F. No. 6-1/2006-KVS/EDP/Computer Syllabus   Dated: 07.04.2014

The Deputy Commissioner/Director,
Kendriya Vidyalaya Sangathan,
All Regions/ZIETS.

Subject:- Implementation of Computer Syllabus in Kendriya Vidyalayas.

Madam/Sir,

       With reference to the subject mentioned above, I am to enclose a copy of Computer Syllabus for the classes III to X to be followed from the session 2014-15.   You are, therefore requested to disseminate it to all the Kendriya Vidyalayas under your jurisdiction with the direction to implement it chapterise/monthwise & quarter wise.

Yours faithfully,

(N. Goyal)
Deputy Commissioner (Acad)

Copy to :- Section Officer (EDP) with the request to upload the said letter on KVS(HQ) website.

Deputy Commissioner (Acad)

केन्द्रीय विद्यालय संगठन

संगणक पाठ्यक्रम (III – X)
Computer Syllabus (III – X)
2014-15

केन्द्रीय विद्यालय संगठन, नई दिल्ली
18, संस्थागत क्षेत्र शहीद जीत सिंह मार्ग
नई दिल्ली-110016

Kendriya Vidyalaya Sangathan, New Delhi
18, Institutional Area, Shaheed Jeet Singh Marg
New Delhi-110016
Website: www.kvsangathan.nic.in

KENDRIYA VIDYALAYA SANGATHAN

COMPUTER SYLLABUS OF CLASS III

Quarter – April to June

SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS
1	**COMPUTER BASICS**	1.1 Introduction to Computer 1.2 Starting and Shut Down the computer. 1.3 Identify the parts of Computer and their functionality. 1.4 Identify the keys of keyboard(alphabet keys, numeric key, caps lock, space bar, backspace/del, enter key, arrow movements) 1.5 Identify the buttons of Mouse (Left, Right, Scroll). 1.6 Precautions to be taken while opening and closing computer. 1.7 Do's and Don'ts of Computer Labs 1.8 Features of the Computer 1.9 Strengths and Limitations of Computer	6
2	**USING PAINT BRUSH**	2.1 Introduction 2.2 How to start Paint brush. 2.3 Home Tab 2.4 Pencil, Eraser, Fill with color, pickcolor, brush, Air brush 2.5 Text tool, Shapes, Magnifier	8
		Minimum level of learning Student should be able to identify basic components of computers. Should know the rules of Computer Laboratory. Should be able to identify tools of Paint Brush. Should be able to draw basic figures.	

SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS
3	**MORE IN PAINT**	3.1 Selection-Rectangular Selection, Freeform Selection 3.2 View Menu 3.3 Zoom In 3.4 Zoom Out 3.5 Full Screen	8
4	**ABOUT DESKTOP AND COMPUTER PERIPHERALS**	4.1 Purpose of Desktop 4.2 Identify Icons on Desktop 4.3 Start Button and Taskbar 4.4 My Computer 4.5 Recycle bin 4.6 Input and Output Devices 4.7 Keyboard, mouse, monitor, printer, speaker 4.8 Memory Devices 4.9 Primary and Secondary Memory 4.10 CPU	4

5	**WORD PROCESSOR**	5.1 Introduction to Word
		   5.1.1 What is Word Processor
		   5.1.2 Features of Word Processor
		   5.1.3 History of Word Processor
		   5.1.4 Steps for Starting Word
		5.2 Components of Word Screen
		5.3 Creating a new Word Document
		5.4 Opening an existing Word Document
		5.5 Editing text in the Word Document
		   5.5.1 Typing text.
		   5.5.2 Selecting the text
		   5.5.3 Copy, Cut and Paste the text
		   5.5.4 Deleting text
		5.6 Saving the Document
			12

Minimum level of learning

Student should be able to explore the windows.

Should be able recognize and work on basic computer parts

Should be able to open, create and save word file.

