

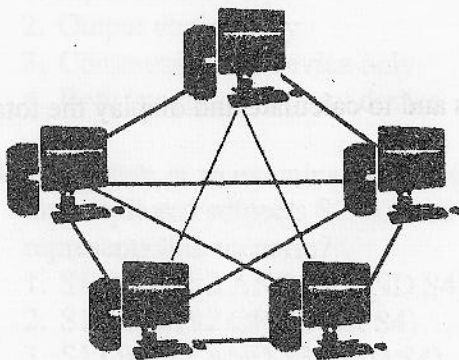
**DE MAZENOD COLLEGE, KANDANA**  
**INFORMATION & COMMUNICATION TECHNOLOGY (ICT)**  
 Third Term Test 2023 (2024)    Grade 11    Paper - I    Time: 01 Hour



Answer all the questions.

In each of questions 1 to 40, pick one of the alternatives 1, 2, 3 or 4 which is correct or most appropriate and mark your response on the answer sheet provided.

- 1) Which one of the following does not contain information?
  1. Weather report
  2. Time table
  3. Price list displayed in a super market
  4. Unlabelled chart
  
- 2) Third generation computers were based on
  1. Vacuum tube
  2. Transistors
  3. Integrated Circuits
  4. Microprocessors
  
- 3) The most general term used to describe the physical components of a computer is
  1. Software
  2. Hardware
  3. Firmware
  4. Liveware
  
- 4) Consider the following statements.  
 (A) Light pen is a pointing device  
 (B) Web cam is an imaging and video input device.  
 (C) Flash drive is an input device  
 Which of the above is / are true?
  1. (A) only
  2. (B) only
  3. (A) and (B) only
  4. All (A), (B) and (C)
  
- 5) The main purpose of using an Uninterruptible Power Supply in a computer system is to
  1. Provide backup power in the case of a main power failure
  2. Protect the computer system from lightning
  3. Provide (Direct Current) DC power to the computer circuitry
  4. Charge the internal battery of the computer
  
- 6) The units used to measure computer speed are
  1. MB and GB
  2. MHz and GHz
  3.  $\text{ms}^{-1}$  and  $\text{Kmh}^{-1}$
  4. None of these
  
- 7) What is the topology of the computer network shown in the following diagram?
  1. Bus
  2. Star
  3. Ring
  4. Mesh



- 8) How many bits are there in a TB?
  1.  $2^{40}$
  2.  $2^{33}$
  3.  $2^{43}$
  4. None of these

**DE MAZENOD COLLEGE, KANDANA**  
**INFORMATION & COMMUNICATION TECHNOLOGY (ICT)**  
Third Term Test 2023 (2024)      Grade 11      Paper - I      Time: 01 Hour

- 9) Which of the following has the highest value?  
1.  $987_{10}$       2.  $1100110011_2$       3.  $777_8$       4.  $AAA_{16}$
- 10) The octal equivalent of  $ABCD_{16}$  is  
1.  $125751_8$       2.  $125715_8$       3.  $127515_8$       4. None of these
- 11) The decimal equivalent of  $CDEF_{16}$  is  
1. 52917      2. 52719      3. 52179      4. None of these
- 12) If the character 'H' is represented in ASCII as 1001000, then the character 'Z' would be represented as  
1. 1100001      2. 1011010      3. 1100100      4. 1100101
- 13) Which of the following statements are true?  
(A)  $8b = 1B$   
(B)  $4b = 1\text{Nibble}$   
(C)  $1B = 2\text{Nibbles}$   
(D)  $1TB < 1PB$   
1. (A) and (C)      2. (A) and (D)      3. (B) and (C)      4. All (A), (B), (C) and (D)
- 14) In Microsoft Word, which of the following keyboard shortcuts are used to Copy and Paste respectively?  
1. Ctrl + C and Ctrl + P      2. Ctrl + A and Ctrl + P  
3. Ctrl + C and Ctrl + X      4. Ctrl + C and Ctrl + V
- 15) Consider the following statements.  
(A) Capacity (Register Memory < Cash Memory)  
(B) Data access speed (Register Memory < Cash Memory)  
(C) Cost per unit storage (Register Memory < Cash Memory)  
Which one of the following is true?  
1. (A) only  
2. (B) only  
3. (C) only  
4. None of the above

The following Pseudocode is used for entering 5 numbers and to calculate and display the total. Use the pseudocode for answering the questions 16 - 18.

