

**MARKING SCHEME**

**Subject: Information and Communication Technology (ICT)**

**Class: X (2018-19)**

**Time: 2 ½ Hrs.**

**M.M.:40**

**General Instructions:**

- (i) The sample question paper consists of 16 questions.
- (ii) All questions are compulsory; however internal choice has been given in few questions.

<b>1.</b>	Multiple choice questions	5
	<p>a. Which of the following is not an input device?</p> <ul style="list-style-type: none"> <li>i) Scanner</li> <li>ii) Microphone</li> <li>iii) Speaker</li> <li>iv) Trackball</li> </ul>	
	<p>Ans: iii) Speaker</p> <ul style="list-style-type: none"> <li>• 1 mark for the correct answer.</li> </ul>	
	<p>b. _____ acts as the nerve centre that sends control signal to all other units.</p> <ul style="list-style-type: none"> <li>i) Control Unit</li> <li>ii) Software</li> <li>iii) ALU</li> <li>iv) Memory</li> </ul>	
	<p>Ans: i) Control Unit</p> <ul style="list-style-type: none"> <li>• 1 mark for the correct answer.</li> </ul>	
	<p>c. Random Access Memory and Read Only Memory are examples of _____.</p> <ul style="list-style-type: none"> <li>i) Auxiliary Memory</li> <li>ii) Primary Memory</li> <li>iii) Secondary Memory</li> <li>iv) Both primary and secondary memory</li> </ul>	
	<p>Ans: ii) Primary Memory</p> <ul style="list-style-type: none"> <li>• 1 mark for the correct answer.</li> </ul>	
	<p>d. GIMP, Adobe Photoshop, Corel Draw, and Picasa are examples of _____ softwares.</p> <ul style="list-style-type: none"> <li>i) Spreadsheets</li> <li>ii) Word Processors</li> <li>iii) Desktop publishing</li> <li>iv) Presentation</li> </ul>	
	<p>Ans: iii) Desktop Publishing</p> <ul style="list-style-type: none"> <li>• 1 mark for the correct answer.</li> </ul>	

	<p>e. It allows a visited website to store its own information about a user on the user's computer.</p> <ul style="list-style-type: none"> <li>i) Spam</li> <li>ii) Malware</li> <li>iii) Cookies</li> <li>iv) Adware</li> </ul>	
	<p>Ans: iii) Cookies</p> <ul style="list-style-type: none"> <li>• 1 mark for the correct answer.</li> </ul>	
2.	<p>Aayush wants to send highly sensitive form data such as username and password which method out of GET/POST should he use to send the form data? Why?</p>	1
Ans:	<p>POST METHOD</p> <ul style="list-style-type: none"> <li>❖ Appends form-data inside the body of the HTTP request (data is not shown in URL)</li> <li>❖ Form submissions with POST cannot be bookmarked</li> <li>• ½ mark for correct Method.</li> <li>• ½ mark for any one correct reason.</li> </ul>	
3.	<p>Define Shareware.</p>	1
Ans:	<p>Shareware is a proprietary software which is initially provided free of charges to users for a limited period on a trial basis, if the user decides to use it after the trial period he /she needs to pay for it.</p> <ul style="list-style-type: none"> <li>• 1 mark for the correct definition.</li> </ul>	
4.	<p>Identify the tools used for the following purpose:</p> <ul style="list-style-type: none"> <li>a. To lighten the colours in an image.</li> <li>b. To shift one part of an image, a layer, a selection or a path to a direction and the other part to the opposite direction.</li> </ul>	1
Ans:	<ul style="list-style-type: none"> <li>a. Dodge tool</li> <li>b. Shear tool</li> <li>• ½ mark for each correct answer.</li> </ul>	
5.	<p>What is the significance of System Software?</p>	1
Ans:	<p>System software includes the programs that enable the computer's hardware to work with and run the application software.</p> <p>Or</p> <p>System software is the interface between user, other programs and the computer's hardware.</p> <ul style="list-style-type: none"> <li>• 1 mark for the correct answer.</li> </ul>	
6.	<p>What does Open-source in Open- Source software mean?</p>	1
Ans:	<p>Open-source software (OSS) is computer software with its source code made available. It is very often developed in a public, collaborative manner. A license for open sources software allows the end user to study, change and distribute the software for any purpose hence it is termed as Open Source.</p> <ul style="list-style-type: none"> <li>• 1 mark for the correct explanation.</li> </ul>	

