ST. PETER'S COLLEGE – COLOMBO 04
THIRD TERM TEST – 2021
GRADE 8 _____ – COMPUTER STUDIES   1 HOUR

Admission Number : ....   Class No:....................

Name: ....

ANSWER ALL QUESTIONS

Q1.   **Underline the MOST SUITABLE answer.**   **(2 x 30 = 60 marks)**

1. The base of 10100_{10} is?
   - i. 2
   - ii. 10
   - iii. 0
   - iv. 1

2. *A number system using two (02) symbols* is known as a ....
   number system.
   - i. Binary
   - ii. Decimal
   - iii. Octal
   - iv. Hexadecimal

3. What is the **Binary value of** 245_{10}?
   - i. 245_2
   - ii. 365_2
   - iii. 10101111_2
   - iv. 11110101_2

4. What is the **Decimal value of** 0001101_2?
   - i. 58_{10}
   - ii. 88_{10}
   - iii. 130_{10}
   - iv. 13_{10}

5. In a *Binary number system*, **each digit** is called a?
   - i. Byte
   - ii. Number
   - iii. Data
   - iv. Bit

6. Which of the following is **NOT a file attribute?**
   - i. File Extension
   - ii. File Permissions
   - iii. Created Date
   - iv. File content

7. Which of the following port **CAN NOT be used** to *connect to a display device*?
   - i. eSATA
   - ii. VGA
   - iii. DVI
   - iv. HDMI

8. The **cable** in *figure 1* is known as?
   - i. PS/2 Port
   - ii. Micro USB Port
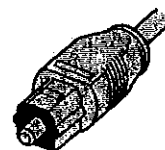   - iii. Optical Audio Port
   - iv. RJ45 Port

Figure 1

9. What is the **simplest solution** for a *software problem* in a computer?
   - i. Restart the computer
   - ii. Run a virus scan
   - iii. Close the application and re-open it
   - iv. Clean up the disk

10. What is the **initial (first) step** when *fixing a hardware issue*?
    i.   Check the power cable
    ii. Disconnect the power supply from the wall socket.
    iii. Check whether the UPS is connected properly.
    iv. Unplug the USB cables from the PC.

11. Which of the following tool is **NOT** belongs to a *Word Processing Software*?
    i.   Formula Function   iii. Spelling & Grammar
    ii. Tables   iv. Shapes

12. Consider the following paragraph in *Figure 2*.

(Source - https://en.wikipedia.org/wiki/Butterfly)

> Butterflies are insects in the macrolepidopteran clade Rhopalocera from the order Lepidoptera, which also includes moths. Adult butterflies have large, often brightly coloured wings, and conspicuous, fluttering flight. The group comprises the large superfamily Papilionoidea, which contains at least one former group, the skippers (formerly the superfamily "Hesperioidea"), and the most recent analyses suggest it also contains the moth-butterflies (formerly the superfamily "Hedyloidea"). Butterfly fossils date to the Paleocene, about 56 million years ago.

Figure 2

What is the **alignment** of the above *paragraph text*?
    i.   Left Aligned   iii. Center Aligned
    ii. Right Aligned   iv. Justify

13. In a *Word Processing Software*, the following **button** (*in Figure 3*) is used for,
    i.   Add a table
    ii. Justify the text
    iii. Change the line spacing
    iv. Change the word size

Figure 3

14. To **format a single word** of a *Word document, first,* you need to,
    i.   Click on the first word and drag the mouse pointer to the last word.
    ii. Press both Ctrl + A on the keyboard together.
    iii. Triple-click on the paragraph.
    iv. Double click on the word.

15. The below feature (*in Figure 4*) in a Word Processing Software is known as,
    i.   Merging cells in a table
    ii. Inserting a Word Art
    iii. Adding a page border
    iv. Inserting a textbox

Figure 4

16. Which of the following is **NOT** considered as a *Control Structure*?
    i.   Repetition   ii. Selection   iii. Recreation   iv. Sequence

17. Which of the following is **an example** of a *Selection Control Structure?*
    i.   Entering marks and display whether the student is pass or fail.
    ii. Display a message 10 times.
    iii. Adding two numbers.
    iv. Finding the price of 5 pens by inserting a price of a pen.

18. Which of the following is **an example** for a *Sequence Control Structure?*
    i.   Comparing two scores and displaying the highest.
    ii. Marking the attendance of 40 students.
    iii. Multiply two numbers.
    iv. Going to the playground according to the weather condition.