Begin

statement1

count=1

Repeat

Input num

statement2

count=count+1

statement3

Print total

End

**DE MAZENOD COLLEGE, KANDANA**  
**INFORMATION & COMMUNICATION TECHNOLOGY (ICT)**

Third Term Test 2023 (2024)    Grade 11    Paper - I    Time: 01 Hour

2024.03.04

- 16) What is *statement1*?  
1. total=1                      2. total=0                      3. total=5                      4. None of these
- 17) What is *statement2*?  
1. total=total+num              2. total=total+5              3. total=total+count              4. None of these
- 18) What is *statement3*?  
1. Until count=5              2. Until count<5              3. Until count>5              4. None of these
- 19) Out of the following which memory contains the manufacturer's details of the mother board?  
1. RAM                      2. ROM                      3. Data traveler              4. Hard disk
- 20) This machine can create digitalized images of internal organs of the body by using strong magnetic fields and radio waves.  
1. ECG                      2. EEG                      3. MRI                      4. CAT
- 21) Who is considered as the first computer programmer in the world?  
1. Ada Augusta Lovelace  
2. Howard Aiken  
3. Charles Babbage  
4. Joseph Jacquard
- 22) A student prepares a report and saves into a permanent storage device (device 1) inside the computer. He then copies the report to a portable storage device (device 2) to be given to a friend. Which of the following is most appropriate to represent device 1 and device 2 respectively?  
1. Main memory and Flash memory  
2. Hard Disk and Compact Disk  
3. Main Memory and Compact Disk  
4. Hard Disk and Main memory
- 23) A person has taken a photograph using a digital camera. Subsequently he shows the photograph to one of his friends using the display of the camera. In this scenario, the camera serves as a / an  
1. Input device only  
2. Output device only  
3. Communication device only  
4. Both Input and Output device
- 24) To qualify in an examination, candidates have to pass one compulsory subject S1 and one of the three optional subjects S2, S3 and S4. Which of the following Boolean expression correctly represents this scenario?  
1. S1 AND (S2 AND S3 AND S4)  
2. S1 AND (S2 OR S3 OR S4)  
3. S1 OR (S2 AND S3 AND S4)  
4. S1 OR (S2 OR S3 OR S4)

**DE MAZENOD COLLEGE, KANDANA**  
**INFORMATION & COMMUNICATION TECHNOLOGY (ICT)**

Third Term Test 2023 (2024)      Grade 11      Paper - I      Time: 01 Hour

- 25) Consider the following statements.
- (A) A student obtains medical advice from a doctor by contacting him over the telephone
  - (B) An automated system, based on the humidity and temperature release water to plants in a greenhouse
  - (C) A teacher purchase a book which is not available in Sri Lanka from an online book shop
- Which of the above use the ICT effectively?
1. (A) and (B) only
  2. (A) and (C) only
  3. (B) and (C) only
  4. All (A), (B) and (C)
- 26) Consider the following statements.
- (A) Optical Fiber cables provide faster data transfer rates than that of copper cables
  - (B) Copper cables provide faster data transfer rates than that of Optical Fiber cables
  - (C) Copper cables are more expensive than Optical Fiber cables
- Which of the above is / are correct?
1. (A) only
  2. (B) only
  3. (A) and (C) only
  4. (B) and (C) only
- 27) A salesman who usually travels by motorcycle needs to use (carry) a computer to record the sales orders he takes from the shops he visits. Which of the following is / are suitable for this purpose?
- (A) Super Computer
  - (B) Palmtop Computer
  - (C) Mainframe Computer
1. (A) only
  2. (B) only
  3. Both (A) and (B)
  4. Both (B) and (C)
- 28) Which of the following identifier is valid in Pascal?
1. Basic\_Salary
  2. Basic+Salary
  3. \$Basic\_Salary
  4. Basic%Salary
- 29) In Pascal  $1001 \text{ mod } 999$  equals to
1. 30
  2. 3.33
  3. 2
  4. 1
- 30) In Pascal the variables are declared under the ..... section of the program.
1. Var
  2. Dim
  3. Variant
  4. None of these
- 31) Which of the following statements are true about HTML tags?
- (A) HTML tags are surrounded by the two characters < and >
  - (B) HTML tags are not case sensitive
  - (C) HTML tags tell the web browser how to display the web page on the computer screen
1. (A) only
  2. (A) and (B) only
  3. (A), (B), (C) all
  4. None of the above

