

HIGHER SECONDARY PUBLIC EXAMINATION MAY 2022
FIRST YEAR COMPUTER APPLICATIONS – KEY ANSWERS

Part – I

Answer all the questions:-

15 X 1 =15

Write the option code and corresponding answer :-

Q.No.	Option Code	Answer	Mark
1	C	RAM	1
2	C	D	1
3	D	All the above	1
4	A	Edit	1
5	B	Title Bar	1
6	C	Alphabet	1
7	B	World Wide Web Consortium	1
8	B	/	1
9	C	Nested List	1
10	A	Img	1
11	B	;	1
12	D	Alert Dialog box	1
13	B	Branching	1
14	C	Library functions	1
15	A	Ezhil	1

Part – II

Answer any 6 questions **Q.No.24** is compulsory.

6 X 2 =12

Q.No	Answer	Mark
16	<ol style="list-style-type: none"> 1. The ALU is a part of the CPU 2. The ALU performs arithmetic operations such as addition, subtraction, multiplication, division and logical operations. 	1 1
17	<ul style="list-style-type: none"> • Google • Bing 	2
18	The icons which are available on desktop by default while installing Windows OS are called standard icons.	2
19	A presentation software is a computer software package used to show information, in the form of a slide show	2
20	<p>The CC (Carbon Copy) field allows you to specify recipients who are not direct addressees (listed in the "To" field). This field is optional.</p> <p>The BCC (Blind Carbon Copy) field is similar to CC, except the recipients are secret. Each BCC recipient will receive the</p>	2

	e-mail, but will not see who else received a copy. The addressees (anyone listed in the "To" field) remain visible to all recipients. This field is optional															
21	<ul style="list-style-type: none"> • <hr> which is known as Thematic Breaks • It produces a horizontal line spread across the width of the browser. This is an empty tag, which means the tag has no closing tag. 	2														
22	GIF (Graphical Interchange Format) JPEG (Joint Photographic Experts Group) PNG (Portable Network Graphics) SVG (Scalable Vector Graphics) (Write any 2)	2														
23	The tag is used to add CSS file with HTML in head section. General format of <Link> tag <Link rel="Stylesheet" type "text/css" href=CSS_File_Name_With_Extension>	2														
24	<table border="1"> <tr><td>2</td><td>65</td></tr> <tr><td>2</td><td>32 – 1</td></tr> <tr><td>2</td><td>16 – 0</td></tr> <tr><td>2</td><td>8 – 0</td></tr> <tr><td>2</td><td>4 – 0</td></tr> <tr><td>2</td><td>2 – 0</td></tr> <tr><td>2</td><td>1 – 0</td></tr> </table> <p>(65)₁₀ = (1000001)₂</p>	2	65	2	32 – 1	2	16 – 0	2	8 – 0	2	4 – 0	2	2 – 0	2	1 – 0	2
2	65															
2	32 – 1															
2	16 – 0															
2	8 – 0															
2	4 – 0															
2	2 – 0															
2	1 – 0															

Part – III

Answer any 6 questions **Q.No.33** is compulsory.

6X3=18



Q.No	Answer	Mark
25	Each number system is uniquely identified by its base value or radix . Radix or base is the count of number of digits in each number system. Example : () ₁₀ () ₂ () ₈ () ₁₆	2 1
26	<ul style="list-style-type: none"> • User Interface (UI) • Memory Management • Process management • Security Management • Fault Tolerance • File Management 	3
27	<ul style="list-style-type: none"> • Access applications (programs) on the computer (word processing, games, spread sheets, calculators. Load any new program on the computer. • Manage hardware such as printers, scanners, mouse, digital cameras. • File management activities. • Creating, modifying, saving, deleting files and folders. • Change computer settings such as color scheme, screen savers of your monitor. <p>(Note : Write any 3)</p>	3

28	<u>Insert Row in Calc</u> <ul style="list-style-type: none"> Select the row where a new row to be inserted. Right-click on the row number, a pop-up menu appears click “Insert Rows” option from the menu. <u>Insert Column in Calc</u> <ul style="list-style-type: none"> Select the column where a new column should be inserted. Right-click on the selected column name that you selected. A pop-up menu appears. click the “Insert Columns” option from the menu. 	3
29	<p>The Internet works by using a protocol called TCP/IP. TCP/IP allows one computer to talk to another computer via the Internet through compiling packets of data and sending them to right location. (or)</p> <p>The internet uses TCP/IP to transmit data via various types of media. The internet protocol (IP) addressing system is used to keep track of the millions of users.</p>	3
30	<p><table> - create a table. <tr> - create rows <th> - defined table columns <td> - create cell <caption> - defines title for the table <tbody>, <thead> and <tfoot></p>	3
31	<p>1. Method – used to identify how the form element names and values will be sent to the server get - it will append the names of the form elements and values to the URL post – it will send the names and values of the form elements as packets.</p> <p>2. Action – identifies the server side program or script that will process the form CGI.</p>	3
32	<p>In JavaScript when the same portion of code needs to be executed many times with slightly different values is called Loops. They are</p> <ul style="list-style-type: none"> for loop while loop do..while loop 	2 1
33	<p>(Note : Write Any Three)</p> <p>alert () – To give warning message isNaN() - check whether the given value or variable is valid number. toUpperCase() - Used to convert given string into uppercase toLowerCase() - Used to convert given string into lowercase length() - Used to find length of the given string prompt() - to get user input. write() - to print the results in screen.</p>	3