19. The following **flowchart** (*in Figure 5*) is an example for
    i.   Selection Control Structure
    ii. Sequence Control Structure
    iii. Repetition Control Structure
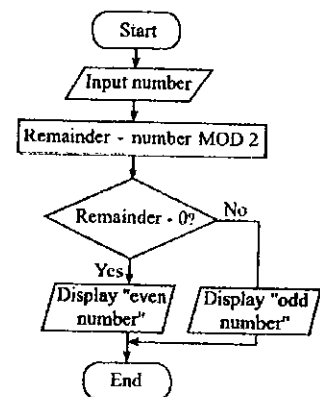   iv. Recreation Control Structure

Figure 5

20. Which device below **CAN NOT** be considered as a *mobile device?*
    i.   Smart Watch
    ii. Smart TV
    iii. Smart Sunglasses
    iv. Laptop

21. Below **Truth Table** (*in Table 01*) belongs to?
    i.   AND Gate
    ii. OR Gate
    iii. NOT Gate
    iv. AND+OR Gate

Input 1	Input 2	Result
OFF	OFF	OFF
OFF	ON	OFF
ON	OFF	OFF
ON	ON	ON

Table 1

22. Select the **INCORRECT** Statement below regarding *Logic Gates?*
    i.   In an AND Gate, when one input is 0, the output is always 0.
    ii. In an AND Gate, when one input is 1, the output is always 1.
    iii. In an OR Gate, when one input is 1, the output is always 1.
    iv. In an OR Gate, when one input is 0, the output will be either 0 or 1.

23. In the below logic diagram *(in figure 6)*, what should be **A, B and C inputs** to get the *output as 1*?

   i.   A – 0, B – 0, C – 1
   ii. A – 1, B – 1, C – 1
   iii. A – 1, B – 1, C – 0
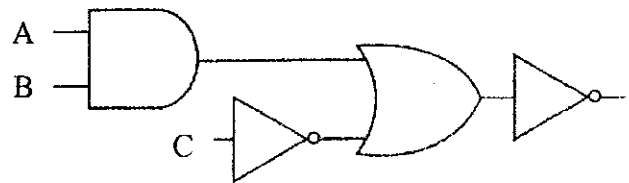   iv. A – 0, B – 0, C – 0

Figure 6

24. In the below logic diagram *(in figure 7)*, what should be **X and Y inputs** to get the *output as 1*?

   i.   X – 0, Y – 0
   ii. X – 0, Y – 1
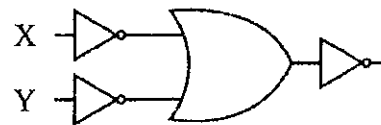   iii. X – 1, Y – 0
   iv. X – 1, Y – 1

Figure 7

25. What is the **maximum number of inputs** a *NOT Gate* can have?
   i. 1   ii. 2   iii. 3   iv. Many inputs

26. Which of the following is **NOT an example** for an *Internet Search Engine*?
   i. Ask.com   ii. Google.com   iii. Yahoo.com   iv. Gmail.com

27. What does the **Bookmark/Favourite** option in an *Internet Browser* do?
   i.   Save recently used web addresses.
   ii. Allows to go back to the previous/next page
   iii. Save a webpage to access later.
   iv. Adds a link to go to another webpage.

28. Which of the following is **NOT** considerable when *developing a Website*?
   i.   The goal of the website.
   ii. The web browsing software.
   iii. How the user navigates the website.
   iv. Use of images.

29. Which of the following **CAN NOT be used** to *create web pages using HTML*?
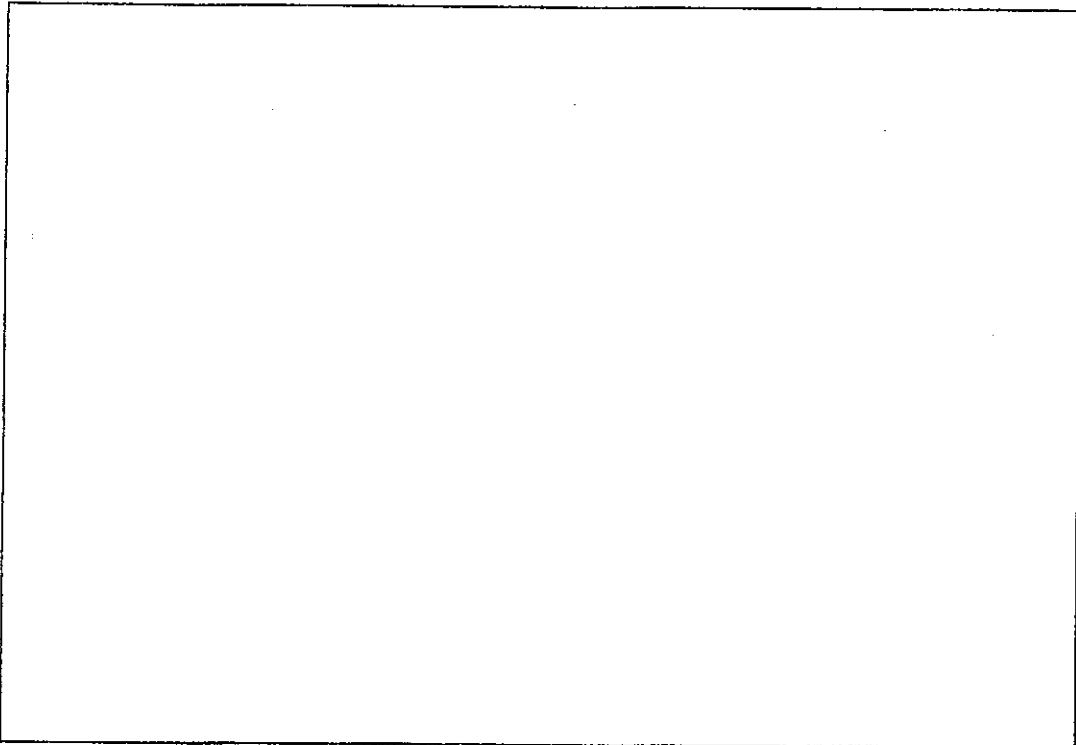   i.   Multimedia Logic   iii.   Notepad
   ii. Wordpress   iv.   Microsoft Visual Studio

