

**MARKING SCHEME**  
**Subject: Information and Communication Technology (ICT)**  
**Class: X (2017-18)**

**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	<b>5</b>
	<p>a. Which of the following is not an input device?</p> <ol style="list-style-type: none"> <li>i) Scanner</li> <li>ii) Microphone</li> <li>iii) Speaker</li> <li>iv) Trackball</li> </ol>	
	<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> <ol style="list-style-type: none"> <li>i) Control Unit</li> <li>ii) Software</li> <li>iii) ALU</li> <li>iv) Memory</li> </ol>	
	<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 _____.  <ol style="list-style-type: none"> <li>i) AuxiliaryMemory</li> <li>ii) Primary Memory</li> <li>iii) Secondary Memory</li> <li>iv) Both primary and secondary memory</li> </ol> </p>	
	<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> <ol style="list-style-type: none"> <li>i) Spreadsheets</li> <li>ii) Word Processors</li> <li>iii) Desktop publishing</li> <li>iv) Presentation</li> </ol>	
	<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> <p>i) Spam</p> <p>ii) Malware</p> <p>iii) Cookies</p> <p>iv) Adware</p>	
	<p>Ans: iii) Cookies</p> <ul style="list-style-type: none"> <li>1 mark for the correct answer.</li> </ul>	
2.	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?	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.	Define Shareware.	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> <p>a. To lighten the colours in an image.</p> <p>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.</p>	1
Ans:	<p>a. Dodge tool</p> <p>b. Shear tool</p> <ul style="list-style-type: none"> <li>½ mark for each correct answer.</li> </ul>	
5.	What is the significance of System Software?	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.	What does Open-source in Open- Source software mean?	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:	<div>a. Scale Tool</div> <div>b. Blur/Sharpen Tool</div> <div>c. Brush &amp; Pencil Tool</div> <div>d. Eraser Tool</div> <div>e. Blend Tool</div> <div>f. Smudge</div> <div>g. Dodge / Burn Tool</div> <div><ul style="list-style-type: none"><li>• ½ mark each for writing any 4 tools from the above.</li></ul></div>		
8.	Write any four exclusive rights that a copyright owner possesses?		2
Ans:	<div><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></div>		
	<b>OR</b>		
8.	What is a firewall?		2
	<div>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.</div> <div><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></div>		
9.	Differentiate between Blur and Sharpen tool.		2
Ans:	<div>Blur Tool</div> <div>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.</div> <div>Blurring can be useful to soften some element of the image that stands out too much.</div>	<div>Sharpen Tool</div> <div>Sharpen mode causes each pixel to become more different from its neighbours, it increases contrast inside the brushstroke area.</div> <div>In “Sharpen” mode, the tool works by increasing the contrast where the brush is applied.</div>	
	<div><ul style="list-style-type: none"><li>• 1 mark each for 2 correct point of differences.</li></ul></div>		
10.	Write the CSS code to: <div>i. Apply 50px indentation to all text paragraphs marked with &lt;p&gt;.</div> <div>ii. Make the text in the paragraphs marked with &lt;p&gt; tag “italics”.</div>		2

Ans:	<p>p {              text-indent: 50px;              font-style: italic;          }          • 1 mark for correctly applying text – indent.          • 1 mark for applying font -style italic          • Deduct ½ mark if p { } not used correctly.</p>	
<b>OR</b>		
10.	List the advantages of using CSS.	2
Ans:	<p>❖ It controls layout of many documents from one single style sheet.          ❖ It has more precise control of layout.          ❖ It applies different layouts to different media-types.          ❖ It has numerous advanced and sophisticated techniques to be applied on web pages.</p>	
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> <div><p>The Dos and Don'ts of network security</p><pre>1. keep anti-virus software up to date . 2. save the file to computer or a disk . 3. run an anti-virus scan regularly .</pre></div> <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><thead><tr><th>Value</th><th>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											
OR												
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>• 1 Mark for any 3 correct items that can be created using DHTML</p>											

