

**11th
STD**

INSTANT SUPPLEMENTARY EXAM - JULY 2023

Reg. No.

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PART - III

COMPUTER APPLICATIONS

(With Answers)

Time Allowed : 3.00 Hours]

[Maximum Marks: 70

- Instructions :**
1. Check the question paper for fairness of printing. If there is any lack of fairness, inform the Hall Supervisor immediately.
 2. Use **Blue** or **Black** ink to write and underline and pencil to draw diagrams.

PART - I

Note: (i) Answer **all** the questions. (15 × 1 = 15)

(ii) Choose the most appropriate answer from the given **four** alternatives and write the option code and the corresponding answer.

1. Expansion of POST is :
(a) Post on Self Test (b) Power on Self Text
(c) Power on Self Test (d) Power on Serial Test
2. (1110)₂ - the equivalent hexadecimal is :
(a) F (b) D (c) E (d) B
3. The shortcut keys used to rename a file in Windows:
(a) F4 (b) F2 (c) F5 (d) F6
4. What is the shortcut key to go to the beginning of the line?
(a) Home (b) End
(c) Ctrl + Home (d) Ctrl + End
5. The key used to move the cell pointer in the forward direction within the worksheet is :
(a) Enter (b) Tab
(c) Shift + Tab (d) Delete
6. The conditional statement used to transfer control from current statement to another statement.
(a) Branching (b) Sequencing
(c) Looping (d) Interating
7. Hotspot uses which type of Network Services?
(a) LAN (b) PAN
(c) WLAN (d) WAN
8. How many levels of heading tags available in HTML?
(a) 4 (b) 6 (c) 8 (d) 3
9. Which of the following tags are called as 'physical style' tags?
(a) <html>, ,
 (b) ,
, <u>
(c) , <A>, <i> (d) , <i>, <u>

10. The important attributes used with the <form> tag are :
(a) name and size (b) type and name
(c) method and action (d) post and set
11. Which of the following indicates that the text included is a comment in CSS style sheet?
(a) /*...*/ (b) !*...*!
(c) <...* (d) *...*\
12. Which of the following is not a looping statement?
(a) Switch (b) While
(c) Do-while (d) For
13. In the below snippet,
Value of x is,
Var x = 102+5 – 50;
(a) 57 (b) 47 (c) 50 (d) 52
14. Which one of the following tracks a user visits a website?
(a) Trojan (b) Worms
(c) Cookies (d) Spyware
15. Library functions are also called as _____.
(a) Commands (b) Storage functions
(c) Instructions (d) Predefined functions

PART - II

Note: Answer **any six** questions. Question No. 24 is **Compulsory.** (6 × 2 = 12)

16. What are the components of a CPU?
17. What is known as Multitasking?
18. In OpenOffice Writer, how do you merge cells in a table?
19. Write about the text operator in OpenOffice Calc.
20. How do you define comments in HTML?

- 21. What is the use of <style> tag?
- 22. What is a function in JavaScript?
- 23. List the Search Engines supported by Tamil Language.
- 24. Convert $(1560)_8$ into equivalent decimal number.

PART - III

Note: Answer **any six** questions. Question No. 33 is **Compulsory.** (6 × 3 = 18)

- 25. Write down the interfaces and ports available in a computer.
- 26. Write a short note on multi-processing.
- 27. In OpenOffice Impress, what is a Normal View?
- 28. What are the advantages of Email?
- 29. Briefly explain the attributes of <hr> tag.
- 30. Explain the values of <input> tag's type attribute.
- 31. Write a note on basic data types in JavaScript.
- 32. Differentiate between while and do..while statements.
- 33. What is Indenting Text in Writer? Write its types.

PART - IV

Note : Answer **all** the questions. (5 × 5 = 25)

- 34. (a) Explain the following :
 - (i) Inkjet printer
 - (ii) Multimedia projector
 - (iii) Bar code / QR Code Reader

(OR)

 - (b) Explain the characteristics of a Microprocessor.
- 35. (a) Write the procedure to Find and Replace a Word with another Word in OpenOffice Writer.

(OR)

 - (b) (i) Convert $(58.36)_{10}$ to Binary.
 - (ii) Find 1's complement and 2's complement for the decimal number $(-55)_{10}$.
- 36. (a) Write in detail about the pop-up dialogue boxes in JavaScript.

(OR)

 - (b) Write down the rules for naming variables in JavaScript.
- 37. (a) Write the steps to generate the following series.

5, 10, 20, 2560

(OR)

 - (b) Explain filters in OpenOffice Calc.

- 38. (a) What are the different methods to change the margin in writer?