Part – IV

Answer all of the following Questions

5x5=25

Q.No	Answer	Mark																		
34 a)	<table border="1"> <tr> <td data-bbox="310 342 591 415">First Generation</td> <td data-bbox="591 342 872 415">1940-1956 (Vacuum tubes)</td> <td data-bbox="872 342 1190 415">Machine Language used</td> </tr> <tr> <td data-bbox="310 415 591 489">Second Generation</td> <td data-bbox="591 415 872 489">1956-1964 (Transistors)</td> <td data-bbox="872 415 1190 489">Assembly Language used</td> </tr> <tr> <td data-bbox="310 489 591 562">Third Generation</td> <td data-bbox="591 489 872 562">1964-1971 (IC)</td> <td data-bbox="872 489 1190 562">High level Language used</td> </tr> <tr> <td data-bbox="310 562 591 678">Fourth Generation</td> <td data-bbox="591 562 872 678">1971-1980 (Microprocessor VLSI)</td> <td data-bbox="872 562 1190 678">IBM,Apple Portable Computers</td> </tr> <tr> <td data-bbox="310 678 591 751">Fifth Generation</td> <td data-bbox="591 678 872 751">1980- till date (ULSI)</td> <td data-bbox="872 678 1190 751">Artificial Intelligence</td> </tr> <tr> <td data-bbox="310 751 591 793">Sixth Generation</td> <td data-bbox="591 751 872 793">In future</td> <td data-bbox="872 751 1190 793">Robotics</td> </tr> </table>	First Generation	1940-1956 (Vacuum tubes)	Machine Language used	Second Generation	1956-1964 (Transistors)	Assembly Language used	Third Generation	1964-1971 (IC)	High level Language used	Fourth Generation	1971-1980 (Microprocessor VLSI)	IBM,Apple Portable Computers	Fifth Generation	1980- till date (ULSI)	Artificial Intelligence	Sixth Generation	In future	Robotics	5
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(b)	<p>AutoSpellCheck</p> <ul style="list-style-type: none"> • Option checks each word as it is typed and displays a wavy red line under any misspelled word. Once the word is corrected, the red wavy line disappears. • Can be done by clicking the AutoSpellCheck icon  • To perform a separate spelling check on the document. • Click the Spelling and Grammar icon . This checks the document or selection • Right-click on a word with a wavy underline, to open a powerful context menu. Correct words can be selected from the suggested words on the menu. The selection will replace the misspelled word with correct word. • The new words can be added to a dictionary. Click Add in the Spelling dialog box and pick the dictionary to add it to. 	5																		
35 (a)	<p>Read Only Memory (ROM)</p> <ul style="list-style-type: none"> • Once the data has been written onto a ROM chip, it cannot be modified or removed and can only be read. • The stored programs that start the computer. • Once the data has been written onto a ROM chip, it cannot be modified or removed. • Even when the computer is turned off. So, ROM is called as a non-volatile memory. <p>Programmable Read Only Memory (PROM)</p> <ul style="list-style-type: none"> • A non-volatile memory. 	5																		

