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**Department of Examinations, Sri Lanka.**  
**General Information Technology Examination**  
**Prototype Question Paper**  
**Paper II**

**Two hours**

**Answer four questions.**

**1.**

1. Distinguish a compiler from an interpreter.
2. List three main differences between a DVD and a CDROM.
3. List three security risks of data communication over the internet.
4. Write the full names for the following acronyms.
  - i. ALU          ii. HTTP          iii. EPROM
  - iv. RISC        v. MIME
5. (i) Draw a diagram of the general structure of a computer.  
(ii) Describe the main functions of each of the main structural

components.

**(15 marks)**

**2.**

- (i) Convert the octal number 631 to decimal
- (ii) Convert the hexadecimal number B375 to binary
- (iii) Design the logic circuit corresponding to the following truth table

A	B	C	X
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	0
1	1	0	0
1	1	1	1

**(15 marks)**

**3.**

- (i) Write a program to print the following words on the console screen.  
Hello. How are you?  
I'm just fine.

(ii) The following program contains a few errors. Identify each error (there are seven), and show the correct version on the right.

```
Program TEST (output)
Var number1, number2; integer;
begin;
```

```

        number1      = 24;
        number2      := number1 * 4;
        writeln('Help)
    end

```

- (iii) Each of the following expressions is wrong. Rewrite each using correct Pascal.

```

Firstletter := A;
StartCount:= Initial := 0;
Taxrate := 5%;
Total := 5 plus 7;
Efficiency := .35;

```

- (iv) What is displayed by the following program?

```

program EXERCISE1 (output) ;
var  a, b : integer;
    c   : real ;
begin
    a := 1;    b := 5;    c := 1.20;
    writeln ('A = ', a + 3) ;
    writeln ('B = ', b - 2) ;
    Writeln ('C =', c / 2)
end.

```

(15 marks)

4. (i) Study the following document and answer the questions given below.

### LEADERSHIP STYLE

Leadership is defined as the behavior of an individual who directs the activities of a group towards a particular goal. It is the character practiced by the leaders. It is a total pattern of leaders actions in relation to his subordinates / followers / workers. It represents the philosophy, skills and attitudes of leaders in practice.

#### Positive Leaders

Positive leaders achieve their goal -job satisfaction and performance by ordinary methods by motivating, advising, educating, giving freedom to employees.

#### Negative Leaders

Negative leaders to get their work done, they reprimand workers in the presence of others, penalties such as loss of job, a few days off without pay.

The positive and negative leaders use different ways to motivate workers.

#### Qualities of leaders

- \* Planning
- \* Organizing

- \* Coordinating
- \* Controlling
- \* Taking decisions
- \* Challenging goals
- \* Achieving targets



- (a) With windows explorer give necessary steps to create a folder
- (b) Name three paragraph alignments used in the table, which is given in the document.
- (c) Identify a tool used to create the heading “LEADERSHIP STYLE”.
- (d) What is the tool available to make the document spelling errors less?
- (e) In this document the student has listed down the ‘Qualities of leaders’. What is the tool he has used to make a list? Write down the steps to apply that tool.

(ii) Mr. Mular is working as Marketing Manager at DigiNet Co. (Pvt) Ltd. He wants to give a **Presentation** for the staff about “**Personal Selling**”. He needs your help to make a slide show presentation using the data given below.

### PERSONAL SELLING

Oral Presentation in a conversation with one or more prospective purchasers for the purpose of making sales.

**A** - **Attention**  
**I** - **Interest**  
**D** - **Desire**  
**A** - **Action**  
**S** - **Satisfaction**

### Steps of Sales Process

Pre-sale preparation  
 Prospecting  
 Pre-Approach  
 Approach  
 Sales Presentation  
 Objections