(OR)

- (b) Explain the different types of cyber attacks.

Answers

PART - I

- 1. (c) Power on Self Test 2. (c) E
- 3. (b) F2 4. (a) Home
- 5. (b) Tab 6. (a) Branching
- 7. (c) WLAN 8. (b) 6
- 9. (d) , <i>, <u>
- 10. (c) method and action
- 11. (a) /*...*/ 12. (a) Switch
- 13. (a) 57 14. (c) Cookies
- 15. (d) Predefined functions

PART - II

- 16. The CPU has three components which are Control unit, Arithmetic and Logic Unit (ALU) and Memory unit.
- 17. Microsoft windows is one of the most popular graphical user Interface. Multiple applications can execute simultaneously in windows, and this is known as 'Multitasking'.
- 18. **To merge cells in a table:**
 - (i) Select the cells to merge.
 - (ii) Right click and choose Cell → Merge or Choose Table → Merge Cells from the menu bar.
- 19. In Calc, "&" is a text operator which is used to combine two or more text. Joining two different texts is also known as "Text Concatenation". An expression using the text operator has the following **syntax:** text reference1 & text reference2.
- 20. The tag <!--> is used to create comments. In HTML, the text what you type within this tag is considered as comments and it is ignored by the browser. Comments never show up onscreen. Comments can be placed anywhere in HTML document.

The general form of comments: <!-- comments -->

- 21. A style tag is used to change the default characteristics of a particular tag in the entire web document wherever that tag is used. The <style> tag controls the presentation styles of a particular HTML document. If you want to use a particular tag with the same style applied in one HTML document to another is not possible. Thus, the <style> tags are called as “Page-Level Styles” or “Internal Style Sheets”.
- 22. A function is a block of JavaScript code that is defined once but may be executed or invoked any number of times.
- 23. Search Engines supported by Tamil Language are:
 - (i) Google
 - (ii) Bing
 - (iii) yahoo
- 24.

Weight	512	64	8	1
Positional notation	8 ³	8 ²	8 ¹	8 ⁰
Given number	1	5	6	0

$$(1560)_8 = 512 \times 1 + 64 \times 5 + 8 \times 6 + 1 \times 0$$

$$= 512 + 320 + 48 + 0$$

$$(1560)_8 = (880)_{10}$$

PART - III

- 25. Interfaces and ports available in a computer :
 - (i) Serial Port
 - (ii) Parallen Port
 - (iii) USB 3.0
 - (iv) VGA Connector
 - (v) Audio Plugs
 - (vi) PS/2 Port
 - (vii) SCSI Port
 - (viii) High Definition Multimedia Interface (HDMI).
- 26. (i) Multi-processing is a one of the features of Operating System.
 - (ii) It has two or more processors for a single running process (job).
 - (iii) Processing takes place in parallel is known as parallel processing.
 - (iv) Since the execution takes place in parallel, this feature is used for high speed execution which increases the power of computing.

- 27. Normal view is the main view for creating individual slides.
 - (i) Use this view to format and design slides and to add text, graphics and animation effects.
 - (ii) There are two ways to place a slide in the Slide Design area of the Normal view: clicking the slide thumbnail in the Slides pane or using the Navigator.
- 28. The main advantages of email are listed below :
 - (i) **Free delivery** : Sending an e-mail is virtually free, outside the cost of Internet service. There is no need to buy a postage stamp to send a letter.
 - (ii) **Global delivery** : E-mail can be sent to nearly anywhere around the world, to any country.
 - (iii) **Instant delivery** : An e-mail can be instantly sent and received by the recipient over the Internet.
 - (iv) **File attachment** : An e-mail can include one or more file attachments, allowing a person to send documents, pictures, or other files with an e-mail.
 - (v) **Long-term storage** : E-mails are stored electronically, which allows for storage and archival over long periods of time.
 - (vi) **Environment friendly** : Sending an e-mail does not require paper (Paperless), cardboard, or packing tape, conserving paper resources.
- 29. The <hr>tag having four attributes viz., size, width, noshade and color. These attributes are used to set size, width, 3D appearance and color to the horizontal line respectively.

The general syntax of <hr> tag with attributes:

$$\langle \text{hr size} = \text{value width} = \text{value noshade, color} = \text{color_name/code} \rangle$$
 - (i) **Size**: Thickness of the horizontal line can be changed with size attribute.
 - (ii) **Width**: The width attribute specifies the horizontal width of the line
 - (iii) **Noshade**: The default view of a horizontal rule line is 3D. So, no need to specify the term “noshade” as an attribute with <hr> tag. If you specify the attribute “noshade” turn off 3D view, turns on 2D view.
 - (iv) The color attribute is used to change the default color to desired color.

