool/tools used for formatting for no.1 to 4 and write the number of the tool with it's label/labels.

8. program whileloop;

    var

   number:interger;

    begin

        number :=1;

        while number <=10 do

          begin

          writeln (number);

          number = number + 1;

        end;

    end;

Write the output of above pascal code

9. Copy the following grid to your answer paper and match A with B.

A	B
Application Software	Iterative method
Language Translators	GIMP
Operating System	Interpreter
System development models	MAC

10. Given figure is a picture of Graphic formatting software.Write the functions of A to D.
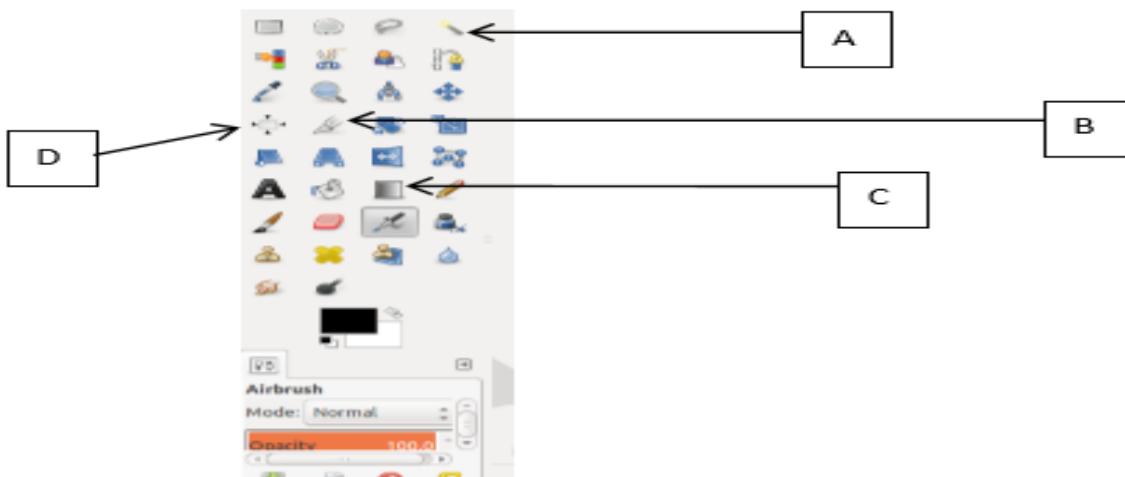
2.
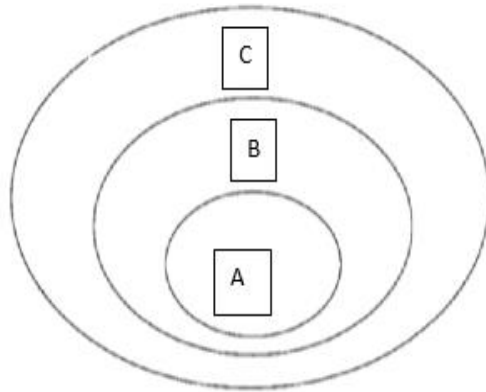
1. Name A,B,C and write down one example for each.
2. Write 3 utility programs in operating systems.
3. Write the classification based on the functionality of operating system with one example each.
4. Write 5 services performed by the operating system in the file management .

3.   Student admission for A/L 2014-2017
                         Sri Sumana Vidyalaya

	A	B	C	D	E	F	G
1	Section	2014	2015	2016	2017	Total	Avarage
2	Art	32	38	49	69		
3	Commers	28	33	42	51		
4	Science	23	28	29	35		
5							
6							
7							

1. In order to find the students intake for art section during 2014-2017, we write the following formula in F2 cell =function(cell 1,cell 2). Write the labels for function, cell 1,cell 2
2. Write the formula for G2 cell.
3. Write the steps to copy the formula from F2 cell to F4 cell.
4. Suggest the suitable chart type for representing above data.

4.

