LESSON PLAN OF CLASS VII (SUBJECT: COMPUTER)

TERM 1

MONTH: APRIL

Ch-1 SOFTWARE AND ITS TYPES

MONTH: MAY

Ch-2 MICROSOFT WINDOWS 7

MONTH: JULY

Ch-3 LOG ON TO MS EXCEL 2007

MONTH: AUGUST

Ch-4 EDITING A WORKSHEET

TERM 2

MONTH: SEPTEMBER

Ch-5 FORMULAS AND FUNCTIONS

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Ch-6 USING EXCEL AS DATABASE

MONTH: NOVEMBER

Ch-7 ADVANCE FEATURES OF EXCEL

MONTH: NOVEMBER

Ch-8 GRAPHICS IN QBASIC

MONTH: JANUARY

Ch- 9 LOOPING STATEMENTS

MONTH: JANUARY

Ch-10 SURFING NET AND E-MAIL

MONTH: APRIL

TOPIC: SOFTWARE AND ITS TYPES

LEARNING OBJECTIVES: After studying this chapter students will

Have an understanding of the concept of Software.

Difference between System Software, Utility Software and Application Software.

PREVIOUS KNOWLEDGE TESTING:

1. What is hard ware?
2. What are Programs?
3. How the Computer gets the instructions?

VOCABULARY USED

Operating System, Utility Programs, Multimedia Software, Graphics Software

IMPORTANT SPELLINGS USED

Compression, DBMS, Presentation Software, Back Up

AIDS/ INNOVATIVE METHODS

 E-book, Visual Clues, Links of videos related to the topic

PROCEDURE

This chapter will be taught by giving the demonstration of Mobile Phone. The body of the mobile will represent hardware whereas the apps and the data inside is known as Software. The chapter will be read aloud in the class and all the technical terms will be explained. Then the pupils will be given several examples such as Windows, MS Word, MS Excel, Photoshop, Paint and would be asked to discuss in a group to differentiate between System software and application Software.

CO-SCHOLASTIC ACTIVITIES

Students will be assigned an activity

Activity 1: Given the examples of various Software's as

 Windows 7, MS Paint, MS Word, Media Player, Adobe Photoshop, Apple ios

1. Make two columns and give the heading as **System Software** and **Applications Software.**
2. Arrange the above given names in their respective columns.

Activity 2. Write the name of the application software which would be used to do the specific task.

1. To write the letter and send it to 10 friends.
2. To create the Marksheet of 10 students and find their percentage.

3. To edit the picture.
4. To create animated movie.

RECAPITULATION: The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

1. What is Software?
2. Define Operating System.
3. What is the use of Multimedia Software?

RESOURCES

A Textbook of class 7 Hyperlink by Kips

ASSESSMENT

It will be done on the basis of periodic test, class response, oral test, activities, quiz, MCQ's etc.

MONTH: MAY

TOPIC: MICROSOFT WINDOWS 7

LEARNING OBJECTIVES: After studying this chapter students will

By the end of the chapter, the students will know about:
- Media player
- Multiple windows
- Pictures
- Disk clean-up
- Pin and unpin

PREVIOUS KNOWLEDGE TESTING:

1. How the data in Computer is organized?
2. What is the difference between File and a Folder?
3. How do you locate a file in Computer?

VOCABULARY USED

Operating System, Utility Programs, Multimedia Software, Graphics Software

IMPORTANT SPELLINGS USED

Small Icons view, Medium Icons view, List view, Content view, Control Panel

AIDS/ INNOVATIVE METHODS

 E-book, Visual Clues, Links of videos related to the topic

PROCEDURE

 This chapter will be taught by giving the demonstration of Mobile Phone. As the Operating System used in the Mobile Phones is Android or ios for Apple. Similarly, Computer uses the Windows operating System. The method of organizing the File and Folder, Pinning and Unpinning of the Program to the task bar, Searching Files and Folders and the Usage of Control Panel will be elaborated.