30.

Value of type attribute	Description
Text	Create a Text Box. The element used to get all kind of text input such as name, address etc.,
Password	Similar as Text box. But, while entering data, the characters are appearing as coded symbols such as asterisk.
Checkbox Multi select box	Check box is an element appearing like a small square box. When the user click on the square a tiny tick mark will appear inside the square. This element is used to select multiple options.
Radio Button	Radio button is used to select any one of the multiple options from the list. This element looks like a small circle, when the user select an item, a tiny dot will appear within the circle. If the user selects another option, previously selected option will be deselected. This means, user can select any one of the given option form a group.
Reset	It is a special command button used to clear all the entries made in the form.
Submit	It is also a special command button used to submit all the entries made in the form to the backend server.
Button	This is a standard graphical button on the form used to call functions on click.

31. The basic data types in JavaScript are Strings, Numbers, and Booleans.

- (i) A **string** is a list of characters, and a string literal is indicated by enclosing the characters in single or double quotes. Strings may contain a single character or multiple characters, including whitespace and special characters such as \n (the newline).
- (ii) **Numbers** can be integer or floating-point numerical value and numeric literals are specified in the natural way.
- (iii) **Boolean** can be any one of two values: true or false. Boolean literals are indicated by using true or false directly in the source code.

32.

While Statements	Do while Statements
1. First condition will be evaluated and they only based on the result of the condition the body of the loop will be executed or not.	do... while loop body of the loop always executed atleast once before the condition can be executed.
2. Entry check loop.	Exit check loop.
3. Checking and execution time of loop is differ in while loop.	Checking and execution time of loop is same in do while loop.

33. Indent is the distance from the left and right margin of a paragraph. It is used to improve the efficiency and readability of the paragraph and makes the paragraph look more attractive.

There are four types of indents:

- (i) Left Indent
- (ii) Right Indent
- (iii) First Line Indent and (iv) Hanging Indent.
- (i) **Left indent** : The Left indent controls the space between the paragraph and the left margin. This is the default indent. Each click on the Increase indent icon moves the paragraph ½ inch away from the left margin
- (ii) **Right indent** : The Right indent controls the space between the paragraph and the right margin. Each click on the decrease indent icon removes the indent applied by the increase indent.
- (iii) **First line indent** : A first-line indentation indents the first line of the paragraph. It is the most common way to start a new paragraph. This indent can be applied by Format → Paragraph → Indents and spacing tab, select first line option in the indent group, enter a positive value which results in first line indent.
- (iv) **Hanging indent** : This is a special kind of indent where the first line of the paragraph alone hangs outside leaving the rest of the text. To apply hanging indent, a negative value is given in the “first line” option of the paragraph dialog box.

PART - IV

34. (a)

(i) Inkjet Printers:

- ◆ Inkjet Printers use colour cartridges which combined Magenta, Yellow and Cyan inks to create color tones. A black cartridge is also used for monochrome output. Inkjet printers work by spraying ionised ink at a sheet of paper.
- ◆ They use the technology of firing ink by heating it so that it explodes towards the paper in bubbles or by using piezoelectricity in which tiny electric currents controlled by electronic circuits are used inside the printer to spread ink in jet speed.
- ◆ An Inkjet printer can spread millions of dots of ink at the paper every single second.

(ii) Multimedia Projectors:

- ◆ Multimedia projectors are used to produce computer output on a big screen.
- ◆ These are used to display presentations in meeting halls or in classrooms.

(iii) Bar Code / QR Code Reader:

- ◆ A Bar code is a pattern printed in lines of different thickness. The Bar code reader scans the information on the bar codes transmits to the Computer for further processing.
- ◆ The system gives fast and error free entry of information into the computer.

QR (Quick response) Code:

The QR code is the two dimension bar code which can be read by a camera and processed to interpret the image.

(OR)

(b) A Microprocessor's performance depends on the following characteristics:

- (a) Clock speed
- (b) Instruction set
- (c) Word size

(a) Clock Speed :

- (i) Every microprocessor has an internal clock that regulates the speed at which it executes instructions.

- (ii) The speed at which the microprocessor executes instructions is called clock speed. Clock speed is measured in MHz (Mega Hertz) or in GHz (Giga Hertz).

(b) Instruction set :

- (i) A command which is given to a computer to perform an operation on data is called an instruction.
- (ii) Basic set of machine level instructions that a microprocessor is designed to execute is called as an instruction set. This instruction set carries out the following types of operations:
 - Data transfer
 - Arithmetic operations
 - Logical operations
 - Control flow
 - Input/output

(c) Word Size :

- (i) The number of bits that can be processed by a processor in a single instruction is called its word size.
- (ii) Word size determines the amount of RAM that can be accessed by a microprocessor.

