

## Syllabus of Computer Fundamentals

### Class IX

#### Quarter 1- April to June

S.no.	Units	Contents	No. of Periods
1.	<b>Revision of Fundamental Concepts</b>	<b>1.1REVIEW OF PHOTOSHOP</b> 1.1.1 Opening & Saving 1.1.2 Scanning a Photograph 1.1.3 Adjusting Image Size 1.1.4 Selection Tools	6
2.	<b>Multimedia Authoring &amp; Animation ( Review of Flash &amp; Introduction to Autodesk 3DMax )</b>	<b>2.1REVIEW OF FLASH</b> 2.1.1 Using the Toolbar 2.1.2 ANIMATION CONCEPTS 2.1.3 FRAMES & LAYERS 2.1.4 About Layers 2.1.5 Types of Animation 2.1.6 Publishing the Movie <b>2.2Introduction to Autodesk 3DMax</b> 2.2.1 What is 3D? <ul style="list-style-type: none"> <li>• 3D Basics:</li> <li>• Modeling</li> <li>• Animation</li> <li>• Rendering</li> <li>• Object-orientation</li> </ul> 2.2.2 Navigation and Display <ul style="list-style-type: none"> <li>• Coordinate Systems &amp; The Home Grid</li> <li>• Orthogonal vs. Perspective Views</li> <li>• Changing Views and Viewport Layout</li> <li>• Display Modes &amp; Viewport Window Controls</li> <li>• Custom Grids and Snaps</li> </ul> 2.2.3 Creating Objects & Selecting Objects. 2.2.4 Parenting & Grouping objects. 2.2.5 Transforming Objects.	10

**Quarter 2- July to Sept**

3.	<b>Adding styles to Webpages using CSS</b>	<b>3.1 Review of HTML</b> 3.1.1 World Wide Web(WWW) 3.1.2 Headers 3.1.3 Body and Titles 3.1.4 Headings 3.1.5 Paragraphs 3.1.6 Tables 3.1.7 Lists  <b>3.2 Adding Style Sheets</b> 3.2.1 Setting the default style sheet language 3.2.2 Inline style information 3.2.3 Header style information: the "STYLE" element. 3.2.4 Media types  <b>3.3 External Style Sheets</b> 3.3.1. Preferred and alternate style sheets 3.3.2. Specifying external style sheets  <b>3.4 CSS Properties-Border, box, font, margin</b> <b>3.5 CSS Classes</b> 3.5.1. ID 3.5.2. Class Selectors	16
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**Quarter 3- Oct to Dec**

4.	<b>Web scripting JavaScript</b>	<b>4.1 CREATING INTERACTIVE WEBPAGES USING JAVASCRIPT</b> 4.1.1 Introduction and History of Java Script 4.1.2 Objectives and Properties 4.1.3 Variables & Operators <ul style="list-style-type: none"> <li>• Variable constraints,</li> <li>• Types of Operators: logical, arithmetic, relational</li> <li>• Decision Making using if &amp; Switch</li> <li>• Iteration – Loops</li> <li>• Window Object</li> <li>• Popup Boxes – alert, confirm etc.</li> </ul>	20
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**Quarter 4- Jan to Mar**

5.	<b>Database concepts- RDBMS</b>	<b>5.1 Basics of RDBMS</b> 5.1.1 Purpose 5.1.2 Data Models 5.1.3 Relational Model <b>5.2 Data Definition Language</b> 5.2.1 Creating Database and Tables 5.2.2 Creating Views <b>5.3 Data Manipulation Language</b> 5.3.1 Data input, modify, display & deleting in tables 5.3.2 Ordering & grouping <b>5.4 Operating with multiple tables.</b> 5.4.1 Union 5.4.2 Join	10
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6.	<b>Network Safety of Computer System.</b>	<b>6.1 Network Safety</b> 6.1.1. Social Networking Ethics <b>6.2 Network Security Tools And Services</b> 6.2.1. Tools 6.2.2. LAN Management 6.2.3. MAN Management 6.2.3. WAN Management 6.2.4. VOIP <b>6.3 Cyber Security</b> 6.3.1. Reasons 6.3.2. Objectives <b>6.4 Social Networking Various Practices</b> <b>6.5 Cloud Computing &amp; Mobile Computing</b>	4
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**ICT Projects to be completed in the one academic session**

**Work Experience:- (Using AutoCad)**

1. Edible Landscape
2. Disaster Relief Housing

**Art Education:- (Using AutoDesk Maya)**

1. Save our Fish