7.	Name any four tools used for Retouching an image in GIMP.		2						
Ans:	<ul style="list-style-type: none"> <li>a. Scale Tool</li> <li>b. Blur/Sharpen Tool</li> <li>c. Brush &amp; Pencil Tool</li> <li>d. Eraser Tool</li> <li>e. Blend Tool</li> <li>f. Smudge</li> <li>g. Dodge / Burn Tool</li> </ul> <ul style="list-style-type: none"> <li>• ½ mark each for writing any 4 tools from the above.</li> </ul>								
8.	Write any four exclusive rights that a copyright owner possesses?		2						
Ans:	<ul style="list-style-type: none"> <li>• Fix or store the information in a tangible form.</li> <li>• Reproduce the copyrighted material.</li> <li>• Sell, rent, lease, or otherwise distribute copies of the copyright work to the public.</li> <li>• Publicly perform and display the copyrighted material.</li> <li>• Prepare derivative works based on the copyrighted material. <ul style="list-style-type: none"> <li>○ ½ mark each for writing any 4 exclusive rights from the above.</li> </ul> </li> </ul>								
<b>OR</b>									
8.	What is a firewall?		2						
	<p>A firewall is a program or hardware device that filters the information coming through an internet connection to a network or computer system. If incoming information does not pass the rules stored in the firewall, it is not allowed through.</p> <ul style="list-style-type: none"> <li>• 1 mark for identifying firewall as a program or hardware device</li> <li>• 1 Mark for the correct definition</li> </ul>								
9.	Differentiate between Blur and Sharpen tool.		2						
Ans:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Blur Tool</td> <td style="width: 50%; padding: 5px;">Sharpen Tool</td> </tr> <tr> <td style="padding: 5px;">Blur mode causes each pixel affected by the brush to be blended with neighbouring pixels, thereby increasing the similarity of pixels inside the brushstroke area.</td> <td style="padding: 5px;">Sharpen mode causes each pixel to become more different from its neighbours, it increases contrast inside the brushstroke area.</td> </tr> <tr> <td style="padding: 5px;">Blurring can be useful to soften some element of the image that stands out too much.</td> <td style="padding: 5px;">In “Sharpen” mode, the tool works by increasing the contrast where the brush is applied.</td> </tr> </table>	Blur Tool	Sharpen Tool	Blur mode causes each pixel affected by the brush to be blended with neighbouring pixels, thereby increasing the similarity of pixels inside the brushstroke area.	Sharpen mode causes each pixel to become more different from its neighbours, it increases contrast inside the brushstroke area.	Blurring can be useful to soften some element of the image that stands out too much.	In “Sharpen” mode, the tool works by increasing the contrast where the brush is applied.	<ul style="list-style-type: none"> <li>• 1 mark each for 2 correct point of differences.</li> </ul>	
Blur Tool	Sharpen Tool								
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Blurring can be useful to soften some element of the image that stands out too much.	In “Sharpen” mode, the tool works by increasing the contrast where the brush is applied.								
10.	Write the CSS code to: i. Apply 50px indentation to all text paragraphs marked with <p>. ii. Make the text in the paragraphs marked with <p> tag “italics”.		2						

