

# **Galaxy Public School**

## **Syllabus**

### **Information Technology**

**(SUBJECT CODE - 402)**

**Class -9<sup>th</sup>**

### DETAILED CURRICULUM/TOPICS:

#### Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-I	10
2.	Unit 2: Self-Management Skills-I	10
3.	Unit 3: Basic Information and Communication Technology Skills-I	10
4.	Unit 4: Entrepreneurial Skills-I	15
5.	Unit 5: Green Skills-I	05
	<b>TOTAL</b>	<b>50</b>

**NOTE:** Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

#### Part-B – SUBJECT SPECIFIC SKILLS

<b>UNIT 1: INTRODUCTION TO IT-ITeS INDUSTRY</b>			
S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1	Appreciate the applications of IT	<ul style="list-style-type: none"><li>• Introduction to IT and ITeS, BPO services,</li><li>• BPM industry in India,</li><li>• Structure of the IT-BPM industry,</li><li>• Applications of IT in home computing, everyday life, library, workplace, education, entertainment, communication, business, science and engineering, banking, insurance, marketing, health care, IT in the government and public service,</li></ul>	<ul style="list-style-type: none"><li>- Identify and list the various IT enabled services, Observe the application of IT in various areas.</li></ul>

## UNIT 2: DATA ENTRY AND KEYBOARDING SKILLS

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Use keyboard and mouse for data entry	<ul style="list-style-type: none"> <li>• Keyboarding Skills,</li> <li>• Types of keys on keyboard, Numeric keypad,</li> <li>• Home keys, Guide keys,</li> <li>• Typing and deleting text,</li> <li>• Typing ergonomics,</li> <li>• Positioning of fingers on the keyboard, Allocation of keys to fingers on four different rows,</li> <li>• Pointing device – Mouse, Mouse operations.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the keys and its use on the keyboard,</li> <li>• Demonstrate to use various keys on the keyboard,</li> <li>• Demonstrate to type the text, numbers, special character using appropriate keys on the keyboard,</li> <li>• Practice the correct typing ergonomics,</li> <li>• Practice to place fingers on correct key in four different row of keyboard,</li> <li>• Practice various mouse operations.</li> </ul>
2.	Use typing software	<ul style="list-style-type: none"> <li>• Introduction to Rapid Typing Tutor,</li> <li>• Touch typing technique,</li> <li>• User interface of Typing Tutor,</li> <li>• Typing text and interpret results,</li> <li>• Working with lesson editor,</li> <li>• Calculating typing speed,</li> <li>• Typing rhythm.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the user interface of typing tutor,</li> <li>• Practice to type text in typing tutor software and interpret the results,</li> <li>• Practice to work in lesson editor,</li> <li>• Calculate the typing speed</li> <li>• Practice to improve typing</li> <li>• Using typing tutor software.</li> </ul>

### UNIT 3: DIGITAL DOCUMENTATION

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create a document using a word processor	<ul style="list-style-type: none"> <li>• Introduction to word processing,</li> <li>• Word processing applications,</li> <li>• Introduction to Word Processing tool</li> <li>• Creating a document, Parts of a Word Processor Window,</li> </ul>	<ul style="list-style-type: none"> <li>• List the available word processing applications.</li> <li>• Introduce with the parts of the main window.</li> <li>• Change document views.</li> <li>• Start a new document.</li> <li>• Open an existing document.</li> <li>• Save a document.</li> <li>• Close a document.</li> </ul>
2.	Apply Editing features	<ul style="list-style-type: none"> <li>• Text editing – Undo and Redo,</li> <li>• Moving and copying text,</li> <li>• Copy and Paste,</li> <li>• Selecting text,</li> <li>• Selection criteria,</li> <li>• Selecting non-consecutive text items,</li> <li>• Selecting a vertical block of text,</li> <li>• Find and replace option,</li> <li>• Jumping to the page number,</li> <li>• Non-printing characters,</li> <li>• Checking spelling and grammar,</li> <li>• Using Synonyms and Thesaurus.</li> </ul>	<ul style="list-style-type: none"> <li>• Editing of text in a document</li> <li>• Demonstrate to use undo and redo option,</li> <li>• Use the keyboard and mouse options to select, cut, copy, paste, and move text.</li> <li>• Demonstrate to select nonconsecutive text items, vertical block of text,</li> <li>• Search and replace text in a document.</li> <li>• Jump to the given page number in a document,</li> <li>• Insert non-printing characters in a document,</li> <li>• Apply Spelling and grammar option of document.</li> <li>• Demonstrate to use Synonyms and Thesaurus.</li> </ul>