CO-SCHOLASTIC ACTIVITIES

Students will be assigned an activity

 Activity:

 Type 'Computer' in the search box and click on **See more results** link.

 A list of all files and folders that have the word '**Computer**' as their name or as

part of their   name will be displayed.

What you will type in the Search box in order to display all the MS Word files?

RECAPITULATION: The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

4. In how many parts is the Windows Explorer divided? What does each part contain?
5. What is the important of Control Panel in Windows?
6. Name the different View formats.

RESOURCES

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ASSESSMENT

It will be done on the basis of periodic test, class response, oral test, activities, quiz, MCQ's etc.

MONTH: JULY

TOPIC: LOG ON TO MS EXCEL 2007

LEARNING OBJECTIVES: After studying this chapter students will know

Features of Spread sheet, Learn to Open, Save and Close a Spread sheet, Components of Excel,
Types of data in Spread sheet, moving around the spreadsheet, Entering data, Understand Operators and Simple Formulas in Excel

PREVIOUS KNOWLEDGE TESTING:

1. What are Rows and Columns?
2. Difference between Workbook and Worksheet?
3. How do you perform calculations?

VOCABULARY USED

Workbook, Work Sheet, Cell reference, Name box, Active Cell

IMPORTANT SPELLINGS USED

Sheet Tabs, Auto Sum, Merge and Center, Average

AIDS/ INNOVATIVE METHODS

 E-book, Visual Clues, Links of videos related to the topic

PROCEDURE

This chapter will be taught through smart board. Teacher will give the demonstration by introducing MS Excel to the students with day-to-day example of tabular data. Further the features of MS Excel along with the steps to be used while opening MS excel and various components of MS Excel will be illustrated. Then the teacher would explain them MS Excel interface and entering of data in worksheet. Also tell them about data type used in MS Excel and calculation in MS Excel.

CO-SCHOLASTIC ACTIVITIES

Activity

The students will be asked to open MS Excel and Create a Marksheet of their class. Also insert some data pertaining to the students of their class in the worksheet. Now calculate the total marks and average of each student.

RECAPITULATION: The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

1. What is known as workbook?
2. Which component of Excel displays the name of the workbook?
3. How a column in MS Excel can be identified?
4. Where data is added in a workbook?
5. Which type of formula has more than one mathematical operator?

RESOURCES

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ASSESSMENT

It will be done on the basis of periodic test, class response, oral test, activities, quiz, MCQ's etc.

MONTH: AUGUST

TOPIC: EDITING A WORKSHEET

LEARNING OBJECTIVES: After studying this chapter students will know about

- Selecting cells
- Entering numbers as text, date and time
- Changing contents
- Undo and redo
- Inserting columns and rows
- Copying and moving
- Auto fill

PREVIOUS KNOWLEDGE TESTING:

1. What is a cell?
2. Define Formula?
3. How you perform complex calculations?

VOCABULARY USED

Workbook, Work Sheet, Cell reference, Name box, Active Cell

IMPORTANT SPELLINGS USED

Adjacent Rows/ Columns, Using Undo and Redo feature, Auto fill feature

AIDS/ INNOVATIVE METHODS

E-book, Visual Clues, Links of videos related to the topic

PROCEDURE

This chapter will be taught through smart board. Teacher will give the demonstration by explaining selecting and deselecting cells by using the keyboard and mouse in Excel. Further explain about entering numbers as a text, date and time as well as changing contents in a cell. Further explain them about undo and redo commands along with their usage. Illustrate them about inserting columns and rows. Also tell them about copying and moving. Explain the feature of Autofill to generate various sequences. Explain the student about various data type like numbers, text, date and time. Explain Autofill series and demonstrate how to use auto fill series to generate various series.

CO-SCHOLASTIC ACTIVITIES

Activity 1. Open the Excel Worksheet.