Ans:	<pre>p {     text-indent: 50px;     font-style: italic; }</pre> <ul style="list-style-type: none"> <li>• 1 mark for correctly applying text – indent.</li> <li>• 1 mark for applying font -style italic</li> <li>• Deduct ½ mark if p { } not used correctly.</li> </ul>	
<b>OR</b>		
10.	List the advantages of using CSS.	2
Ans:	<ul style="list-style-type: none"> <li>❖ It controls layout of many documents from one single style sheet.</li> <li>❖ It has more precise control of layout.</li> <li>❖ It applies different layouts to different media-types.</li> <li>❖ It has numerous advanced and sophisticated techniques to be applied on web pages.</li> </ul>	
11.	Explain the various values associated with “scrolling” attribute of FRAME tag.	3
Ans:	<p>The scrolling attribute of FRAME tag can take 3 values:</p> <ul style="list-style-type: none"> <li>▪ <b>Yes</b> will insert both the scrolls irrespective of the size of the sub-window.</li> <li>▪ <b>Auto</b> will insert the scrolls only when the contents of the sub-window are not visible.</li> <li>▪ <b>No</b> will not insert any scrolls even when all the contents are not visible. <ul style="list-style-type: none"> <li>• 1 mark for explaining each value.</li> </ul> </li> </ul>	
12.	<p>Observe the following code carefully and answer the questions that follow:</p> <pre>&lt;html&gt; &lt;head&gt; &lt;title&gt;NETWORK SECURITY&lt;/title&gt; &lt;style type="text/css"&gt; li { letter-spacing:10px ; text-transform: lowercase; } &lt;/style&gt; &lt;/head&gt; &lt;body&gt; The Dos and Don'ts of network security &lt;ol&gt; &lt;li&gt; KEEP ANTI-VIRUS SOFTWARE UP TO DATE.&lt;/li&gt; &lt;li&gt; SAVE THE FILE TO COMPUTER OR A DISK.&lt;/li&gt; &lt;li&gt; RUN AN ANTI-VIRUS SCAN REGULARLY.&lt;/li&gt; &lt;/ol&gt; &lt;/body&gt; &lt;/html&gt;</pre> <p>Predict the output of the above code while explaining the effects applied on &lt;li&gt; in the CSS code.</p>	3

Ans:	<p>The output of the above code will be:</p> <hr/> <p>The Dos and Don'ts of network security</p> <pre> 1. k e e p   a n t i - v i r u s   s o f t w a r e   u p   t o   d a t e . 2. s a v e   t h e   f i l e   t o   c o m p u t e r   o r   a   d i s k . 3. r u n   a n   a n t i - v i r u s   s c a n   r e g u l a r l y . </pre> <p>As per the output it is evident that the list elements specified as li have been displayed in Lower case due to :  text-transform: lowercase;  Also, there is a space of 10 pixels between each letter due to :  letter-spacing:10px ;</p> <ul style="list-style-type: none"> <li>• 1 mark for displaying output as an ordered list i.e. 1...5.</li> <li>• 1 mark for applying both effects.</li> <li>• 1 mark for explaining both the statement.</li> </ul>											
13.	<p>Body { background-image: url("learn.gif"); background-repeat: repeat-x }</p> <p>In reference with the above CSS code, explain the usage of background-repeat property. Also mention the different values that can be used for background-repeat.</p>	3										
Ans:	<p>With reference to the above CSS code the inserted background image learn.gif will repeat horizontally on the browser screen.</p> <p>The four different values for background-repeat are as follows:</p> <table border="0"> <thead> <tr> <th style="text-align: left;">Value</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>background-repeat: repeat-x :</td> <td>The image is repeated horizontally.</td> </tr> <tr> <td>background-repeat: repeat-y :</td> <td>The image is repeated vertically.</td> </tr> <tr> <td>background-repeat: repeat :</td> <td>The image is repeated both horizontally and vertically</td> </tr> <tr> <td>background-repeat: no-repeat :</td> <td>The image is not repeated</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• 1 mark for explaining the background-repeat with reference to the code given.</li> <li>• ½ mark each for explaining all values.</li> </ul>	Value	Description	background-repeat: repeat-x :	The image is repeated horizontally.	background-repeat: repeat-y :	The image is repeated vertically.	background-repeat: repeat :	The image is repeated both horizontally and vertically	background-repeat: no-repeat :	The image is not repeated	
Value	Description											
background-repeat: repeat-x :	The image is repeated horizontally.											
background-repeat: repeat-y :	The image is repeated vertically.											
background-repeat: repeat :	The image is repeated both horizontally and vertically											
background-repeat: no-repeat :	The image is not repeated											
<b>OR</b>												
13.	List any 3 items that can be created using DHTML.	3										
Ans:	<p>DHTML can be used to create the following:</p> <ul style="list-style-type: none"> <li>• Animation</li> <li>• Pop-up menus</li> <li>• Inclusion of Web page content from external data sources</li> <li>• Elements that can be dragged and dropped within the Web page</li> </ul> <p>• <b><i>1 Mark for any 3 correct items that can be created using DHTML</i></b></p>											