35. (a) OpenOffice Writer has a Find and Replace feature that helps to locate for a text inside a document and replace it with another word.

- ◆ Click Edit → Find & Replace (or) Ctrl + F
- ◆ The Find & Replace dialog box appears as shown.

Steps to Find & Replace a text :

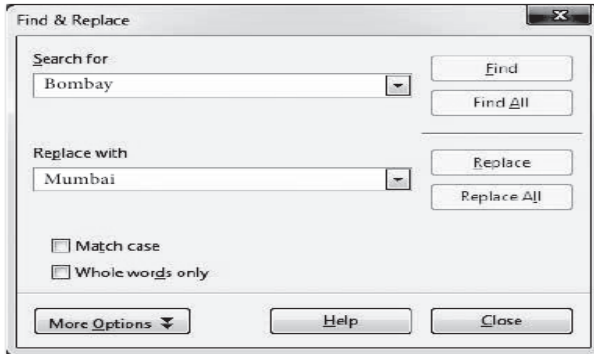
- (i) Type the text you want to find in the Search for box
For Example : To search a word "Bombay" in a document and replace with "Mumbai", enter the word "Bombay" in the Search for box.
- (ii) Enter the word " Mumbai" in the Replace with box and Click Find button, to start the search, the found word is highlighted and the first occurrence of "Bombay" is highlighted.
- (iii) To replace text, click Replace button.

The highlighted word is replaced with the word given in the Replace with box.

- (iv) Click Find All, Writer selects all instances of the search text in the document.

All occurrences of Bombay are highlighted.

- (v) Click Replace All button, Writer replaces all matches.
This will replace all occurrences of “Bombay” with “Mumbai”.
- (vi) Enable Match case to perform the search case sensitively so that uppercase and lower cases are distinguished separately.
- (vii) Enable Whole Words only to make the search more specific to words. For example, if you search for the word “Image”, the command will only find “Image” not “Imaging”, “Images” etc.



Find & Replace dialog box

(OR)

- (b) (i) Convert $(58.36)_{10}$ to Binary.

I. Integer part:

$$\begin{array}{r}
 2 \mid 58 \\
 \hline
 2 \mid 29 - 0 \\
 2 \mid 14 - 1 \\
 2 \mid 7 - 0 \\
 2 \mid 3 - 1 \\
 2 \mid 1 - 1
 \end{array}$$

II. Fractional part:

$$\begin{aligned}
 0.36 \times 2 &= 0.72 = 0 \\
 0.72 \times 2 &= 1.44 = 1 \\
 (58.36)_{10} &= (111010.01\dots)_2
 \end{aligned}$$

- (ii) 1's complement of $(-55)_{10}$

$$\begin{array}{r}
 2 \mid 55 \\
 \hline
 2 \mid 27 - 1 \\
 2 \mid 13 - 1 \\
 2 \mid 6 - 1 \\
 2 \mid 3 - 0 \\
 1 \mid 1 - 1
 \end{array}$$

$$(55)_{10} = 110111$$

$$8 \text{ bit format of } 55_{10} = 00110111$$

$$1's \text{ complement} = 11001000$$

$$\text{Add 1 bit} = \quad \quad + 1$$

$$2's \text{ complement} = \underline{11001001}$$

- 36. (a) JavaScript supports three important types of dialog boxes. Dialog boxes are also called as Popup Boxes. These dialog boxes can be used to raise an alert, or to get confirmation on any input or to have a kind of input from the users. JavaScript supports three kind of popup boxes: Alert box, Confirm box, and Prompt box.

Alert Dialog Box : An alert dialog box is mostly used to give a warning message to the users. For example, if one input field requires to enter some text but the user does not provide any input, then as a part of validation, you can use an alert box to give a warning message. Alert box gives only one button “OK” to select and proceed.

The syntax of alert box is

```
Alert("Message");
(or) Window.alert ("Message");
```

Example :

```
alert("Name is compulsory entry");
(or) window.alert("Name is compulsory entry");
```

Confirm Dialog Box : A confirmation dialog box is mostly used to take user’s consent on any option. It displays a dialog box with two buttons: OK and Cancel. If the user clicks on the OK button, the confirm() will return true. If the user clicks on the Cancel button, then confirm() returns false.