Should be able to edit the contents in word file.

Quarter – October to December			
SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS

6	**FORMATTING WORD DOCUMENT**	6.1 Formatting Text
		  6.1.1 Font size, style, color, sub/super script.
		  6.1.2 Bold, Italic, underline, background color.
		  6.1.3 Numbering and Bullets.
		  6.1.4 Alignment
		  6.1.5 Change Case
		  6.1.6 Inserting the special characters and symbols.
		6.2 Insert Menu
		  6.2.1 Word Art
		  6.2.2 Page Break
		  6.2.3 Images
		  6.2.4 Clip Art
		  6.2.5 Shapes
		  6.2.6 Text Box
		  6.2.7 Page Number
		  6.2.8 Date and Time
			12

	Minimum level of learning Student should be able to format the text. Should be able to insert pictures from clip art and pictures stored in computer. Should be able format heading using word art. Should be able to insert page number, date and time. Should be able to draw shapes.		

Quarter – January to March			
7	**INTERNET**	7.1 Introduction 7.2 Need of Internet 7.3 Requirements for an Internet Connection. 7.4 Steps to open Web Browser 7.5 Search Engines 7.6 Finding / Downloading / Saving Images	12
	Minimum level of learning Student should be able to open the Google. Should be able to search the images and text. Should be able to download and save image.		

KENDRIYA VIDYALAYA SANGATHAN

COMPUTER SYLLABUS OF CLASS IV

Quarter – April to June

SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS
1	**COMPUTER HISTORY**	1.1 Understanding Generations 1.2 Classification of Computer	4
2	**WORD PROCESSOR**	2.1 File Menu 　2.1.1　Create a new file 　2.1.2　Open an existing file 　2.1.3　Save the current file 　2.1.4　Save As – saving the file with different name (Copy a file) 　2.1.5　Close the file 2.2 View Menu 　2.2.1　Print Layout 　2.2.2　Web Layout 　2.2.3　Full Screen 　2.2.4　Zooming 　2.2.5　Ruler	6
3	**EXPLORING WINDOWS**	3.1 Starting windows Explorer 3.2 Components of Explorer Window 3.3 Panes of the Explorer Window 3.4 Working with folder in left pane 3.5 Managing files and folders in windows Explorer 3.6 Modes of View 3.7 File naming convention 3.8 Searching Files 3.9 Creating Shortcuts	4
	Minimum level of learning Student should know the various inventions in computers. Student should know the difference between Save and Save As option. Student should be able to open the existing file. Should be able to work on different views. Student should be able create/rename/delete/move a folder and making its shortcut on desktop. Student should be able to search a particular file and folder in computer.	

SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS
		Quarter – July to September	

4	**POWERPOINT PRESENTATION**	4.1 Starting Powerpoint
		    4.1.1 Create a new file
		    4.1.2 Open an existing file
		    4.1.3 Save the current file
		    4.1.4 Save As – saving the file with different name (Copy a file)
		    4.1.5 Close the file
		4.2 Formatting a Presentation
		    4.2.1 Changing the Font
		    4.2.2 Changing the Font Size, Style, Color,
		    4.2.3 Formatting Paragraphs
		    4.2.4 Changing Text Alignment
		    4.2.5 Modifying Line Spacing
		    4.2.6 Creating Bulleted and Numbered Lists
		    4.2.7 Copying Formatting
		4.3 Insert Menu / Inserting
		    4.3.1 Images
		    4.3.2 Table
		    4.3.3 Clip Art
		    4.3.4 Screen Shot
		    4.3.5 Shapes and SmartArt
		    4.3.6 Chart
		    4.3.7 Text Box, WordArt, Date & Time, Slide Number, Symbols,
		    4.3.8 Moving & Resizing an Image
		4.4 SLIDE SHOW MENU
		    4.4.1 from Beginning
		    4.4.2 from current slide
		    4.4.3 Custom Slide show
		    4.4.4 Setup slide show
			24

Minimum level of learning

Student should be able to format the presentation.
Student should be able to insert various objects in the powerpoint slide.
Student should be able to run the powerpoint slides.

SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS
		Quarter – October to December	
5	**EXCEL SPREADSHEET**	5.1 Working in Excel 5.2 Introduction – Workbook & Worksheet 5.3 Use in day to day life. 5.4 Steps to start Excel 5.5 Components of Excel Screen 5.6 Various data types 5.7 Entering Data in Spreadsheet 5.8 About the cell & cell address 5.9 Auto Sum 5.10 Formatting the Data in the Table	10

Minimum level of learning

Student should be able to create a file in Excel.
Student should be able to identify components of Excel Screen.
Student should be able to make a mark sheet in spreadsheet.
Student can auto generate the series like Serial no., days, months etc.

SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS
		Quarter – January to March	
6	**WINDOWS ACCESSORIES**	6.1 Calculator 6.2 Onscreen Keyboard 6.3 Magnifier 6.4 Games 6.5 Virus & Anti-Virus	2
7	**CONTROL PANEL**	7.1 Display Properties 7.2 Setting of Mouse 7.3 Taskbar and Start Menu 7.4 Date and Time Settings	8

Minimum level of learning

Student should be able to use calculator, onscreen keyboard, magnifier.
Student should be able to change desktop background, time and date etc.
Student should be able to change the view of start menu and customize task bar.

KENDRIYA VIDYALAYA SANGATHAN

COMPUTER SYLLABUS OF CLASS V

Quarter – April to June

SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS
1	**TABLE CREATION IN WORD**	1.1 Inserting Tables 1.1.1 Selecting no. of rows and Columns 1.1.2 Inserting new row and column 1.1.3 Merging the cells 1.1.4 Filling the color in cells 1.1.5 Alignment in the table (vertical and horizontal) 1.1.6 Table borders 1.2 Draw table	8
2	**MORE IN WORD**	2.1 Manipulating Paragraph 2.1.1 Selecting 2.1.2 Moving 2.1.3 Copying 2.1.4 Page Layout Menu 2.1.5 Margins Setting 2.1.6 Orientation 2.1.7 Paper Size (Legal & A4) 2.1.8 Page Borders 2.2 Indentation 2.3 Wrap Text / Positioning Image	6
		Minimum level of learning	

Student should be able to create a time table of their class in word.
Student should be able to create a greeting card using page borders and other options.

SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS

Quarter – July to September

SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS
3	**WORKING IN EXCEL**	3.1 Working with Sheets 　3.1.1 Creating / Deleting Sheets 　3.1.2 Renaming Sheets 　3.1.3 Copying / Moving Sheets 3.2 Inserting New Row and Column 3.3 Deleting / Hiding the Rows and Columns 3.4 Changing the width and height of the column and row. 3.5 Find and Select the data in a given range. 3.6 VIEW MENU 　3.6.1 Gridlines 　3.6.2 Freeze Panes 　3.6.3 View side by side 　3.6.4 Synchronous Scrolling	14
4	**MULTIMEDIA**	4.1 Introduction to Multimedia 　4.1.1 Definition 　4.1.2 Uses of Multimedia 　4.1.3 Hardware and Software required 4.2 Media Player: 　4.2.1 How to open and use. 4.3 Sound Recorder: 　4.3.1 How to open and use. 4.4 Movie Maker: 　4.4.1 Inserting image 　4.4.2 Setting timeline 　4.4.3 Publishing movie.	10
		Minimum level of learning	

Student should be able to create a sheet with his/her own name.
Student should be able to create an album of CCA activity using movie maker.

SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS
		Quarter – October to December	

5	**MAKING A POWERFUL PRESENTATION**	6.6 Design Menu
		    6.6.1 Slide Designs
		6.7 Transition Menu
		    6.7.1 Different Effects on slides
		6.8 Animation Menu
		    6.8.1 Different Effects on object
		6.9 Viewing Presentation in Different Ways
		    6.9.1 Managing Slides in the Slide Sorter View
		    6.9.2 Running a Presentation in the Slide Show View
		6.10 Previewing and Printing a Presentation
		    6.10.1 Selecting Page Setup Options
		    6.10.2 Printing a Presentation
		6.11 Showing presentation using Projector.
			12

Minimum level of learning

Student should be able to select a perfect design for his/her power point file based on project given by different subject teachers.
Student should be able to apply different animation effects on different objects used in slides.
Student should be able to give proper settings for printing the document in page setup.

SL. NO.	UNITS	CONTENTS	NO. OF PEROIDS
		Quarter – January to March	

6	**INTERNET**	7.1 Review of Internet
		    7.1.1 Introduction to Internet
		    7.1.2 Web Browsers
		    7.1.3 Websites
		    7.1.4 Search Engines
		7.2 Exploring the different websites
		    7.2.1 KVS website
		    7.2.2 Vidyalaya's Website
		    7.2.3 Wikipedia
		    7.2.4 Edustrokes
			12

Minimum level of learning
Student should be able to open various educational websites and can copy a paragraph in their PowerPoint presentation.

SYLLABUS OF VI

Quarter – April to June

Sl. No.	Units	Contents		No. of Periods
1	1. Fundamental of Computer	1.1	Review Brief history of computer	5
		1.2	Basic components of computer	
		1.3	Different I/O Devices	
		1.4	Computer Language	
		1.5	Software definition and its Types	
		1.6	Computer Memory	
		1.7	Different types Printers	
2	2. Word Processing (MS Word)	2.1	Header and footer	9
		2.2	Formatting of Paragraph	
		2.3	Mail Merge	
		2.4	Envelope and labels	
		2.5	Page column	
		2.6	Hyperlink	
		2.7	Drop cap	

Minimum level of learning

Child should be able to identify basic components of computers and Input/Output devices

Should be able to turn on and off the computer

Should be able to open , create and format a word file

Should be able to understand the concept of mail merge

Quarter – July to September

3	3. Spread Sheet (MS Excel)	3.1 Table creating in MS Excel and implementing Various Charts 3.2 Cell reference in MS Excel 3.3 Functions in MS Excel 3.4 Sorting of data in MS Excel 3.5 Filtering data in MS Excel 3.6 Conditional Formatting 3.7 Workbook and worksheet 3.8 Protection of Work book and Worksheet	22

Minimum level of learning

Child should be able to understand the use of excel

Should be able to open , create an excel file and can do calculation using formulas

Should be able to understand the concept of sorting, filtering ,password

Formative Assessment – 2

Summative Assessment – 1

Quarter – October to December

4	4. Advance feature of MS Power Point	4.1 Insert different objects(i.e. images, Word arts , audio & Video etc.) 4.2 Transitions in slide 4.3 Custom Animation with text 4.4 Adobe Presenter	13
5	5. HTML	5.1 Introduction to HTML 5.2 Uses of HTML 5.3 HTML Tags 5.4 HEAD ,TITLE, BODY ,Empty and Container Tags	7

Minimum level of learning

Child should be able to start power point presentation

Should be able to create an effective presentation

(effective means using templates, transition, animation etc.)
*)

Child should be able be create simple web page

Formative Assessment – 3

Quarter – January to March				
6	6. Use of internet	6.1	Overview of internet	12
		6.2	Intranet	
		6.3	Different types of web sites	
		6.4	Web browsers	
		6.5	Opening of Web pages and Web Sites	
		6.6	Use of search engine	
		6.7	Creation of an E-mail and using it	
		6.8	Advantage and Disadvantage of Social Media/sites	
		6.9	Networking and Networks	

Minimum level of learning

Child should be able to access the web page ,can identify various browsers

can effectively search a topic on the internet

can ensure his/her security over the net

can open an email account and operate it.