**DE MAZENOD COLLEGE, KANDANA**  
**INFORMATION & COMMUNICATION TECHNOLOGY (ICT)**

Third Term Test 2023 (2024)

Grade 11

Paper - I

Time: 01 Hour

32) In Microsoft Office Excel 2010, Shift + Tab shortcut key is used for

1. Move to the beginning of the row
2. Move to the beginning of the worksheet
3. Move one cell to the left
4. None of the above

33) In Microsoft Office Excel 2010, by default values are

1. left aligned
2. right aligned
3. justified
4. None of the above

34) In Microsoft Office Excel 2010, the result of the equation  $= (2^2 - 2 * 2 + 2 / 2 * 2) / (2^0 + 2^2)$  is

1. 4
2. 0.4
3. 4.4
4. None of the above

35) What is the output of the following HTML code segment?

```
<dl>
  <dt>Coffee</dt>
  <dd>Black hot drink</dd>
  <dt>Milk</dt>
  <dd>White cold drink</dd>
</dl>
```

1. Coffee Black hot drink  
Milk White cold drink
2. Coffee  
Black hot drink  
Milk  
White cold drink
3. Coffee  
Black hot drink  
Milk  
White cold drink
4. None of the above

36) CoffeeCup and Eclipse are

1. Programming Languages
2. HTML Editors
3. Video Editing Software
4. None of the above

**DE MAZENOD COLLEGE, KANDANA**  
**INFORMATION & COMMUNICATION TECHNOLOGY (ICT)**

Third Term Test 2023 (2024)    Grade 11    Paper - I    Time: 01 Hour

---

37) Which of the following statement(s) is/are true?

- (A) Bluegriffon is an Open Source Web Authoring Tool
  - (B) Adobe Dream Viewer is a Purchasing Web Authoring Tool
1. (A) only
  2. (B) only
  3. Both (A) and (B)
  4. None of the above

38) Which of the following statement(s) is/are true?

- (A) If the content of a website is maintained without any change over a period of time, such a website is called a static website.
  - (B) If the web content is often changed, such a website is called a dynamic website.
1. (A) only
  2. (B) only
  3. Both (A) and (B)
  4. None of the above

39) Joomla and Drupal are

1. Programming Languages
2. Open Source CMS Software
3. Video Editing Software
4. None of the above

40) These are some of the responsibilities of a Web Editor.

1. Designs interfaces of the website
2. Writes codes, checks errors and rectifies those
3. Fulfills maintenance tasks related to the web server and database
4. None of the above

# DE MAZENOD COLLEGE, KANDANA

## INFORMATION & COMMUNICATION TECHNOLOGY (ICT)

Third Term Test 2023 (2024) Grade 11 Paper - II Time: 02 Hours

Answer five questions only, including first question and four other questions.  
First question carries 20 marks and each of the other questions carries 10 marks.