14.	<p>Write HTML code to display the following table :</p> <table border="1"> <caption>Duty Chart</caption> <tr> <th>8 AM</th><th>10 AM</th><th>12 AM</th></tr> <tr> <td>KEVIN</td><td>KHUSHBOO</td><td>AMARJEET</td></tr> </table> <p><b>Specifications:</b></p> <ul style="list-style-type: none"> <li>The title of the webpage is “Schedule”</li> <li>The Caption of the Table is Duty Chart.</li> <li>8 AM, 10 AM, 12 AM are Headings given to the table.</li> </ul>	8 AM	10 AM	12 AM	KEVIN	KHUSHBOO	AMARJEET	3
8 AM	10 AM	12 AM						
KEVIN	KHUSHBOO	AMARJEET						
Ans:	<pre> &lt;HTML&gt; &lt;HEAD&gt; &lt;TITLE&gt; Schedule &lt;/TITLE&gt; &lt;/HEAD&gt; &lt;BODY&gt; </pre> <p>→ ½ mark</p> <pre> &lt;TABLE Border = 1&gt; </pre> <p>→ ½ mark for &lt;TABLE&gt;</p> <pre> &lt;CAPTION&gt;Duty Chart&lt;/CAPTION&gt; </pre> <p>→ ½ mark</p> <pre> &lt;TR&gt; &lt;TH&gt; 8 AM &lt;/TH&gt; &lt;TH&gt; 10 AM &lt;/TH&gt; &lt;TH&gt; 12 AM &lt;/TH&gt; &lt;/TR&gt; </pre> <p>→ ½ mark for &lt;TR&gt;&lt;/TR&gt; ½ mark for &lt;TH&gt;&lt;/TH&gt;</p> <pre> &lt;TR&gt; &lt;TD&gt; KEVIN&lt;/TD&gt; &lt;TD&gt; KHUSHBOO &lt;/TD&gt; &lt;TD&gt; AMARJEET &lt;/TD&gt; &lt;/TR&gt; &lt;/TABLE&gt; &lt;/HTML&gt; </pre> <p>→ ½ mark for using&lt;TD&gt; &lt;/TD&gt;to show all names</p>							
15.	Carefully observe the following labeled screenshot and answer the questions that follow:	5						

	<p>Your Name : <input type="text"/> → 1</p> <p>Type your Address here:</p> <div style="border: 1px solid black; height: 80px; width: 300px; margin-bottom: 5px;"></div> <p>..... → 2</p> <p>Choose setting type:</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <input type="radio"/> Do Not Disturb  <input type="radio"/> VIBRATE  <input type="radio"/> Active         </div> <div style="font-size: 3em; margin-right: 10px;">}</div> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">3</div> </div> <p>APP Preferences: GAMES <input type="checkbox"/> NEWS <input type="checkbox"/> ASTROLOGY <input type="checkbox"/> → 4</p> <p>Choose Country: <span style="border: 1px solid black; padding: 2px 10px;">INDIA ▼</span> → 5</p> <ol style="list-style-type: none"> <li>Identify the form element labeled as 1 and 2?</li> <li>Why has the form element labeled as 2 used to input the Address?</li> <li>Write HTML code to create the form element labeled as 3.</li> <li>Differentiate between the form element labeled 3 and the form element labeled 4.</li> <li>How can any one item be highlighted in the Dropdown box labeled as 5?</li> </ol>	
Ans:	<ol style="list-style-type: none"> <li>Form element labeled as 1 is a Textbox and Form element labeled as 2 is a Textarea.           <ul style="list-style-type: none"> <li>½ mark for correctly identifying each labeled element.</li> </ul> </li> <li>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.           <ul style="list-style-type: none"> <li>1 mark for the difference.</li> </ul> </li> <li> <pre>&lt;input type="radio" name="Ltype" value="DND"&gt;Do Not Disturb &lt;br&gt; &lt;input type="radio" name="Ltype" value="Vib"&gt;VIBRATE &lt;br&gt; &lt;input type="radio" name="Ltype" value="Act"&gt;Active &lt;br&gt;</pre> <ul style="list-style-type: none"> <li>1 mark for writing code for all or any one.</li> </ul> </li> <li>Form element labeled as 3 is a Radio button .It enables the selection of one of the options out of the many.</li> </ol> <p>Whereas,</p> <p>Form element labeled as 4 is a Checkbox. As compared to radio button, a</p>	

	<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> <p>&lt;option selected&gt;</p> <p>Eg:</p> <p>&lt;select&gt;</p> <p>&lt;option&gt;SINGAPORE&lt;/option&gt;</p> <p>&lt;option selected&gt;JAPAN&lt;/option&gt;</p> <p>&lt;option&gt;MALAYSIA&lt;/option&gt;</p> <p>&lt;/select&gt;</p> <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>What is a Form?</li> <li>What does a Form consist of?</li> <li>Which tag is used to insert a Form in a HTML document? Is it a container or a non container tag?</li> <li>What values can be used with the Method attribute of the Form?</li> <li>How is a Submit button different from a Reset Button in a Form?</li> </ol>	
Ans:	<ol style="list-style-type: none"> <li>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>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>&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>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>	



	<p>▪ ½ mark each</p> <p>v. When activated, a submit button submits the data collected through the form elements in a form Whereas when activated, a reset button resets all controls/form elements to their initial values.</p> <p>○ 1 mark for correct answer</p>	
16.	<p>Answer the following questions:</p> <ol style="list-style-type: none"> <li>What are Layers?</li> <li>What is the purpose of using Layers?</li> <li>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>What steps should Shikha perform to enlarge the image of the Medical prescription of her Aunt which she has opened in GIMP?</li> <li>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 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. Whereas , 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>	