<b>S. No.</b>	<b>LEARNING OUTCOMES</b>	<b>THEORY</b>	<b>PRACTICAL</b>
3.	Apply formatting features	<ul style="list-style-type: none"> <li>• Page style dialog</li> <li>• Formatting text – Removing manual formatting, Common text formatting, Changing text case, Superscript and Subscript</li> <li>• Formatting paragraph – Indenting paragraphs, Aligning paragraphs, Font colour, highlighting, and background colour, Using bullets and numbering, Assigning colour, border and background to paragraph.</li> <li>• Page formatting – setting up basic page layout using styles, Inserting page break, Creating header/footer and page numbers,</li> <li>• Defining borders and backgrounds, Inserting images shapes, special characters in a document, Dividing page into columns, Formatting the shape or image.</li> </ul>	<ul style="list-style-type: none"> <li>• Apply various text formatting options for the text,</li> <li>• Demonstrate to format paragraphs – indent/align paragraphs, assign font colour, highlighting, and background colour,</li> <li>• Assign number or bullets to the lists items</li> <li>• Demonstrate to assign colour, border and background to paragraph</li> <li>• Demonstrate the page formatting – set up basic page layout using styles,</li> <li>• Insert page break, Create header/footer and page numbers</li> <li>• Define borders and backgrounds</li> <li>• Insert images, shapes, special characters in a document</li> <li>• Divide page into columns,</li> <li>• Format the shape or image.</li> </ul>
4.	Create and work with tables	<ul style="list-style-type: none"> <li>• Creating table in Word Processor</li> <li>• Inserting row and column in a table</li> <li>• Deleting rows and columns</li> <li>• Splitting and merging tables</li> <li>• Deleting a table</li> <li>• Copying a table</li> <li>• Moving a table.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate and do the following in Word Processor:</li> <li>• Create table,</li> <li>• Insert and delete rows and column in a table,</li> <li>• Split and merge tables,</li> <li>• Delete a table,</li> <li>• Copy or move from one location to another location of document.</li> </ul>
5.	Use Print Options	<ul style="list-style-type: none"> <li>• Printing options in Word Processor.</li> <li>• Print preview,</li> <li>• Controlling printing,</li> <li>• Printing all pages, single and multiple pages.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to print the document, selected pages in the document</li> <li>• Print the document with various options,</li> <li>• Preview pages before printing.</li> </ul>

<b>S. No.</b>	<b>LEARNING OUTCOMES</b>	<b>THEORY</b>	<b>PRACTICAL</b>
6.	Understand and apply mail merge	<ul style="list-style-type: none"> <li>• Introduction to mail merge</li> <li>• Concept of data source for mail merge.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to print the letters using mail merge,</li> <li>• Do the following to achieve</li> <li>• Create a main document,</li> <li>• Create the data source,</li> <li>• Enter data in the fields,</li> <li>• Merge the data source with main document,</li> <li>• Edit individual document,</li> <li>• Print the merged letter,</li> <li>• Save the merged letter.</li> </ul>

