

CHOITHRAM SCHOOL, MANIK BAGH, INDORE
ANNUAL CURRICULUM PLAN SESSION 2017 – 2018

CLASS: VII
SUBJECT: ICT

Month & Working Days	Theme/ Sub-theme	Learning Objectives		Activities & Resources	Expected Learning Outcomes	Assessment
		Subject Specific (Content Based)	Behavioural (Application based)			
June	Number System Sub-theme: Decimal Number System, Binary number System, Octal Number System, Hexadecimal Number System, Computer Arithmetic	1) To learn about Decimal, Binary, Octal and Hexadecimal Number System. 2) To enable students to convert decimal number into binary number. 3) To enable students to convert binary number into decimal number. 4) To enable students to perform binary addition, subtraction, multiplication and division.	1) To enable students to understand the importance and significance of different number systems. 2) To enable students to understand the face value, positional value of the digits in the number. 3) To enable students to understand the concept of base of the number system. 4) To enable students to perform arithmetic operations and calculations.	<ul style="list-style-type: none"> • Written class test on Number System. (calculation) • Presentation on Number System, types with features of every number system. • Group discussion on Decimal Number System vs Binary Number System. 	Student will learn about Decimal, Binary, Octal and Hexadecimal Number System. They will be able to convert decimal number into binary number, binary number into decimal number, to perform binary addition, subtraction, multiplication and division. Students will understand the importance and significance of different number systems. Students will learn about the face value, positional value of the digits in the number, concept of base of the number system.	Allotting sufficient time to students for conversions and to perform binary operations. Level of accuracy and understanding of different number systems.

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July	Working with Flash CS3 Sub-theme: Flash introduction, Workspace, Gradient fill, Graphics and animation in Flashtweening, Shape tween	1) To introduce the flash workspace to the students. 2) To make students aware about the application of the Flash software. 3) To make students to apply gradient fill, and to modify linear gradient. 4) To make students able to animate objects using Tint Tweening.	1) To make students able to use this software in daily life for making animated video clips (funny + informative) and to design games. 2) It will make students to think creatively.	<ul style="list-style-type: none"> • Subject Enrichment Activity I- Mathematical Modeling in Flash • Drawing scenery showing sunset and sunrise. • Showing a crying face and changing into a smiling face. • Drawing a girl going up and down on stair case. • Creating a Flash animation to create a tint tween effect on the text (Name of student). 	Student will learn about applying gradient fill, modifying linear gradient, animating objects using Tint Tweening and Shape Tweening, selecting, renaming and adding new layers, rotating objects using Masking effect, animating objects using onion skin tool. Students will be able to use this software in daily life for making animated video clips (funny + informative) and to design games creatively.	Students will be asked to draw 2-D figures having identical shapes and size. They can show congruency by superimposing one 2-D fig. on the other 2-D figure using tools and layers, for applying flash animation effect on objects. On the basis of animation, creativity, innovation shown by students.

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August	Working with layers Sub-theme: Layer introduction, Hide and show layers, Masking, Onion skin tool	1) To make students able to animate objects using Shape Tweening. 2) To enable students to	1) To make students able to use this software in daily life for making animated video clips (funny + informative) and to design games.	<ul style="list-style-type: none"> • Creating shape tween effect showing emoji's conversion. • Drawing a car and showing car standing at traffic signal. • Creating solar system. 	Student will learn about applying gradient fill, modifying linear gradient, animating objects using Tint Tweening and Shape Tweening, selecting, renaming and adding new	Student will be asked to draw emojis and do conversion using shape tween effect. On the basis of animation, creativity, innovation shown by students.

		select, rename and add new layers. 3) To enable students to rotate objects using Masking effect. 4) To animate objects using onion skin tool.	2) It will make students to think creatively.		layers, rotating objects using Masking effect, animating objects using onion skin tool. Students will be able to use this software in daily life for making animated video clips (funny + informative) and to design games creatively.	
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September	Theme: The Virus Sub-Theme: Types of virus Virus Symptoms Prevention by Antivirus software	1) To make students aware about terms like Trojan horse, worm, malware and spyware. 2) To enable students to learn about types of virus and virus symptoms 3) To enable students by giving tips on How to prevent virus infection.	1) To make students aware about on ethical surfing and searching on internet. 2) To make students understand to use licensed software.	<ul style="list-style-type: none"> PPT on virus symptoms and preventing virus infection using antivirus software. 	Student will learn about terms like Trojan horse, worm, malware and spyware, types of virus and virus symptoms . They will learn about preventing virus infection usage and working of antivirus software	Student will be asked to make ppt on types of virus, malwares, symptoms of virus infection and preventing virus infections using antivirus software. Way of presentation and level of content