Formative Assessment – 4

Summative Assessment – 2

ICT Projects to be completed in the session :-

Work Experience :-

1. Kinetic Energy: Yo-Yo Design

2. Friction: Rocket Model

Art Education

1. Line, Still Life Drawing

2. Value and Tone

SYLLABUS OF VII

Quarter – April to June

Sl. No.	Units	Contents		No. of Periods
1	1. Computer Security	1.1	Threats to computer	5
		1.2	Virus and its types	
		1.3	Anti Virus software and examples	
		1.4	Firewall and its use	
		1.5	Cyber Crime and Computer Ethics	
		1.6	Hackers and crackers	
		1.7	Cyber law and importance	
		1.8	Backup and Restore	
2	2. HTML	2.1	Heading (H1 to H6)	9
		2.2	 , <hr> ,<comment>	
		2.3	Background Color ,font tag(size, face, color)	
		2.4	Text alignment (center, left , right)	

Minimum level of learning

Child should be able to secure his/her computer from various threats

Can tell what is cyber crime and understand the importance of cyber law

Quarter – July to September

3	3. HTML	3.1	Paragraph formatting Tags	10
		3.2	List Tags	
		3.3	Order (start and type attribute) and Un order List	
		3.4	Background Image and other Image Insertion in Web Page with alignment	
		3.5	Creation of table	
		3.6	Anchor Tag	
		3.7	Hyper Link	
4	4. Photoshop Introduction	4.1	DTP and its softwares	12
		4.2	Starting Photoshop	
		4.3	Tool Palette	
		4.4	How to create a new file	
		4.5	How to save a file	
		4.6	How to open an Existing file	
		4.7	How to use Photoshop tools	
	Using Layers	4.8	**Using Layers**	
			4.7.1 Learning Layer Basics	
			4.7.2 Using Layers palette	
			4.7.3 Rearranging Layers	
			4.7.4 Applying a Layer Style	
			4.7.5 Flattening and saving files	

Minimum level of learning

Child should be create a web page using tags taught in the class

Formative Assessment – 2

Summative Assessment – 1

5	Photoshop (continued)		20
	5.1 Rectangular Marquee	**Rectangular Marquee** **5.1.1.** Elliptical Marquee **5.2.1.** Single column Marquee **5.3.1.** Single Row Marquee	
	5.2 Lasso	**Lasso** 5.1.2. Polygonal Lasso 5.2.2. Magnetic Lasso 5.3.2. Quick Selection 5.4.2. Magic Wand	
	5.3 Crop and Slice tools	**Crop and Slice tools** 5.3.1 Crop 5.3.2 slice 5.3.3 Slice Select	
	5.4 Measuring tools	**Measuring tools** 5.4.1 Eyedropper 5.4.2 color Sampler 5.4.3 Ruler 5.4.4 Note 5.4.5 Count	
	5.S Retouching tools	**Retouching tools** 5.5.1 Spot Healing Brush 5.5.2 Healing Brush 5.5.3 Patch 5.5.4 Red Eye 5.5.5 Magic Eraser 5.5.6 Blur 5.5.7 Sharpen 5.5.8 Smudge 5.5.9 Dodge 5.5.10 Burn 5.5.11 Sponge	

Minimum level of learning

Introduction of tool with its use to be demonstrated to students

Practical exercise to be given to students so that they can learn the specified tool

Child should be able to understand the use of Photoshop

Should be able to identify various tools and where to use the tool

Should be able to make changes in the picture using tools taught in the class

Formative Assessment – 3

		Quarter – January to March		
6	Painting Tools in Photoshop	6.1 Brush 6.2 Pencil 6.3 Color Replacement 6.4 Mixer Brush 6.5 History Brush 6.6 Art History Brush 6.7 Gradient 6.8 Paint Bucket		12