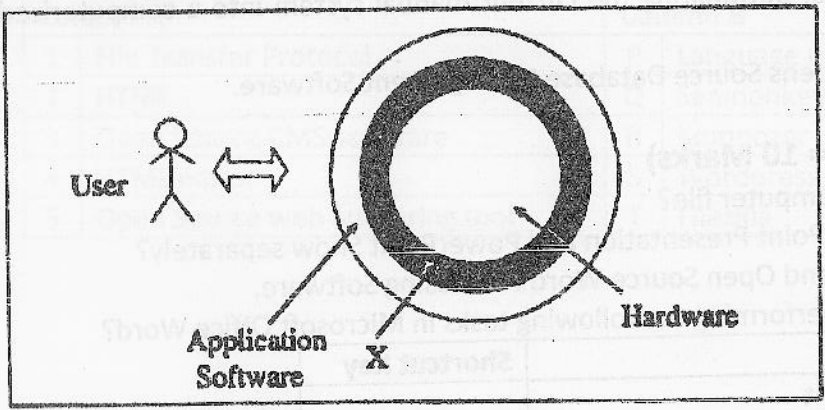
### QUESTION # 1 (2 Marks X 10 = 20 Marks)

1. Write two differences between RAM and ROM.
2. What do the terms DNS and TCP/IP stand for?
3. Write two examples for language translators.
4. What is the hexadecimal equivalent of the octal value 4567<sub>8</sub>?
5. Write two services provided by LMS for the school management.
6. Write two names of Free and Open Source Electronic Spreadsheet Software.
7. Write two characteristics in LCD when comparing monitors designed using CRT.
8. Write two special features that the USB port possesses comparing with the other ports.
9. Database is a file made of various internal objects. Name two internal objects in a database.
10. Write two reasons why a dot matrix printer is not suitable to be used in an operation theatre.

### QUESTION # 2 (10 Marks)

#### PART (A) - (1 Marks X 4 = 4 Marks)

The following diagram represents an abstract view of a computer system.



1. Name the layer labeled as X
2. Write one function for the layer labeled as X.
3. Write one function for the layer labeled as Hardware.
4. Provide an example for the layer labeled as Application software.

#### PART (B) - (2 Marks X 3 = 6 Marks)

1. What are the four types of Operating Systems?
2. What are the four components used by GUI Operating Systems?
3. Write down four different names of utility programs in an Operating System?

**DE MAZENOD COLLEGE, KANDANA**  
**INFORMATION & COMMUNICATION TECHNOLOGY (ICT)**

Third Term Test 2023 (2024)    Grade 11    Paper - II    Time: 02 Hours

**QUESTION # 3 (10 Marks)**

(2 Marks X 5 = 10 Marks)

The following three tables are a part of a school management information system that stores details of teachers and their subjects. One teacher may teach more than one subject and one subject may be taught by more than one teacher.

**Teachers**

TeacherID	Name
1111	Saman Silva
2222	Mallika Perera

**Subjects**

SubjectCode	SubjectName
Eng10	English
Sin09	Sinhala
Sci10	Science

**Teacher\_Subject**

SubjectCode	TeacherID
Eng10	1111
Sin09	2222
Sci10	1111
Sci10	2222

- Briefly explain the purpose of a primary key.
- List two primary keys together with their corresponding table names.
- Write two disadvantages that would occur if a single table is used instead of three tables for storing the data.
- Assume that in the library of your school the borrowing and returning of books are recorded manually. List two advantages of automating the current manual system into a computerized system.
- Write two names of Free and Opens Source Database Management Software.

**QUESTION # 4 (1 Marks X 10 = 10 Marks)**

- What are the two parts of the computer file?
- Write the extensions of a PowerPoint Presentation and PowerPoint Show separately?
- Write down two names of Free and Open Source Word Processing Software.
- What are the shortcut keys for performing the following tasks in Microsoft Office Word?

	Task	Shortcut Key
1	Select the whole document	
2	Replace words	

- Check whether the following characteristics of a good quality presentation are true or false.