		4) To make them learn about usage and working of antivirus software				
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October	Theme: Formulas and Functions Sub-Theme: Basic, compound and text formulas, relative, absolute and mixed reference, sum, average, max, min function	1) To make students learn how to create formulas (basic, compound and text formulas) in excel. 2) To make students understand how to assign multiple cells to a formula by creating a reference (relative, absolute and mixed reference) or a range. 3) To enable students to perform calculations using functions available within	1) To make students understand How formulas and Functions make calculations easy. 2) To enable students to fill data in cells automatically using Auto Fill feature. 3) Students will understand about the importance of spreadsheets and its utility for data organization and quantitative analysis.	<ul style="list-style-type: none"> • Creating a worksheet for Daily Routine. • Lab activity given in the book to maintain record of player's salaries and represent graphically 	Student will learn to create formulas (basic, compound and text formulas) in excel. They will understand how to assign multiple cells to a formula by creating a reference (relative, absolute and mixed reference) or a range. Students will be able to perform calculations using sum, average, max, min functions.	Student will be asked to perform lab activity given in the book to maintain record of player's salaries and represent the pay scale graphically. On the basis of data collected and organized in spreadsheet and presenting the data using charts and graphs.

		the software.				
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November	Theme: Using Excel as Database Sub-Theme: Form, Adding, searching and deleting a record, sorting and filtering data, data validation, Pivot table	1) To make students learn how to use a form to enter new record, searching a record and deleting a record. 2) To enable students to sort and filter data. 3) To enable students to apply data validation. 4) To enable students to analyze data with pivot table.	1) To enable students to enter or display information using forms. 2) To enable students to arrange the data in alphabetical, increasing or decreasing order. 3) Students will understand about the importance of spreadsheets and its utility for data organization and quantitative analysis. 4) To enable students to restrict the cell entries within a specified range.	<ul style="list-style-type: none"> Creating a worksheet showing time spent on different social media and sites daily for 1 week. To maintain record of Indoor and outdoor activities opted by students of the classroom. 	Student will learn to use a form to enter new record, searching a record and deleting a record. They will be able to analyze data with pivot table. Students will be able to sort and filter data, students to apply data validation..	Student will be asked to create a worksheet showing time spent on different social media and sites and to maintain record of Indoor and outdoor activities of students of classroom. On the basis of data collected and organized in spreadsheet and presenting the data using charts and graphs.

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December	Theme: Advance	1) To make	1) To enable	<ul style="list-style-type: none"> Worksheet of Progress Report of 	Student will learn to create	Student will be asked to

	features of Excel Sub-Theme: Chart, Grouping worksheet	students learn about components of chart and common chart types 2) To make students understand how to create chart 3) To enable students to format the chart and data series, change the scale of value axis. 4) To enable students to insert picture. 5) To enable students to group the worksheets.	students to display data in pictorial form. 2) To enable students to make comparisons and analysis of information.	friends.	components of chart and common chart types. They will understand how to create chart, to format the chart and data series, change the scale of value axis. They will be able to insert picture and group the worksheets.	create worksheet of Progress Report of friends and show the performance of friends pictorially by inserting the charts. On the basis of data collected and organized in spreadsheet and presenting the data using charts and graphs.
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January	Theme: Graphics in QBASIC Sub-Theme: Screen statement, Color statement, Line statement, Circle statement, Play statement,	1) To make students aware about terms like constants, variables, and types of each term.	1) To understand what is step by step approach for building a program. 2) To understand the need of graphics to draw shapes. 3) To enable	<ul style="list-style-type: none"> Drawing a home using different graphics statement. Programs to draw geometrical figures (2-D figures) using graphics statement. Write a program to draw lines across screens in different colors. Write a program to draw the Hut. 	Student will learn about terms like constants, variables, and types of each term. They will be able to write programs using CLS, PRINT, INPUT command, END statement	Students will be asked to write programs to draw geometrical figures (2-D figures) draw a home or hut using graphics statement. On the basis of logics applied and level of concepts used in

	Constant and its types, Variables and its types	2) To enable them to write programs using CLS, PRINT, INPUT command, END statement 3) To enable them to make decisions based on comparisons and conditions using If_Then and If_Then _Else statement. 4)To learn usage of QBASIC statements like screen statement, color statement, line statement, circle statement, Play statement	students to understand pixel positions.	<ul style="list-style-type: none"> • Write a program to draw a filled box with color. • Write a QBASIC program to draw a triangle with horizontal base. • Write a QBASIC program to display a pixel on the screen. 	Students will be able to make decisions based on comparisons and conditions using If_Then and If_Then _Else statement. They will learn usage of QBASIC statements like screen statement, color statement, line statement, circle statement, Play statement	programming
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February	Theme: Looping statements Sub-Theme: The For_Next loop, For_Next with step, While _Wend, Do	1) To understand formation of a loop using FOR...NEXT, Nested For Next Loop, While	1) To understand the concept of iteration and looping. 2) To make them aware about the	<ul style="list-style-type: none"> • Write a program to find the sum of squares of odd numbers up to 10 terms. • Program to print table of 10 • Program to find sum of 10 numbers • Program to print first five EVEN 	Student will learn the usage of FOR...NEXT ,Nested For Next Loop, While Loop, Do Until Loop	Students will be asked to write programs to find the sum of squares of odd numbers up to 10 terms, Program to print table of 10 Program to find sum of 10

	Until Statement	Loop, Do Until Loop. 2) To enable students to understand the concept of control variable.	advantages of iteration and looping.	numbers • Program to print multiples of 5 in reverse order starting from 20		numbers, Program to print first five EVEN numbers . On the basis of logics applied and level of concepts used in programming
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