Minimum level of learning
Should be able to identify various tools and where to use the tool
Should be able to make changes in the picture using tools taught in the class
Introduction of tool with its use to be demonstrated to students
Practical exercise to be given to students so that they can learn the specified tool

Formative Assessment – 4
Summative Assessment – 2

ICT Projects to be completed in the session :-

Work Experience :-

1. Chicken Coop Design

Art Education:-

1. Composition, Animal Poster

2. Shapes, Small Park Design

SYLLABUS OF VIII

Quarter – April to June

Sl. No.	Units	Contents	No. of Periods
1	1. Algorithm	1.1 Use of algorithm in programming Developing algorithm to solve a particular problem	6
2	2. Flow chart	2.1 About flow chart 2.2 Various types of box used in flow chart and their use(terminal box, input/output box, processing box, decision box) 2.3 Question based on sequence , selection and iteration	8
		Minimum level of learning Child should be able to develop a solution of a problem and can create its algorithm and flow chart	

Quarter – July to September

3	3. Photoshop Review	Topics studied in class VII (Rectangular marquee Toole, Lasso, Quick Selection, Crop ,measuring ,retouching , Painting)	5

4	More on Photoshop
	
	4. Tools
	
	4.1 Working with Masks
		6.1 Drawing and type tools
		    4.1 Pen(P)
		       Freeform Pen
		       Add Anchor point
		       Delete Anchor point
		       Convert Point
		    4.2 Horizontal Type
		       Vertical Type
		    4.3 Rectangle
		       Rounded Rectangle
		       Ellipse
		       Polygon
		       Line
		       Custom Shape
		Working with Masks
		4.1.1 Working with masks and channels
		4.1.2 Creating a quick mask
		4.1.3 Editing a quick mask
		4.1.4 Saving a selection as a mask
		4.1.5 Viewing channels
		4.1.6 Adjusting individual channels
		4.1.7 Loading a mask as a selection
		4.1.8 Applying effects using a gradient mask
		4.1.9 Resizing the canvass
		4.1.10 Moving layers between documents
		4.1.11 Colorizing with an adjustment layers
		4.1.12 Grouping and clipping layers
		4.1.13 Applying a mask from a saved selection
		4.1.14 Using type as a mask
			17

Minimum level of learning

Should be able to identify various tools and where to use the tool
Should be able to make changes in the picture using tools taught in the classDrawing and type toolsIntroduction of tool with its use to be demonstrated to studentsPractical exercise to be given to students so that they can learn the specified tool

Formative Assessment – 2

Summative Assessment – 1

	Quarter – October to December		
5	5. **Photoshop (Continue...)** **5.1 Photoshop Vector tools** **5.2 Type in Photoshop** **5.3 Output from Photoshop**	**6.2 Photoshop Vector tools** 5.1.1 Basic Vector paths 5.1.2 Drawing shapes 5.1.3 Combining vector paths 5.1.4 Converting shapes to selections 5.1.5 Manipulating vector paths **6.3 Type in Photoshop** 5.2.1 Typographic design 5.2.2 Creating a clipping mask from . type 5.2.3 Creating a design element from type 5.2.4 Using interactive formatting controls 5.2.5 Wrapping font type 5.2.6 Designing a paragraph of type **6.4 Preparing file for print** 5.3.1 Preparing file for web output File compression	10
6	6. **Flash**	**6.5 What is flash and its uses** **6.6 Creating animation** **6.7 About symbols and instances** **6.8 Types of symbols(graphic, button,movie clip etc.)** **6.9 Converting an object to a symbol** **6.10 Introducing time line and its use in animation** **6.11 Frames and key frame** **6.12 About layers (inserting a new layer, renaming & deleting layer)** **6.13 Types of animation (frame and tweened)**	10