30. Which **tag pairs** is used to add a **list with bullets** on an *HTML page*?
   i.   <i> ..... </i>   iii.   .....
   ii. .....   iv.   .....

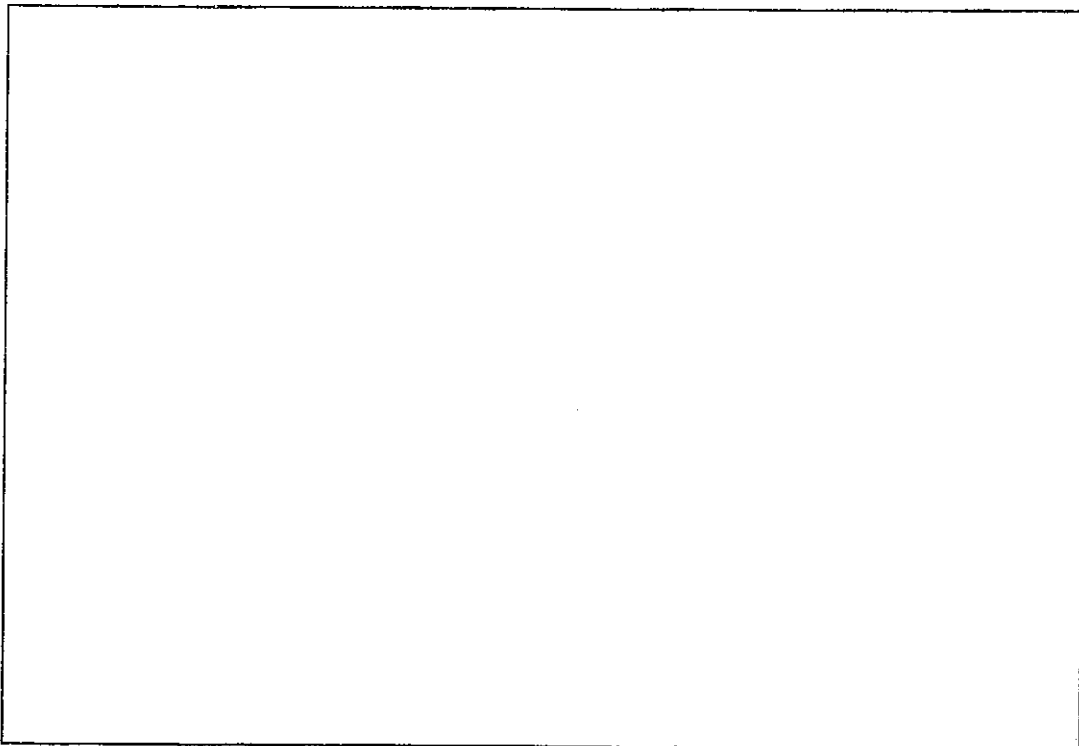Q2.   Convert **204**$_{10}$ to a *Binary number*. *(Show your work)*.   (05 Marks)

Q3.   Convert **10110**$_2$ to a *Decimal number (Show your work)*.   (05 Marks)

Q4.   State whether the following conditions are **TRUE** or **FALSE**   (2 x 5 = 10 Marks)

Statement	True / False
Data are fed to the memory of the computer as 1's and 0's	
To search files by its type, *File Extension* of a file can be used when searching.	
A *Display Port* provides a Higher Performance when compared to VGA and DVI ports.	
The *Only Solution* for Application software problems is to restart the computer.	
A computer program is converted to an algorithm when developing a computer program	

Q5. Consider the following HTML page. Write the **most suitable** HTML tags in the relevant boxes. *(Only the correct tag is sufficient. No need to write attributes.)*   (1 x 10 = 10 Marks)

Q6. Draw the Truth Table for the following Logic Diagram.
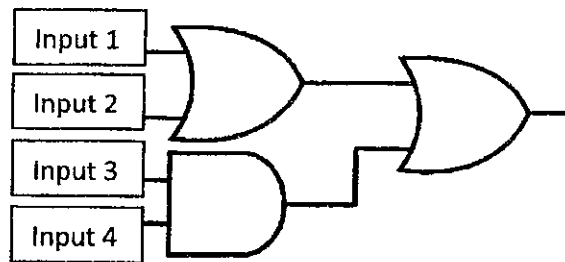
Input 1	Input 2	Input 3	Input 4	Output