2. Enter a rectangular array of numbers, like

Row 1	Row 2	Average
12	22	
11	14	
10	2	
4	16	

3. Evaluate the average of the first row of numbers data.

4. Use the auto fill handle to copy the formula.

5. Check if the value of average is accurate.

Activity 2.

Ask the students to open MS Excel and Create a Worksheet of their class. Now ask them to copy a column at different places. Also ask them to move a row to a new place. Also give them the task of entering date and time and using various date and time functions with shortcut keys.

RECAPITULATION: The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

1. What are functions in Excel? Name some functions.
2. What is Cell reference?
3. Which function returns today's date (current date)?
4. What is the shortcut key to add current date?
5. Which facility will help us in generating sequences?

RESOURCES

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ASSESSMENT

It will be done on the basis of periodic test, class response, oral test, activities, quiz, MCQ's etc.

MONTH: SEPTEMBER

TOPIC: FORMULAS AND FUNCTIONS

LEARNING OBJECTIVES: After studying this chapter students will

Learn to prepare a Spread sheet, Understand Operators and Functions in Excel, Know to Format the worksheet, learn to use Compound Formulas

PREVIOUS KNOWLEDGE TESTING:

1. What do you mean by Cell Reference?
2. What do you understand by Range in Excel?
3. How you perform complex calculations?

VOCABULARY USED

Cell reference, Relative Reference, Absolute reference, Mixed reference

IMPORTANT SPELLINGS USED

SUM, MAX, MIN, AVERAGE, NOT, AND, OR, SQRT, POWER

AIDS/ INNOVATIVE METHODS

 E-book, Visual Clues, Links of videos related to the topic

PROCEDURE

This chapter will be taught through smart board. Teacher will explain the operators and various formulas as they are used in mathematics. Also, they will be explained about types of formulas used in MS Excel and cell reference. The common functions and their usage would be illustrated by using tabular data. Further, inserting, renaming and deleting, changing the colour of Sheet tab of a worksheet will be explained.

CO-SCHOLASTIC ACTIVITIES

Activity 1. Open the Excel Worksheet.

4. Enter a rectangular array of numbers, like

Row 1	Row 2	Average
12	22	
11	14	
10	2	
4	16	

3. Evaluate the average of the first row of numbers data.

4. Use the auto fill handle to copy the formula.

5. Check if the value of average is accurate.

Activity 2.

1. Open the Excel Sheet.

2. Tabulate some data such that these are in 2 columns like:

X-axis	Y-axis
0	120
360	110
60	125
90	132

RECAPITULATION: The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

4. What are functions in Excel? Name some functions.
5. What is Cell reference?
6. What is a function?

RESOURCES

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ASSESSMENT

It will be done on the basis of periodic test, class response, oral test, activities, quiz, MCQ's etc.

MONTH: OCTOBER

TOPIC: USING EXCEL AS DATABASE

LEARNING OBJECTIVES: After studying this chapter students will know about

Database, Adding a new record, Searching and deleting a record, Sorting and Filtering data, Data Validation, Subtotal, Pivot table

PREVIOUS KNOWLEDGE TESTING:

1. What are Rows and Columns?
2. How you organize the records?
3. How you perform complex calculations?

VOCABULARY USED

Workbook, Work Sheet, Cell reference, Name box, Active Cell

IMPORTANT SPELLINGS USED

SUM, MAX, MIN, AVERAGE, NOT, AND, OR, Relative, Absolute, Mixed Reference

AIDS/ INNOVATIVE METHODS

 E-book, Visual Clues, Links of videos related to the topic

PROCEDURE

This chapter will be taught through smart board. Teacher will give the introduction of Database with day-today examples and connect excel to the database and insert a new record. The pupils will be taught about searching, deleting, sorting and filtering in database. Furthermore, the concept of Data Validation, Sub Total and Pivot Table will be elaborated.

CO-SCHOLASTIC ACTIVITIES

Activity 1. Open the Excel Worksheet.

2. Enter some records and use advanced filter option in the database. Also apply data validation on any column.

Activity 2.