Minimum level of learning

Should be able to identify various tools and where to use the tool

Should be able to make changes in the picture using tools taught in the class

Should be able to create a simple flash file using his/her own creativity

Formative Assessment – 3

Quarter – January to March

7	7. Flash continued...	**7.1** **Motion tweening (using and without using motion guide)** **7.2** **Shape tweening (simple shape and using text strings)**	4
8	8. E-Commerce E-Greeting	8.1 EDI(Electronic Data Interchange) 8.2 What is E-Commerce and E-Greetings ? 8.3 Influence on user 8.4 What factor one should keep in mind while doing e-commerce, Websites Example	2
9	9. Chatting	9.1 Definition 9.2 Example	2
10	10. Downloading/Uploading	10.1 Downloading/Uploading Speed 10.2 Difference 10.3 Example 10.4 Concept of Bandwidth and protocol	2
11	11. Audio and Video Conferencing	11.1 What is it 11.2 Use of It 11.3 Factors affecting Video Quality 11.4 Usefulness of Video Conferencing	2
	## Minimum level of learning Child should be able to create simple flash file having different types of motion Child should be able to understand the e-commerce and its various websites and what to keep in mind while doing online purchasing chatting, downloading and uploading Use of video conferring and its advantage		
	Formative Assessment – 4 Summative Assessment – 2		

ICT Projects to be completed in the session :-

Work Experience :-

1. Smartphone Accessory

Art Education

1. Chair Design

2. Lamp Design

Syllabus of Computer Fundamentals
Class IX
Quarter 1- April to June

S.no.	Units	Contents	No. of Periods
1.	Revision of Fundamental Concepts	**1.1REVIEW OF PHOTOSHOP** 1.1.1 Opening & Saving 1.1.2 Scanning a Photograph 1.1.3 Adjusting Image Size 1.1.4 Selection Tools	6

S.no.	Units	Contents	No. of Periods
2.	Multimedia Authoring & Animation (Review of Flash & Introduction to Autodesk 3DMax)	**2.1REVIEW OF FLASH** 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 **2.2Introduction to Autodesk 3DMax** 2.2.1 What is 3D? • 3D Basics: • Modeling • Animation • Rendering • Object-orientation 2.2.2 Navigation and Display • Coordinate Systems & The Home Grid • Orthogonal vs. Perspective Views • Changing Views and Viewport Layout • Display Modes &Viewport Window Controls • Custom Grids and Snaps 2.2.3 Creating Objects & Selecting Objects. 2.2.4 Parenting & Grouping objects. 2.2.5 Transforming Objects.	10

3.	Adding styles to Webpages using CSS	**3.1 Review of HTML** 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 **3.2Adding Style Sheets** 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 **3.3External Style Sheets** 3.3.1. Preferred and alternate style sheets 3.3.2. Specifying external style sheets **3.4CSS Properties-Border, box, font, margin** **3.5CSS Classes** 3.5.1. ID 3.5.2. Class Selectors	16

4.	Web scripting JavaScript	**4.1CREATING INTERACTIVE WEBPAGES USING JAVASCRIPT** 4.1.1 Introduction and History of Java Script 4.1.2 Objectives and Properties 4.1.3 Variables & Operators • Variable constraints, • Types of Operators: logical, arithmetic, relational • Decision Making using if & Switch • Iteration – Loops • Window Object • Popup Boxes – alert, confirm etc.	20

5.	Database concepts-RDBMS	5.1 Basics of RDBMS
		    5.1.1 Purpose
		    5.1.2 Data Models
		    5.1.3 Relational Model
		5.2 Data Definition Language
		    5.2.1 Creating Database and Tables
		    5.2.2 Creating Views
		5.3 Data Manipulation Language
		    5.3.1 Data input, modify, display & deleting in tables
		    5.3.2 Ordering & grouping
		5.4 Operating with multiple tables.
		    5.4.1 Union
		    5.4.2 Join
			10