The syntax of confirm dialog box is

```
confirm("message");
(or)
window.confirm("message");
```

Example :

```
confirm("Hai Do you want to continue?");
(or)
```

```
window.confirm("Hai Do you want to continue?");
```

Prompt Dialog Box : The prompt dialog box is very useful when the user want to pop-up a text box to get user input. Thus, it enables you to

interact with the user. The user needs to fill in the text box field and then click OK.

The prompt dialog box is displayed using a method called prompt() which takes two parameters :

(i) a label which you want to display in the text box and (ii) a default string to display in the text box. This dialog box has two buttons: OK and Cancel. If the user clicks the OK button, the prompt() will return the entered value from the text box. If the user clicks the Cancel button, the prompt() returns null. The Syntax of prompt dialog box is,

```
Prompt("Message","defaultValue");
```

(or)

```
window.prompt("sometext","defaultText");
```

Example :

```
prompt("Enter Your Name:","Name");
```

(or)

```
window.prompt("Enter Your Name:","Name");
```

(OR)

(b) **Rules for naming variable :**

- (i) The first character must be a letter or an underscore (_). Number cannot be as the first character.
- (ii) The rest of the variable name can include any letter, any number, or the underscore. You can't use any other characters, including spaces, symbols, and punctuation marks.
- (iii) JavaScript variable names are case sensitive. That is, a variable named Register Number is treated as an entirely different variable than one named register number.
- (iv) There is no limit to the length of the variable name.
- (v) JavaScript's reserved words cannot be used as a variable name. All programming languages have a supply of words that are used internally by the language and that cannot be used for variable names.

37. (a) Step to generate the series 5, 10, 20..2560

Step 1 : Select the required number of cells to generate the series.

Step 2 : Click EDIT → FILL, the Fill Series dialog box appear.

Step 3 : Select Direction Down in fill series dialog box.

Step 4 : Select the Series type growth.

Step 5 : Initial value of the series 5 should be typed in start value box.

Step 6 : Maximum value of the series 2560 should be typed in End value box.

Step 7 : The value 2 should be typed in Increment box.

Step 8 : Click Ok.

(OR)

(b) **Filtering :** Filter is a way of limiting the information that appears on screen. The visible records satisfy the condition that the user sets. Those that do not satisfy the condition are hidden, but not removed. OpenOffice Calc allows three types of filters. They are AutoFilter, Standard Filter and Advanced Filter.

Auto Filter: Auto Filter applies a drop-down list box to each field (columns) filled with similar data available in that field. Using the list box item, you can filter the data that matches the criteria of the data concerned.

Using Auto Filter: Click Auto Filter icon available on the "Standard tool bar" (or) Click Data → Filter → Auto Filter • The list box contains similar data in the fields. Each list box item will be considered as filter criteria.

Removing Auto Filter: To remove auto filter, click "Auto filter" icon once again . The original table is displayed without filter. Standard Filter: Auto filter is used only for single criteria on a data, whereas the Standard filter is used for multiple criteria to filter.

Standard Filter: Auto filter is used only for single criteria on a data, where as the standard filter is used for multiple criteria to filter.

38. (a) Page margins are the white space around the top, bottom, left and right of your document.

Changing or setting page margins in openoffice writer can be done in two ways:

- (i) Using the Rulers - quick and easy, but does not have precise values.
- (ii) Using the Page Style dialog box - can specify precise values for the margins.

Changing Page Margins using Ruler:

- (i) The shaded sections of the rulers are the margins.
- (ii) Hold the mouse pointer over the line between the gray and white sections.

- (iii) The mouse pointer turns into a double-headed arrow.
- (iv) Hold down the left mouse button and drag the mouse to move the margin and release it at the required point.
- (v) The new margin is set.

Using the Page Style Dialog Box:

To change margins using the Page Style dialog box

- (i) Right-click anywhere on the page and select Page from the popup menu or select page tab of page style dialog box.
- (ii) In the Margins boxes, specify the values for left, right, top and bottom margins.
- (iii) Click on OK button.

(OR)

(b)

Cyber Attack	Function
Virus	<p>A virus is a small piece of computer code that can repeat itself and spreads from one computer to another by attaching itself to another computer file. One of the most common virus is Trojan.</p> <p>Trojan : A Trojan virus is a program that appears to perform one function (for example, virus removal) but actually performs malicious activity when executed.</p>
Worms	Worms are self- repeating and do not require a computer program to attach themselves. Worms continually look for vulnerabilities and report back to the author of the worm when weaknesses are discovered.
Spyware	Spyware can be installed on the computer automatically when the attachments are open, by clicking on links or by downloading infected software.
Ransomware	Ransomware is a type of malicious program that demands payment after launching a cyber-attack on a computer system. This type of malware has become increasingly popular among criminals and costs the organizations millions each year.
