CHOITHRAM SCHOOL, MANIK BAGH, INDORE
ANNUAL CURRICULUM PLAN SESSION 2019– 2020

CLASS: VI
SUBJECT: Artificial Intelligence

Month & Working Days	Theme/ Sub-theme	Learning Objectives		Activities &Resources	Expected Learning Outcomes	Assessment
		Subject Specific (Content Based)	Behavioral (Application based)			
June-17	Introduction to Artificial Intelligence Subtheme: Definition of AI/Meaning of the Term AI, Difference between Human intelligence and Artificial Intelligence, Real life applications of AI(Space program Mars Lander, Medical Research: Prosthetic limbs, Mining through Robots, Google Assistant) Pros and Cons of AI	• To make students aware about the term AI. • To make students understand difference between Human intelligence and Artificial Intelligence. • To make them aware about Real life applications of AI(Space program Mars Lander, Medical Research: Prosthetic limbs, Mining through Robots, Google Assistant) • To make students understand Pros and Cons of AI	• To enable students to use AI to solve their daily life problems. • To make students understand the importance of AI in daily life of 21st century. • To make students aware about dependency of humans on AI	**Activity (to introduce the lesson):** • Activity demonstrating the use of Google Assistant, Google Maps and Google translator. **Activity (to support learning):** • Ice Breaker Activity: Dream Smart Car Activity: Designing a rough layout of design of dream smart Car by watching videos of Google Cars. **Activity / Assignment (to assess learning):** • Activity of sharing new AI inventions(Robot applications in different fields) by students in classroom	**Students will :** • Be aware about theterm AI. • Understand difference between Human intelligence and Artificial Intelligence. • Be aware about Real life applications of AI. • Understand Pros and Cons of AI. **Students will be:** • Able to use AI to solve their daily life problems. • Understand the importance of AI in daily life of 21st century. • Aware about dependency of humans on AI.	**Activity / Assignment (to assess learning):** **Parameters:** • Activity of sharing new AI inventions(Robot applications in different fields) by students in classroom

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July -26	Microsoft Excel 2007 Sub-theme: Features of Excel, Workbook, Components of a Worksheet, Types of Data, Performing calculations, (Cell, Active Cell, Name Box, Formula Bar, Column and Row Headings, Status Bar, Entering Data, Formulae, AutoSum Button)	• To make students aware about features of Excel. • To make them aware about components of Worksheet (Cell, Active cell, Name Box, Formula Bar, Column and Row headings, Status Bar). • To make students learn how to enter numbers, text and formulae in Excel sheet. • To enable students to switch between worksheets, rename a worksheet, add and remove a worksheet and save a workbook.	• To enable students to organize and analyze data.	**Activity (to introduce the lesson):** • Discussion about features of Excel by an activity of maintaining record of name of classmates + their percentage in term I exam in worksheet. **Activity (to support learning):** • Worksheet on Weekly Expenses of eatables and stationary items. **Activity / Assignment (to assess learning):** • Worksheet to maintain employee information (Name, designation, Department and salary).	**Student will :** • Be aware about features of Excel. • Be aware about components of Worksheet (Cell, Active cell, Name Box, Formula Bar, Column and Row headings, Status Bar). • Learn how to enter number, text and formulae in Excel sheet. • Be able to switch between worksheets, rename a worksheet, add and remove a worksheet. **Student will be able:** • To organize and analyze data.	**Activity / Assignment (to assess learning):** • Worksheet to maintain employee information (Name, designation, Department and salary).

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August-20	Formulas and Functions Sub-theme: AutoFill feature Creating a basic formula, Using Compound formula, Using text formula Using Range in formula	• To enable students to use Auto Fill feature. • To make students learn applying basic, compound and text formulae.	• To enable students to organize and analyze data. • To enable students to fill data in cells automatically using Auto Fill feature.	**<u>Activity (to introduce the lesson):</u>** • Worksheet to calculate Birthday Party Expenses of your friend. **<u>Activity (to support learning):</u>** • Worksheet showing Progress Report of friends. • Create a worksheet showing time elapsed on different social networking websites in a week. **<u>Activity / Assignment (to assess learning):</u>** • Creating excel datasheet of sales information with headings: Unit sales, cost of sales, gross margin, advertising expense, overhead expenses.	**<u>Student will:</u>** • Learn applying basic, compound and text formulae • Be able to use Auto Fill feature. **<u>Student will be able:</u>** • To organize and analyze data. • To fill data in cells automatically using Auto Fill feature.	**<u>Activity / Assignment (to assess learning):</u>** • Creating excel datasheet of sales information with headings: Unit sales, cost of sales, gross margin, advertising expense, overhead expenses.