6.	Network Safety of Computer System.	**6.1 Network Safety**
		    6.1.1. Social Networking Ethics
		6.2Network Security Tools And Services
		    6.2.1. Tools
		    6.2.2. LAN Management
		    6.2.3. MAN Management
		    6.2.3. WAN Management
		    6.2.4. VOIP
		6.3 Cyber Security
		    6.3.1. Reasons
		    6.3.2. Objectives
		6.4 Social Networking Various Practices
		6.5 Cloud Computing & Mobile Computing
			4

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**

Syllabus of Computer Fundamentals
Class X
Quarter 1- April to June

S.no.	Units	Contents	No. of Periods
1.	**Review of Autodesk 3D Max**	1.1 What is 3D? 1.2 Navigation and Display 1.3 Creating Objects & Selecting Objects. 1.4 Parenting & Grouping objects. 1.5 Transforming Objects.	4

2.	**Animation in 3D Max**	**2.1. Animation**
		  2.1.1 Keys and Key framing.
		  2.1.2 Animation Controllers
		  2.1.3 Parametric vs. Transform Animation
		  2.1.4 Animation Playback
		  2.1.5 Acceleration
		  2.1.6 Time Configuration
		  2.1.7 Cycling &Linking
		2.2 Editing tools:
		  2.2.1 Select Modifiers
		  2.2.2 Edit Modifiers
		  2.2.3 Editable Object Commands
		  2.2.4 Sub-Object Selection
		  2.2.5 Modifying & Transforming Sub-Objects
		  2.2.6 Mesh Editing Levels
		  2.2.7 Spline Editing Levels
			12

Quarter 2- July to Sept

S.no.	Units	Contents	No. of Periods
3.	**Customizing & Embedding Multimedia components in Webpages**	**3.1 Inserting Multimedia files in Webpages** 3.1.1 Compatible Multimedia Files formats for Webpages. 3.1.2 Embedding Audio File. 3.1.3 Embedding Video File. 3.1.4 Embedding Flash File.	16

Quarter 3- Oct to Dec

| 4. | Web Scripting Using Java Script | **4.1 REVIEW OF JAVA SCRIPT OF CLASS IX**
 4.1.1 Variables & Operators
 4.1.2 If & Switch
 4.1.3 Iteration (Loops)
 4.1.4 Window Object
 4.1.5 Pop – Up Boxes –Alert, Confirm Etc.
 4.2 FUNCTIONS –USER DEFINED
 4.2.1 Function Definition
 4.2.2 Calling a Function
 4.2.3 Function Parameters
 4.2.4 Return Statement
 4.3 String Object
 4.3.1 Syntax
 4.3.2 String Properties
 4.3.3 String Methods
 4.3.4 String HTML Wrappers
 4.4 Math Object
 4.4.1 Syntax
 4.4.2 Array Properties
 4.4.3 Array Methods
 4.5 Event
 4.5.1 What is an Event?
 4.5.2 An click Event Type
 4.5.3 On Submit Event Type
 4.5.4 On Mouseover & On Mouseout
 4.5.5 HTML 4 Standard Events | 20 |

Quarter 4- Jan to Mar

| 5. | Operating Web Based Application | **5.1 E-GOVERANCE**
 5.1.1 What is E-Governance
 5.1.2 Major E- Governance Projects in India
 5.1.3 Societal Imports of E- Governance
 5.2. E-BUSSINESS
 5.2.1 What is E- Business
 5.2.2 Major E- Business Portals
 5.2.3 Societal Impacts of E- Business
 5.3 E- LEARNING
 5.3.1 What is E- Learning?
 5.3.2 Major E- Learning Sites
 5.3.3 Societal Impacts of E- Learning. | 6 |

| 6. | Project | Developing a Project on coding a website using HTML, JavaScript & CSS. | 8 |

ICT Projects to be completed in the one academic session

Work Experience:-

1. Urban Park (Using AutoCad)

Art Education:-

1. Green Garbage Game (Using AutoDesk Maya)