Post-sale contacts

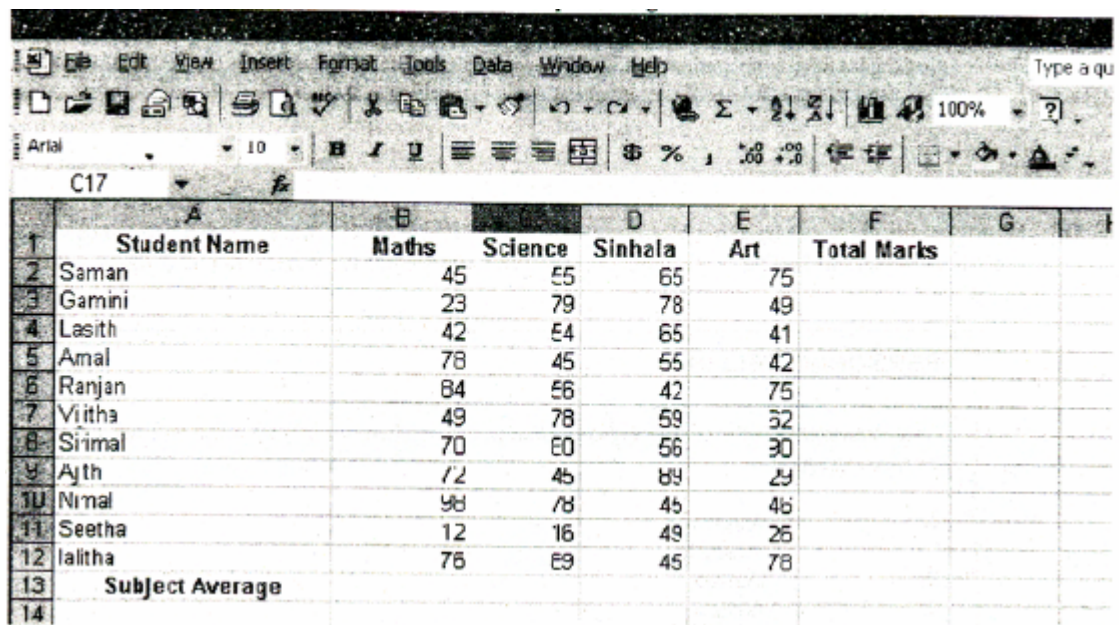
- a) What is the software you can use to create a presentation ?
- b) Write down three things that can be used to make the presentation more effective.
- c) Arrange the above data about **“Personal Selling”**.
- d) Write down features of presentation software you can use to make the presentation more effective.

- (iii)
  - a) What is meant by Hyperlink ?
  - b) A uniform resource locator (URL) of a webpage is given below <http://www.altavista.com/images/science/teach.htm> label the different parts of the uniform resource locator above.

- (c) What is meant by e-mail attachment?

(15 marks)

5. Study the following spread sheet and answer the questions given below.



The image shows a screenshot of a Microsoft Excel spreadsheet. The spreadsheet has a menu bar at the top with options: File, Edit, View, Insert, Format, Tools, Data, Window, Help. Below the menu bar is a toolbar with various icons for file operations, editing, and formatting. The spreadsheet itself has a grid with columns labeled A through G and rows numbered 1 through 14. The data is as follows:

	A	B	C	D	E	F	G
1	Student Name	Maths	Science	Sinhala	Art	Total Marks	
2	Saman	45	55	65	75		
3	Gamini	23	79	78	49		
4	Lasith	42	54	65	41		
5	Amal	78	45	55	42		
6	Ranjan	84	56	42	75		
7	Viitha	49	78	59	32		
8	Sirmal	70	60	56	30		
9	Ajith	72	45	69	29		
10	Nimal	98	78	45	46		
11	Seetha	12	16	49	25		
12	lalitha	76	69	45	78		
13	Subject Average						
14							

- (a)
  - (i) According to given data set on a spread sheet table, describe the procedure to obtain total marks of each student in total column.
  - (ii) Describe the procedure of obtaining subject average of each subject in the row. (No. 13)
  - (iii) If you want to arrange the student names according to the marks obtained, describe how you perform it
  - (iv) If you want to plot a bar chart of student names Vs total marks, describe the procedure you will use to perform it.

- (b) (i) What is meant by a table in a database?
  - (ii) List four data types available in a popular data base package?
  - (iii) What are the advantages of keeping a primary key in a table?
- (15 marks)**

6. (a) (i) List the different phases of the system development life cycle(SDLC).
- (ii) Briefly describe three of the above phases.
  - (iii) What are the possible problems in system development?

- (b) (i) What is meant by digital divide?
- (ii) Explain in your own terms steps a government should take to overcome the “digital divide”

**(15 marks)**