	<ul style="list-style-type: none"> • which data can be written only once. • Once a program has been written onto a PROM, it remains there forever. • PROM burner is used to write data to a PROM chip <p>Erasable Programmable Read Only Memory (EPROM)</p> <ul style="list-style-type: none"> • The content can be erased using ultraviolet rays. • Retains its contents until it is exposed to ultraviolet light • PROM can be written only once and cannot be erased. <p>Electrically Erasable Programmable Read Only Memory (EEPROM)</p> <ul style="list-style-type: none"> • Data can be erased by exposing it to an electrical charge. • Retains its contents even when the power is turned off. • It is slower in performance. 	
(b)	<p>Headings are used to include titles to sections of a web page.</p> <p>HTML has six levels of headings viz. <h1> to <h6>.</p> <p>Header tags are display the body text as bolder and larger in size according to its level.</p> <p>The syntax of heading tags: <h...> Heading text </h...></p> <p><h1> Welcome to Computer Application</h1> <h2> Welcome to Computer Application</h2> <h3> Welcome to Computer Application</h3> <h4> Welcome to Computer Application</h4> <h5> Welcome to Computer Application</h5> <h6> Welcome to Computer Application</h6></p>	5
36 (a)	<p>To access shared data and files that reside in any machine around the world using internet/intranet.</p> <p>The advantages of distributed Operating System are as follows:</p> <ul style="list-style-type: none"> • A user at one location can make use of all the resources available at another location over the network. • Many computer resources can be added easily in the network • Improves the interaction with the customers and clients. • Reduces the load on the host computer. 	5

(b)	<ul style="list-style-type: none"> • - displays the text as bold. • - text will be in italics. • <mark> - to highlight the text • <hr> (Horizontal Rules) horizontal line. This is an empty tag, which means the tag has no closing tag. • <sub> will be displayed as subscript. 	1 1 1 1 1																						
37 (a)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"> $\begin{array}{r} 2 \overline{) 255} \\ 2 \overline{) 127 - 1} \\ 2 \overline{) 63 - 1} \\ 2 \overline{) 31 - 1} \\ 2 \overline{) 15 - 1} \\ 2 \overline{) 7 - 1} \\ 2 \overline{) 3 - 1} \\ 2 \overline{) 1 - 1} \end{array}$ </td> <td style="width: 50%; text-align: center;"> $\begin{array}{r} 2 \overline{) 126} \\ 2 \overline{) 63 - 0} \\ 2 \overline{) 31 - 1} \\ 2 \overline{) 15 - 1} \\ 2 \overline{) 7 - 1} \\ 2 \overline{) 3 - 1} \\ 2 \overline{) 1 - 1} \end{array}$ </td> </tr> <tr> <td colspan="2" style="text-align: center;"> $(255)_{10} = (11111111)_2$ </td> </tr> <tr> <td style="vertical-align: top;"> $(377)_8$ </td> <td style="text-align: center;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"> $\begin{array}{r} 8 \overline{) 255} \\ 8 \overline{) 31 - 7} \\ 8 \overline{) 3 - 7} \end{array}$ </td> <td style="width: 50%;"> $\begin{array}{r} 8 \overline{) 126} \\ 8 \overline{) 15 - 6} \\ 8 \overline{) 1 - 7} \end{array}$ </td> </tr> </table> </td> </tr> <tr> <td colspan="2" style="text-align: right;"> $(255)_{10} =$ </td> </tr> <tr> <td colspan="2" style="text-align: center;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"> $\begin{array}{r} 16 \overline{) 255} \\ 16 \overline{) 15 - 15} \end{array}$ </td> <td style="width: 50%;"> $\begin{array}{r} 16 \overline{) 126} \\ 16 \overline{) 7 - 14} \end{array}$ </td> </tr> </table> </td> </tr> <tr> <td colspan="2" style="text-align: center;"> $(255)_{10} = (FF)_{16}$ </td> </tr> <tr> <td colspan="2" style="text-align: center;"> $(126)_{10} = (1111110)_2$ </td> </tr> <tr> <td colspan="2" style="text-align: center;"> $(126)_{10} = (176)_8$ </td> </tr> <tr> <td colspan="2" style="text-align: center;"> $(126)_{10} = (7E)_{16}$ </td> </tr> </table>	$\begin{array}{r} 2 \overline{) 255} \\ 2 \overline{) 127 - 1} \\ 2 \overline{) 63 - 1} \\ 2 \overline{) 31 - 1} \\ 2 \overline{) 15 - 1} \\ 2 \overline{) 7 - 1} \\ 2 \overline{) 3 - 1} \\ 2 \overline{) 1 - 1} \end{array}$	$\begin{array}{r} 2 \overline{) 126} \\ 2 \overline{) 63 - 0} \\ 2 \overline{) 31 - 1} \\ 2 \overline{) 15 - 1} \\ 2 \overline{) 7 - 1} \\ 2 \overline{) 3 - 1} \\ 2 \overline{) 1 - 1} \end{array}$	$(255)_{10} = (11111111)_2$		$(377)_8$	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"> $\begin{array}{r} 8 \overline{) 255} \\ 8 \overline{) 31 - 7} \\ 8 \overline{) 3 - 7} \end{array}$ </td> <td style="width: 50%;"> $\begin{array}{r} 8 \overline{) 126} \\ 8 \overline{) 15 - 6} \\ 8 \overline{) 1 - 7} \end{array}$ </td> </tr> </table>	$\begin{array}{r} 8 \overline{) 255} \\ 8 \overline{) 31 - 7} \\ 8 \overline{) 3 - 7} \end{array}$	$\begin{array}{r} 8 \overline{) 126} \\ 8 \overline{) 15 - 6} \\ 8 \overline{) 1 - 7} \end{array}$	$(255)_{10} =$		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"> $\begin{array}{r} 16 \overline{) 255} \\ 16 \overline{) 15 - 15} \end{array}$ </td> <td style="width: 50%;"> $\begin{array}{r} 16 \overline{) 126} \\ 16 \overline{) 7 - 14} \end{array}$ </td> </tr> </table>		$\begin{array}{r} 16 \overline{) 255} \\ 16 \overline{) 15 - 15} \end{array}$	$\begin{array}{r} 16 \overline{) 126} \\ 16 \overline{) 7 - 14} \end{array}$	$(255)_{10} = (FF)_{16}$		$(126)_{10} = (1111110)_2$		$(126)_{10} = (176)_8$		$(126)_{10} = (7E)_{16}$		5
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(b)