.   Products   Sales

Product_ID	Product_Name	Price
P001	T.V	32,000.00
P002	Radio	18,000.00
P003	Video Player	23,000.00

Customer_ID	Product_ID	Qty_Sold
001	P001	1
002	P002	2
001	P001	1

Customer

Customer_ID	Customer_Name	City
001	Mr.Gurnarathna	Rathnapura
002	Mrs.Samarawera	Rathnapura
003	Ms.Gamage	Rathnapura

1. Write 2 primary keys with its' tables.

2. Write one foreign key with it's table.

3. What is the relationship between Products table and Sales table?

4. Mr. Gunarathna bought 2 TVs. So what is the field wanted to update? write down the updated record again.

5.

ABC institute wants to design an information management system. Before developing the new system, a study is conducted on existing system and proposed system.
1. Writ five ways to identify the needs of the system.
2. What are the functions to be performed in the planning phrase of system development
3. After developing the system, it will be deployed using parallel deployment method. Write two advantages of above method.
4. Briefly explain the importance of system maintenance.

6.

Write down the functions of below items when performing operations in internet.
1.   I. web browser
    II. Domain Name System
    III. Web Server
    IV. File Transfer Protocol

2. There is a suggestion to get an internet connection to a school ICT Laboratory while they already have a computer network.
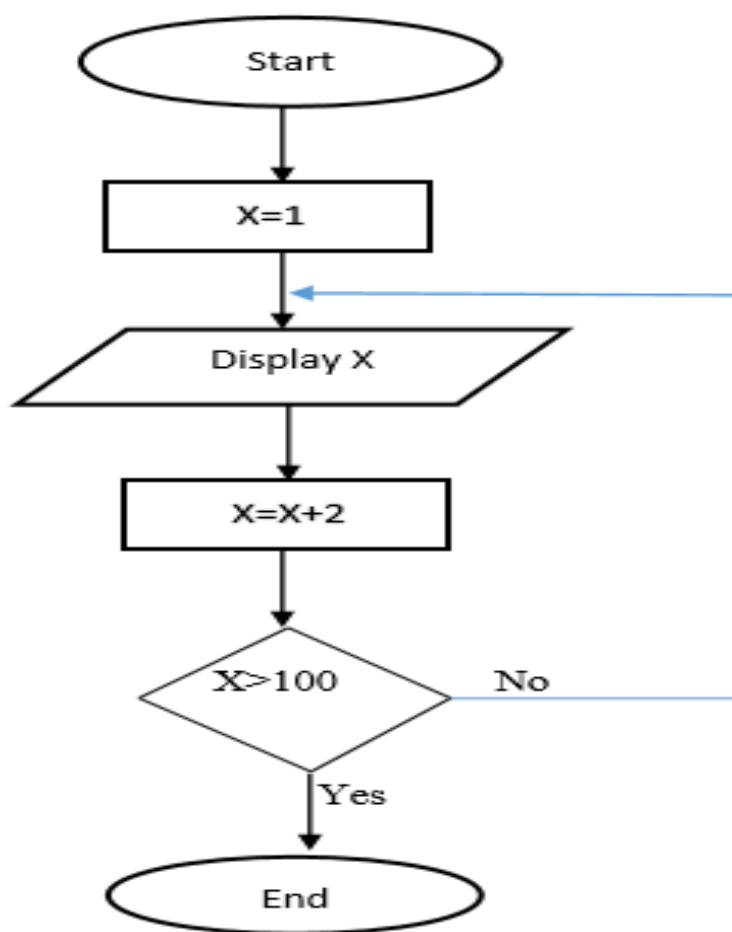
I. Write down 3 requirements which need to get the internet connection.
II. Suggest suitable guided media and network topology for data communication withing the ICT laboratory. What are the reasons for above answers.

III. Describe the functions of Firewall when access the internet.

7.

I.

Write down the pseudo code for above flow chart.

2. XYZ Commercial institute agent's monthly salary are calculated using following formula.

Final Salary = Salary + Discount

Discounts as follows:

- Sales above Rs.30,000/- ,discount 30%
- Sales bellow Rs.30,000/- ,discount 5%

Final Salary   - FS
Discount   - D
Sales Rate   - SR
Write down suitable answers for A-F.

Start

FS=0

D=0

Input Salary

Input SR

If SR > A

B

D= SR * 5/100

C

D= SR * D /100

FS= Salary + E

F

End