14.

Write HTML code to display the following table :

3

Duty Chart

8 AM	10 AM	12 AM
KEVIN	KHUSHBOO	AMARJEET

**Specifications:**

- The title of the webpage is “Schedule”
- The Caption of the Table is Duty Chart.
- 8 AM, 10 AM, 12 AM are Headings given to the table.

Ans:

```

<HTML>
<HEAD>
<TITLE>
Schedule
</TITLE>
</HEAD>
<BODY>

```

→ ½ mark

```

<TABLE Border = 1> → ½ mark for <TABLE>

<CAPTION>Duty Chart</CAPTION> → ½ mark
<TR>
<TH> 8 AM </TH>
<TH> 10 AM </TH>
<TH> 12 AM </TH>
</TR>

```

→ ½ mark for <TR></TR>  
→ ½ mark for <TH></TH>

```

<TR>
<TD> KEVIN</TD>
<TD> KHUSHBOO </TD>
<TD> AMARJEET </TD>
</TR>
</TABLE>
</HTML>

```

→ ½ mark for using<TD> </TD>to show all names

15.

Carefully observe the following labeled screenshot and answer the questions that follow:

5

Your Name :  → 1

Type your Address here:

.....

Choose setting type:

Do Not Disturb  
 VIBRATE  
 Active } → 3

APP Preferences: GAMES  NEWS  ASTROLOGY  → 4

Choose Country:  → 5

- Identify the form element labeled as 1 and 2?
- Why has the form element labeled as 2 used to input the Address?
- Write HTML code to create the form element labeled as 3.
- Differentiate between the form element labeled 3 and the form element labeled 4.
- How can any one item be highlighted in the Dropdown box labeled as 5?

Ans:

- Form element labeled as 1 is a Textbox and Form element labeled as 2 is a Textarea.
  - ½ mark for correctly identifying each labeled element.
- Text areas are the fields that display multiple text lines at a time hence it has been used to accept Address which also contains multiple lines of text.
  - 1 mark for the difference.
- ```
<input type="radio" name="Ltype" value="DND">Do Not Disturb <br>
<input type="radio" name="Ltype" value="Vib">VIBRATE <br>
<input type="radio" name="Ltype" value="Act">Active <br>
```

  - 1 mark for writing code for all or any one.
- Form element labeled as 3 is a Radio button .It enables the selection of one of the options out of the many.
 