	Characteristics	True / False
1	Number of lines per slide are 10 to 12	
2	Font size at 32 points or more	

- Write down two names of Free and Open Source Electronic Presentation Software.
- Write down two Views in Microsoft Office PowerPoint.
- Write down two Slide Layout Templates in Microsoft Office PowerPoint.
- What are the shortcut keys for performing the following tasks in Microsoft Office PowerPoint?

	Task	Shortcut Key
1	Creating a new PowerPoint Presentation	
2	Inserting a new slide	

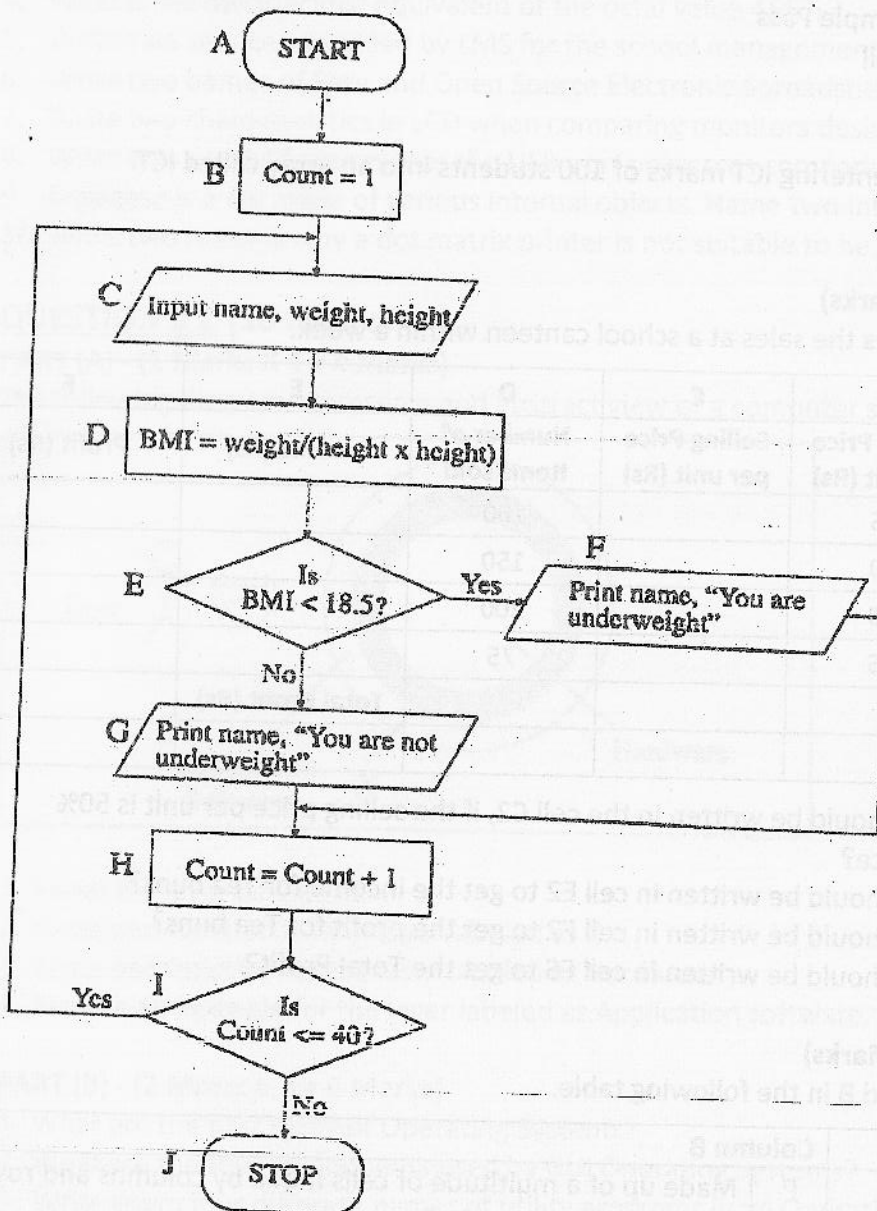
- Write down two different objects that you can insert in Microsoft Office PowerPoint Slides.