3. Open the Excel Sheet.
4. Tabulate some data such that these are in 2 columns like:

X-axis	Y-axis
0	120
360	110
60	125
90	132

RECAPITULATION: The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

1. What can be used as a database?

2. What is arranging data in a particular order called?

3. In how many ways data can be sorted in Excel?

4. How the data can be filtered in Excel?

RESOURCES

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ASSESSMENT

It will be done on the basis of periodic test, class response, oral test, activities, quiz, MCQ's etc.

MONTH: NOVEMBER

TOPIC: ADVANCE FEATURES OF EXCEL

LEARNING OBJECTIVES: After studying this chapter students will know about

Various charts and its components, Creating Charts, Commonly used Charts, Formatting Chart and Legend, Inserting picture in Chart, Goal Seek, Consolidating and grouping Worksheet, Goal Seek, Consolidating and Grouping Worksheet

PREVIOUS KNOWLEDGE TESTING:

1. What do you need to represent the data of population Survey graphically?
2. How you represent the atmosphere of earth in terms of various gases?
3. How the marksheets of Ist and 2nd terms are combined to give the result of Final term ?

VOCABULARY USED

Charts, Goal Seek, Consolidation, Grouping,

IMPORTANT SPELLINGS USED

Line Chart, Bar Chart, Pie Chart, Area Chart, Sub Total, Legend

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 E-book, Visual Clues, Links of videos related to the topic

PROCEDURE

This chapter will be taught through smart board. Teacher will give the demonstration by manually taking the example of Tabular data and explaining each type of charts such as Column Chart, Bar Chart, Pie Chart, Area Chart, Line Chart, XY Chart. Formatting of Charts such as changing backgrounds, colors and patterns of the Legend and the Data Series will be taught. Further, the concept of Consolidating the data and Grouping of Worksheets will be illustrated.

CO-SCHOLASTIC ACTIVITIES

Activity 1. Open the Excel Worksheet.

Create two columns. Make the headings as **Year** and **Population of India** respectively.

In the first column Write the series of years from 2001 -2020 and in the Second column Enter the population surveyed in various years. Then based on this data Create the Column and Bar Chart .

- Specify the X-axis and Y-axis title.
- Format the legend by changing its color, text color, and Border style.

RECAPITULATION: The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

1. Describe the usage of Charts.
2. What are Charts? Explain different types of Charts.
3. Briefly explain the term Legend.
4. What is meant by Consolidating Data?

RESOURCES

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ASSESSMENT

It will be done on the basis of periodic test, class response, oral test, activities, quiz, MCQ's etc.

MONTH: NOVEMBER

TOPIC: GRAPHICS IN QBASIC

LEARNING OBJECTIVES: After studying this chapter students will know about

- Constants and Variables
- Input and Print Statement
- Using Graphics in QBasic
- Screen statement
- Color, Line, Circle statements, Drawing Boxes
- Creating Sound

PREVIOUS KNOWLEDGE TESTING:

1. What is the use of studying Programming Language?
2. Name some of the Computer Programming Languages.
3. How the gaming apps are created?

VOCABULARY USED

Character and Numeric Constants, Numeric and String Variables, CLS, GOTO

AIDS/ INNOVATIVE METHODS

 E-book, Visual Clues, Links of videos related to the topic

IMPORTANT SPELLINGS USED

If…. Then….. Else, Resolution, Syntax, Beep, Play

PROCEDURE

This chapter will be taught by taking the previous concepts as Variables and Constants. The types of Constants and Variables will be discussed. The use of various QBasic statements as CLS, PRINT, INPUT will be discussed. The pupils would be explained the concept of Graphics as used in various gaming Apps. Thus creating Drawing with the help of several commands as Line, Circle, Color and Screen Statements would be thoroughly illustrated.

CO-SCHOLASTIC ACTIVITIES

Activity 1. Open the QBasic interface.