Whereas,

Form element labeled as 4 is a Checkbox. As compared to radio button, a

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|      | <p>checkbox allows for multiple selections of items.</p> <ul style="list-style-type: none"> <li>• 1 mark for correct difference</li> <li>• ½ mark for only correctly identifying the labeled elements.</li> </ul> <p>e. To highlight one item in a dropdown box ,“selected” clause is used in the &lt;option&gt; tag as follows :</p> <pre>&lt;option selected&gt;</pre> <p>Eg:</p> <pre>&lt;select&gt; &lt;option&gt;SINGAPORE&lt;/option&gt; &lt;option selected&gt;JAPAN&lt;/option&gt; &lt;option&gt;MALAYSIA&lt;/option&gt; &lt;/select&gt;</pre> <ul style="list-style-type: none"> <li>• 1 mark for writing the correct method to highlight one item or for demonstrating using an example.</li> </ul>                                                                                                                                                                                                |  |
| Or   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| 15.  | Carefully read and answer the following questions with respect to HTML:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|      | <ol style="list-style-type: none"> <li>i. What is a Form?</li> <li>ii. What does a Form consist of?</li> <li>iii. Which tag is used to insert a Form in a HTML document? Is it a container or a non container tag?</li> <li>iv. What values can be used with the Method attribute of the Form?</li> <li>v. How is a Submit button different from a Reset Button in a Form?</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Ans: | <ol style="list-style-type: none"> <li>i. A Form is an object that is used for collecting data from the user. <ul style="list-style-type: none"> <li>○ 1 mark for correct answer</li> </ul> </li> <li>ii. A Form consists of the elements of a form called the form fields. These fields may be text field, text area, drop-down box, radio buttons, checkbox and/or a command button. <ul style="list-style-type: none"> <li>○ 1 mark for correct answer</li> </ul> </li> <li>iii. &lt;Form&gt; &lt;/Form&gt; tag is used to insert a Form in a HTML document.It is a container tag. <ul style="list-style-type: none"> <li>○ ½ mark for the correct tag.</li> <li>○ ½ mark for identifying the tag as a container tag.</li> </ul> </li> <li>iv. The values that can be used with the Method attribute of the Form are: <ul style="list-style-type: none"> <li>○ Get</li> <li>○ Post</li> </ul> </li> </ol> |  |



|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|      | <ul style="list-style-type: none"> <li>▪ ½ mark each</li> </ul> <p>v. When activated, a submit button submits the data collected through the form elements in a form<br/>Whereas when activated, a reset button resets all controls/form elements to their initial values.</p> <ul style="list-style-type: none"> <li>○ 1 mark for correct answer</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |   |
| 16.  | <p>Answer the following questions:</p> <ol style="list-style-type: none"> <li>a. What are Layers?</li> <li>b. What is the purpose of using Layers?</li> <li>c. Abhay scanned a few photos but some of the scanned photos did not look colourful enough. How can he improve their tonal range?</li> <li>d. What steps should Shikha perform to enlarge the image of the Medical prescription of her Aunt which she has opened in GIMP?</li> <li>e. How is Flip tool different from Rotate tool?</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5 |
| Ans: | <p>a. In GIMP terminology, each individual transparency is called a Layer. Layers are the transparent sheets one on top of the other. You can see through transparent areas of a layer to the layers below.</p> <ul style="list-style-type: none"> <li>• 1 mark for correctly explaining Layers</li> </ul> <p>b. Layers allows us to work with one element of an image without disturbing the others. Layer provides a variety of effects that change the appearance of the image.</p> <ul style="list-style-type: none"> <li>• 1 mark for writing the correct use.</li> </ul> <p>c. If some of the scanned photos do not look colourful enough, we can easily improve their tonal range with the “Auto” button in the Levels tool (Colours→Levels).</p> <ul style="list-style-type: none"> <li>• 1 mark for the correct answer</li> </ul> <p>d. Step 1: Click on Image-&gt; Scale Image<br/>Step 2: Set the required width and height and click on scale.</p> <ul style="list-style-type: none"> <li>• ½ mark for each step.</li> </ul> <p>e. Using a Flip tool on an image produces its mirror image.<br/>Whereas ,<br/>Rotate tool helps to rotate an image by different angles.</p> <ul style="list-style-type: none"> <li>• 1 mark for correct difference</li> </ul> |   |