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September-24	Formulas and Functions Sub-theme: Types of cell reference:- Relative reference, Absolute reference, Mixed reference, Cell reference of another worksheet Naming a sheet tab Function, Rules to enter a function, Common functions, Charts	• To make students understand difference between relative reference and absolute reference and their significance in performing calculations. • To enable students to perform calculations by using some common inbuilt functions (SUM, AVERAGE, MAX, MIN, PRODUCT, TODAY). • To enable students to create formulae for certain operations on values. • To enable students to insert charts to represent data statistically.	• To enable students to represent data pictorially in the form of charts to compare data. • To enable students to organize and analyze data.	**Activity (to introduce the lesson):** • Creating worksheet representing height and weight of students of the class. **Activity (to support learning):** • Worksheet showing minimum temperature, maximum temperature and average temperature of 1 week. **Activity / Assignment (to assess learning):** • Students have to calculate the "Gross salary" of one employee. Worksheet must have the following heading: Basic salary, HRA, DA, Internet charges, Food Expenses, Petrol Allowance, Mobile charges.	**Student will:** • Understand difference between relative reference and absolute reference and their significance in performing calculations. Learn how to enter number, text and formulae in Excel sheet. • Be able to perform calculations by using some common inbuilt functions. • Be able to create formulae for certain operations on values. • Be able to insert charts to represent data statistically. **Student will be able:** • To organize and analyze data. • To represent data pictorially in the form of charts to compare data.	**Activity / Assignment (to assess learning):** • Students have to calculate the "Gross salary" of one employee. Worksheet must have the following heading: Basic salary, HRA, DA, Internet charges, Food Expenses, Petrol Allowance, Mobile charges.

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October-22	Log on to Animate CC Sub-theme: Starting Animate, Animate workspace, Tool Panel, Drawing Tools, Selection Tools, Transforming objects, Colouring tools	• To learn about the importance of Animate. • To introduce Animate workspace to the students. • To enable students to use tools (Drawing, Coloring and selection tools) present in the tool panel.	• To enable students to show their creativity by applying animation. • To make students able to create 2D animation.	**Activity (to introduce the lesson):** • Discussion about animation in daily life by taking example of animated cartoons, video games, animated movies. Discussion about custom animation effect that students have used while making PowerPoint Presentation. **Activity (to support learning):** • To draw star, sun and clouds using Polystar tool. • To draw free hand scenery using Pen and Pencil tool. **Activity / Assignment (to assess learning):** • Drawing scenery showing sunset and sunrise.	**Student will learn** • About the importance of Animate. • About the Animate workspace. • Utility of tools (Drawing, Coloring and selection tools) present in the tool panel. **Student will be able to** • Show their creativity by applying animation. • Create 2D animation.	**Activity / Assignment (to assess learning):** • Drawing scenery showing sunset and sunrise.

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November-20	**Continued…….** Log on to Animate CC Sub-theme: Starting Animate, Animate workspace,	• To enable students to create symbols for animating objects. • To make students able to animate objects using Frame by Frame	• To enable students to show their creativity by applying animation. • To make students able to create 2D animation. • To make students able	**Activity (to introduce the lesson):** • Discussion about utility of animation for creating 2Dgraphicsrealistic models to show accurate	**Student will learn** • Animating objects using Frame by Frame technique. • To create symbols for animating objects	**Activity / Assignment (to assess learning):** • Drawing a boy playing football. • Drawing a girl going up and down on stair case.

	Tool Panel, Drawing Tools, Selection Tools, Transforming objects, Colouring tools	technique.	to use this software in daily life for making animated video clips (funny + informative) and to design games.	representation of an object. **Activity (to support learning):** • Drawing a flower bud and converting the bud into a blossom flower by using Frame by Frame technique.(Animation) **Activity / Assignment (to assess learning):** • Drawing a boy playing football. • Drawing a girl going up and down on stair case.	**Student will be able to** • Show their creativity by applying animation. • Create 2D animation. • Use this software in daily life for making animated video clips (funny + informative) and to design games.	

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December-20	Working with Animate CC Subtheme: Frame by Frame Technique, Symbols, Creating a Symbol, Motion Tween effect, Shape Tween effect	• To enable students to create Motion tween, Shape tween, Classic Motion Guide tween effect and Tint tween effect for animating objects. • To learn about the importance of Layer in Animate.	• To enable students to show their creativity by applying animation. • To make students understand the importance of Graphics.	**Activity (to introduce the lesson):** • Animate the object using frame by frame technique by an activity of football game designing. **Activity (to support learning):** • Creating shape tween effect showing emoji's conversion. • Drawing and animating	**Student will learn:** • Creating Motion tween, Shape tween, Classic Motion Guide tween effect and Tint tween effect for animating objects • About the importance of Layer in Animate. **Student will be:** • Able to show their creativity by applying animation.	**Activity / Assignment (to assess learning):** • Creating tint tween effect on the text to change the color of the text (Name of student). • Creating solar system.

				clouds on a rainy day using motion tween effect. • Changing a sunny day into a cloudy day using shape tween effect. **<u>Activity / Assignment (to assess learning):</u>** • Creating tint tween effect on the text to change the color of the text (Name of student). • Creating solar system.	• Understanding the importance of Graphics.	