- Write a Program to generate the following series as 1,3,5,7,9.
- Write a Program to draw a square of 100x100 pixels whose centre lies at the centre of screen.
- Write a program to draw an equilateral triangle.

RECAPITULATION: The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

1. What is the use of Input and Print Statement?
2. What do you understand by the term screen modes?
3. How can you draw a rectangle? Give an example.

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ASSESSMENT

It will be done on the basis of periodic test, class response, oral test, activities, quiz, MCQ's etc.

MONTH: JANUARY

TOPIC: LOOPING STATEMENTS

LEARNING OBJECTIVES: After studying this chapter students will know about

- FOR……NEXT
- NESTED FOR
- WHILE…. WEND
- DO…. WHILE

PREVIOUS KNOWLEDGE TESTING:

1. What is the use of studying Programming Language?
2. Name some of the Computer Programming Languages.
3. How the gaming apps are created?

VOCABULARY USED

Inner Loop, Outer Loop, Do Until,

IMPORTANT SPELLINGS USED

If…. Then….. Else, Control Variable, Initial Value, Final value

PROCEDURE

This chapter will be taught by taking numerous real life examples to explain the concept of Loop as Earth is continuously rotating around sun to cause the motion of day and night. Its an infinite loop. The needles of the Clock will continuously move till the cells in the Clock are working. Then the various Looping statements will be discussed such as FOR…. Next, While…. Wend, Do….. Until

CO-SCHOLASTIC ACTIVITIES

Activity 1. Open the QBasic interface.

- Write a Program to generate the following series as 1,3,5,7,9 using For… Next loop.
- Write a Program to print first 10 multiples of 5, 6, 7 using all the loops.

RECAPITULATION: The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

1. What do you understand by the term looping?
2. What is the difference between While…Wend and Do…. Until?
3. What is Nested Loop?

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ASSESSMENT

It will be done on the basis of periodic test, class response, oral test, activities, quiz, MCQ's etc.

MONTH: JANUARY

TOPIC: SURFING NET AND E-MAIL

LEARNING OBJECTIVES: After studying this chapter students will know about

- Various Services of Internet such as Email, Blogs, Instant messaging etc.
- Composing and Sending Mail
- Adding a new Contact
- Editing and Deleting a Contact
- Creating groups
- Sending E-Greetings

PREVIOUS KNOWLEDGE TESTING:

1. What do you mean by World Wide Web?
2. What is Browser and Search engine?
3. How do you send the Documents and Files to each other?

VOCABULARY USED

Online libraries, Chat Rooms, Blogs, Domain Name

IMPORTANT SPELLINGS USED

Composing and Sending mail, New Contact, Delete contact

AIDS/ INNOVATIVE METHODS

 E-book, Visual Clues, Links of videos related to the topic

PROCEDURE

This chapter will be taught by explaining the concept of Network and types of Network as LAN, MAN, WAN. Further, the important example of WAN i.e. INTERNET and its services will be discussed. Then the concept of BLOG would be explained. Furthermore, the topic Email and its components as Username and Domain Name would be discussed. In addition, the practical of Composing and Sending mail would be shown on Smart Board. Also, the procedure of Creating, Editing and Deleting the Email contacts would be illustrated. At the end, the usage of E-Greetings in our today's times will be highlighted and the manual demonstration of sending the E-Greetings to our friends would be taken.

CO-SCHOLASTIC ACTIVITIES

Students will be arranged in the group of 4 and assign an activity

Activity: Visit the site – www.bing.com, collect information and pictures of the most respected Indian IT personalities- "Sh. Narayan Murthy"(Co-founder of Infosys) and the Apple founder "Steve Jobs". Create a beautiful presentation of minimum six slides on these two personalities.

RECAPITULATION: The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

1. Explain the term Blog.
2. What are contacts? How will you add a contact to your Address Book?
3. What are groups?

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ASSESSMENT

It will be done on the basis of periodic test, class response, oral test, activities, quiz, MCQ's etc.