**QUESTION # 5 (10 Marks)**

**PART (A) - (1 Marks X 5 = 5 Marks)**

A Health Science teacher needs a computer program to identify the underweight students in her class. The class consists of 40 students. The underweight students are identified using their Body Mass Index (BMI). BMI is calculated by dividing the weight in kilograms by the square of the height in meters. The following flow chart is drawn for the required program. The symbols are labelled from A to J for reference.



Use the above flow chart to answer the following questions.

1. Write down the input(s) of the flow chart.
2. Write down one possible output of the flow chart.
3. Write the condition of the iteration.
4. Write the statement that helps to terminate the iteration.
5. List the label(s) that is/are executed within the selection control structure.

**DE MAZENOD COLLEGE, KANDANA**  
**INFORMATION & COMMUNICATION TECHNOLOGY (ICT)**

Third Term Test 2023 (2024)    Grade 11    Paper - II    Time: 02 Hours

**PART (B) - (2 Marks)**

Write the Pseudo Code for entering marks of a subject and to display the grade according to the following criteria.

<u>Marks</u>	<u>Grade</u>
Marks $\geq$ 75	Distinction
$50 \leq$ Marks $<$ 75	Credit
$40 \leq$ Marks $<$ 50	Simple Pass
Else	Fail

**PART (C) - (3 Marks)**

Write a program in pascal for entering ICT marks of 100 students into an array called ICT.

**QUESTION # 6 (10 Marks)**

**PART (A) - (1 Marks X 4 = 4 Marks)**

The following worksheet shows the sales at a school canteen within a week.

	A	B	C	D	E	F
1	Item	Buying Price per unit (Rs)	Selling Price per unit (Rs)	Number of Items sold	Income (Rs)	Profit (Rs)
2	Tea Bun	35		100		
3	Egg Roll	40		150		
4	Pancake	30		200		
5	Chocolate Bar	25		75		
6					Total Profit (Rs)	
7						

1. What is the formula that should be written in the cell C2, if the selling price per unit is 50% higher than the buying price?
2. What is the formula that should be written in cell E2 to get the income for Tea buns?
3. What is the formula that should be written in cell F2 to get the profit for Tea buns?
4. What is the formula that should be written in cell F6 to get the Total Profit?

**PART (B) - (1 Marks X 6 = 6 Marks)**

Match the two columns A and B in the following table.

Column A		Column B	
1	Ctrl + End	P	Made up of a multitude of cells made by columns and rows on a two dimensional plane
2	Name box	Q	Free & Open Source Software
3	OpenOffice Calc	R	The address of the active cell is displayed
4	Workbook	S	Moves to bottom right cell of the data range
5	Worksheet	T	Collection of worksheets
6	Ctrl + Home	U	Moves the cell to A1 position

DE MAZENOD COLLEGE, KANDANA  
INFORMATION & COMMUNICATION TECHNOLOGY (ICT)  
Third Term Test 2023 (2024) Grade 11 Paper - II Time: 02 Hours

**QUESTION # 7 (10 Marks)**

**PART (A) - (5 Marks)**

Draw the output of the following HTML code segment?

```
<table border="1">
<tr>
<th>Column 1</th><th>Column 2</th><th>Column 3</th>
</tr>
<tr>
<td rowspan="2">Row 1 Cell 1</td>
<td>Row 1 Cell 2</td>
<td>Row 1 Cell 3</td>
</tr>
<tr><td>Row 2 Cell 2</td><td>Row 2 Cell 3</td></tr>
<tr><td colspan="3">Row 3 Cell 1</td></tr>
</table>
```



**PART (B) - (1 Marks X 5 = 5 Marks)**

Match the two columns A and B in the following table.

Column A		Column B	
1	File Transfer Protocol	P	Language used for documents in the WWW
2	HTML	Q	Seamonkey Composer
3	Open Source CMS software	R	Kompozer
4	HTML editor	S	Wordpress
5	Open Source web authoring tool	T	Filezilla