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January-23	**Continued…….** Working with Animate CC Subtheme: Frame by Frame Technique, Symbols, Creating a Symbol, Motion Tween effect, Shape Tween effect	• To learn selecting a particular layer, renaming a layer, adding a new layer for creating small animated video clips. • To enable the student to use onion skin tool to apply animation effect. • To create the spotlight effect through masking.	• To enable students to show their creativity by applying animation. • To make students understand the importance of Graphics. • To make students able to use this software in daily life for making animated video clips (funny + informative) and to design games. • To make students understand how animation is used in Entertainment.	**<u>Activity (to introduce the lesson):</u>** • Creating a winter scene having snowfall using classic motion guide tween effect. **<u>Activity (to support learning):</u>** • To make changes in the appearance of text using Tint Tween effect. • To draw a flying bird using onion skinning tool.	**<u>Student will learn:</u>** • Selecting a particular layer, renaming a layer, adding a new layer for creating small animated video clips. • To use onion skin tool to apply animation effect. • To create the spotlight effect through masking. **<u>Student will be:</u>** • Able to show their creativity by applying animation. • Understanding the importance of Graphics.	**<u>Activity / Assignment (to assess learning):</u>** • Showing a crying face and changing into a smiling face using shape tween effect. • To create oval and star shaped spotlight effect on Sample Pictures.

				• To create oval and star shaped spotlight effect through masking. **<u>Activity / Assignment (to assess learning):</u>** • Showing a crying face and changing into a smiling face using shape tween effect. • To create oval and star shaped spotlight effect on Sample Pictures.	• Able to use this software in daily life for making animated video clips (funny + informative) and to design games. • understanding how animation is used in Entertainment	

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February-23	Natural Language Processing and Expert Systems Subtheme: Meaning of NLP, Speech and Voice recognition, Handwriting recognition, Text classification forming keyword cloud	• To make students know the meaning of the term NLP. • To make students aware about Real life applications of NLP.	• To enable students to recognize apps(android applications) based on NLP. • To make students understand the importance of NLP in real world.	**<u>Activity (to introduce the lesson):</u>** • Quick Draw game: A game where a neural net tries to guess what has been drawn. (Handwriting recognition) **<u>Activity (to support learning):</u>** • Semantris game: Block game by Google AI We enter a clue, AI looks at all the words in	**<u>Students will :</u>** • Come to know the meaning of the term NLP. • Be aware about Real life applications of NLP. **<u>Students will be:</u>** • Able to recognize apps (android applications) based on NLP. • Understand the importance of NLP in real world.	**<u>Activity / Assignment (to assess learning):</u>** • The Infinite Drum Machine: It creates beats using everyday sounds. The computer has placed similar sounds closer together. (Similar sounds are organized forming Sound cloud).Students will create music tunes on their own by using this particular AI interface

				play and chooses the ones it thinks are most related. (Expert System, Text classification forming keyword cloud) **<u>Activity / Assignment (to assess learning):</u>** • The Infinite Drum Machine: It creates beats using everyday sounds. The computer has placed similar sounds closer together. (Similar sounds are organized forming Sound cloud).Students will create music tunes on their own by using this particular AI interface.		

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March-24	**Continued…….** Natural Language Processing and Expert Systems Subtheme: Meaning of NLP,	• To make students understand difference between Speech and Voice recognition. • To make students	• To enable students to recognize apps(android applications) based on NLP. • To make students understand the importance	**<u>Activity (to support learning):</u>** • Semantris game: Block game by Google AI We enter a clue, AI looks at all the words in play	**<u>Students will :</u>** • Understand difference between Speech and Voice recognition.	**<u>Activity / Assignment (to assess learning):</u>** • The Infinite Drum Machine: It creates beats using everyday sounds. The

	Speech and Voice recognition, Handwriting recognition, Text classification forming keyword cloud	understand working of Expert Systems.	of NLP in real world. • To make students able to use expert systems to find solutions of their daily life problems.	and chooses the ones it thinks are most related. (Expert System, Text classification forming keyword cloud) **<u>Activity / Assignment (to assess learning):</u>** • The Infinite Drum Machine: It creates beats using everyday sounds. The computer has placed similar sounds closer together. (Similar sounds are organized forming Sound cloud).Students will create music tunes on their own by using this particular AI interface.	• Understand working of Expert Systems. **<u>Students will be:</u>** • Able to recognize apps (android applications) based on NLP. • Understand the importance of NLP in real world. • Able to use expert systems to find solutions of their daily life problems.	computer has placed similar sounds closer together. (Similar sounds are organized forming Sound cloud).Students will create music tunes on their own by using this particular AI interface