5

HTML supports three types of lists

- Numbered
- Unnumbered
- Definition.

Numbered List / Ordered List

- Numbered list is created within the tag pair ` ` tag.
- The tag `` is used to present the list item in the list.
- Items in a numerical or alphabetical order.

Ex:

```
<ol>
<li>Tamil
<li>English
<li>Computer Applications
</ol>
```

Un-numbered List / Unordered List

- Unordered lists are often referred as bulleted lists.
- Instead of numbers, each element in the list has prefixed with a special bullet symbol.
- Unordered list is surrounded within ` ` tags.
- Each list element is defined by `` tag.

```
<ul>
<li>Tamil
<li>English
<li>Computer Applications
</ul>
```

Definition List

- No bullet or number is provided for the list items.
- In this list type, the list element has two parts.
 - (1) A definition term
 - (2) The definition description
- Definition list is surrounded within `<DL> </DL>` tags.
- Definition term is presented in between `<DT> </DT>` tag
- Definition description should be surrounded within `<DD> </DD>` tag.

```
<DL>
  <DT> HTML </DT>
  <DD> Hyper Text Markup Language </DD>
</DL>
```

<p>38 (a)</p>	<table border="1"> <thead> <tr> <th data-bbox="293 65 646 113">Arithmetic Operator</th> <th data-bbox="646 65 938 113">Example</th> <th data-bbox="938 65 1252 113">Result</th> </tr> </thead> <tbody> <tr> <td data-bbox="293 113 646 149">+ Addition</td> <td data-bbox="646 113 938 149">S=20 + 30</td> <td data-bbox="938 113 1252 149">50</td> </tr> <tr> <td data-bbox="293 149 646 184">- Subtraction</td> <td data-bbox="646 149 938 184">S=70 – 30</td> <td data-bbox="938 149 1252 184">40</td> </tr> <tr> <td data-bbox="293 184 646 220">* Multiplication</td> <td data-bbox="646 184 938 220">S=20 * 30</td> <td data-bbox="938 184 1252 220">600</td> </tr> <tr> <td data-bbox="293 220 646 256">/ Division</td> <td data-bbox="646 220 938 256">S=120/30</td> <td data-bbox="938 220 1252 256">4</td> </tr> <tr> <td data-bbox="293 256 646 312">% Modulus operator</td> <td data-bbox="646 256 938 312">S=120 % 30</td> <td data-bbox="938 256 1252 312">0</td> </tr> </tbody> </table>	Arithmetic Operator	Example	Result	+ Addition	S=20 + 30	50	- Subtraction	S=70 – 30	40	* Multiplication	S=20 * 30	600	/ Division	S=120/30	4	% Modulus operator	S=120 % 30	0		<p>5</p>
Arithmetic Operator	Example	Result																			
+ Addition	S=20 + 30	50																			
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* Multiplication	S=20 * 30	600																			
/ Division	S=120/30	4																			
% Modulus operator	S=120 % 30	0																			
<p>(b)</p>	<p>Malware - Malicious programs that can perform a variety of functions including monitoring user's computer activity without their permission.</p> <p>Harvesting - A person or program collects login and password information from a legitimate user to illegally gain access to others' account(s).</p> <p>Spam - Distribute unwanted e-mail to a large number of internet users.</p> <p>Virus - The virus could corrupt, steal, or delete data on your computer.</p> <p>Malware - variety of forms of hostile, intrusive, or annoying software or code.</p> <p>Trojan horse - downloading an application they thought was legitimate in fact malicious.</p>	<p>5</p>																			