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Sabaragamuwa Provincial Department of Education

පළමු වාර පරීක්ෂණය 2018  
1<sup>st</sup> Term Test 2018

11 ශ්‍රේණිය  
Grade 11

තොරතුරු හා සන්නිවේදන තාක්ෂණය  
Information and Communication Technology

පැය දෙකයි  
Two hours

- Answer **first** question and, **Four** other questions only.
- First question carries **20** marks and each of the other questions carries **10** marks

1)

- i. Write two applications of internet in education sector .
- ii. Write two file format for graphic files.
- iii. Name two data types to include numbers in Pascal Programming
- iv. Write two differences between Dot-matrix printer and Laser printer
- v. Name two examples for system software and application software
- vi. Write two advantages of E-mail than normal mail
- vii. Name four categories of computer according to the size
- viii. Consider the following statements.
  - Giving an algorithm by graphic symbols is 1. ....
  - Giving an algorithm by a language is 2. ....

Write suitable words for 1 and 2 from the below list.

( pseudo code / flowchart )

- ix. Copy the A and B charts to your answer script and match with arrows.

A	B
Compiler	Programme after the translation
Object programme	Translating commands one by one in to machine language
Interpreter	Basic programme to use translation
Source programme	Translating all the commands of the programme at ones

- x. Consider the following two columns .

1 column	2 column
A	An input device
B	Fastest and highest capacity computer in the world
C	Control all operations of the computer
D	Computer which operates according to analog signals and digital signals

Write suitable words for A,B,C,D from the below list.

( Super computer, Joystick, Control Unit, Hybrid computer )

- 2) Ravindra is a super market owner. He wants to buy a computer for the work of business and use internet to make easy his business activities.
- Write two advantages that he gets when using a computer based system than a manual system.
  - Write two data collecting methods to the new system.
  - Mention a software that can be used to data management.
  - Describe a advantage when he connects his database to the internet.
  - When a new employer of the shop enters to the system which step and status of the SDLC follows.

- 3) A person who have deposited his money in Kegalle branch of the NSB bank . He wishes to withdraw his money from the Galle branch.
- Which network can be used for that?
  - Write down the classification according to the physical layout of a network.
  - Note down the difference between LAN and WAN .
  - Write down 02 advantages and 02 disadvantages of computer networking.
  - Name two data transmission media.

- 4) To teach the following things for primary students in an attractive way, a teacher used four bulbs.

⊗ 0 0 0	Raise hands
0 ⊗ 0 ⊗	Put hands down
0 0 ⊗ 0	Run to the front.
⊗ 0 0 ⊗	Stop

- Considering lighted bulbs as 1 and Considering none lighted bulbs as 0. Write the binary number for **raising hands** and **run to the front**.
- Write the  $83_{10}$  in BCD Code Format.
- Write two other coding systems used for computer data representation.
- Create the truth table for  $(\overline{A} \cdot B) + (A \cdot \overline{B})$
- Draw the logic circuit for the above truth table.

- 5) Write answers using following spread sheet.

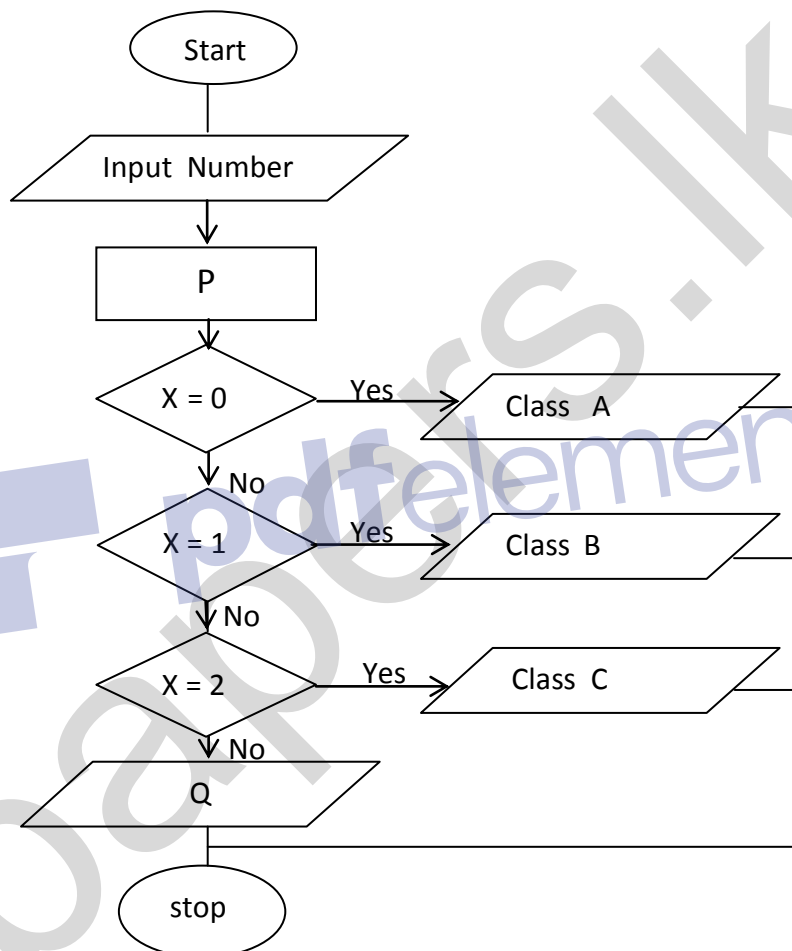
	A	B	C	D	E	F
1	Item	Unit cost (Rs)	Quantity	Total cost (Rs)	Discount	Final cost (Rs)
2	CD	Rs30.00	10	Rs300.00	5%	Rs285.00
3	DVD	Rs50.00	8	Rs400.00		Rs380.00
4	Pen Drive	Rs1,500.00	5	Rs7,500.00		Rs7,125.00
5					Total	Rs7,790.00
6						

- What is the function that can be used to find the final cost on the cell F2?the function may also can be used to find final costs of other items.
- What is the function of the F3 Cell when the function of cell F2 copied to cell F3.
- What is the function that can be used to find the final total on cell F5.
- What is the best suitable chart type can be used to describe the Item Unit cost.
- Name two spread sheet software.

6)

A) Index number of grade 8 students divide from 4 and categorize them in to four classes according to the rest. As following flow chart when dividing the number the rest shows the MOD.

The rest dividing from 4	class
0	A
1	B
2	C
3	D



- What are the statements for P and Q in this flowchart ?
- What are the control structures used in the above flowchart?
- What is the data type for variable X ?

B)

- Draw a flowchart to print all numbers from 1 to 10
- Write the pseudo code for this flowchart.