#### **UNIT 4: ELECTRONIC SPREADSHEET**

<b>S. No.</b>	<b>LEARNING OUTCOMES</b>	<b>THEORY</b>	<b>PRACTICAL</b>
1.	Create a Spreadsheet	<ul style="list-style-type: none"> <li>• Introduction to spreadsheet application</li> <li>• Starting a spreadsheet</li> <li>• Parts of a spreadsheet</li> <li>• Worksheet – Rows and Columns, Cell and Cell Address,</li> <li>• Range of cells – column range, row range, row and column range.</li> </ul>	<ul style="list-style-type: none"> <li>• Start the spreadsheet,</li> <li>• Identify the parts of Calc,</li> <li>• Identify the rows number, column number, cell address,</li> <li>• Define the range of cell,</li> <li>• Identify row range, column range, row &amp; column range</li> </ul>
2.	Apply formula and functions in spreadsheet	<ul style="list-style-type: none"> <li>• Different types of data,</li> <li>• Entering data – Label, Values, Formula</li> <li>• Formula, how to enter formula,</li> <li>• Mathematical operators used in formulae,</li> <li>• Simple calculations using values and operators,</li> <li>• Formulae with cell addresses and operators,</li> <li>• Commonly used basic functions in a spreadsheet – SUM, AVERAGE, MAX, MIN, Count</li> <li>• Use of functions to do calculations.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to enter the text, numeric data in a cell,</li> <li>• Identify the label, values and formula in the cell,</li> <li>• Demonstrate to enter formula in a cell,</li> <li>• Construct the formula using mathematical operators,</li> <li>• Identify formulae with cell addresses and operators,</li> <li>• Identify the correct syntax of formula,</li> <li>• Use the basic functions to perform calculations on data.</li> </ul>

<b>S. No.</b>	<b>LEARNING OUTCOMES</b>	<b>THEORY</b>	<b>PRACTICAL</b>
3.	Format data in the spreadsheet	<ul style="list-style-type: none"> <li>• Formatting tool,</li> <li>• Use of dialog boxes to format values,</li> <li>• Formatting a range of cells with decimal places,</li> <li>• Formatting a range of cells to be seen as labels,</li> <li>• Formatting of a cell range as scientific,</li> <li>• Formatting a range of cells to display times,</li> <li>• Formatting alignment of a cell range,</li> <li>• Speeding up data entry using the fill handle,</li> <li>• Uses of fill handle to copy formulae.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the formatting tool,</li> <li>• Demonstrate to use of dialog boxes to format values,</li> <li>• Demonstrate to format range of cells with decimal places,</li> <li>• Demonstrate to format a range of cells to labels,</li> <li>• Demonstrate to format of a cell range as scientific,</li> <li>• Demonstrate to format a range of cells to display time,</li> <li>• Demonstrate to align cell data range,</li> <li>• Demonstrate to create number series using fill handle,</li> <li>• Copy formula by dragging the formula using fill handle.</li> </ul>
4.	Understand and apply Referencing	Concept of referencing, <ul style="list-style-type: none"> <li>• Relative referencing,</li> <li>• Mixed referencing,</li> <li>• Absolute referencing.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to use Relative referencing in spreadsheet,</li> <li>• Demonstrate to use Mixed referencing in spreadsheet,</li> <li>• Demonstrate to use Absolute referencing in spreadsheet.</li> </ul>
5.	Create and insert different types of charts in a spreadsheet	<ul style="list-style-type: none"> <li>• Importance of chart in spreadsheet</li> <li>• Types of chart</li> </ul>	<ul style="list-style-type: none"> <li>• Create different types of charts supported by a spreadsheet,</li> <li>• Illustrate the example of chart in a spreadsheet.</li> </ul>

## UNIT 5: DIGITAL PRESENTATION

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Understand features of an effective presentation	<ul style="list-style-type: none"> <li>• Concept of presentation,</li> <li>• Elements of presentation,</li> <li>• Characteristics of an effective presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and list the elements of presentation,</li> <li>• List the characteristics of an effective presentation.</li> </ul>
2.	Create a presentation	<ul style="list-style-type: none"> <li>• Introduction to presentation software,</li> <li>• Opening a presentation software</li> <li>• Parts of presentation window,</li> <li>• Closing a presentation</li> <li>• Creating a presentation using template,</li> <li>• Selecting slide layout,</li> <li>• Saving a presentation,</li> <li>• Running a slide show,</li> <li>• Save a presentation in PDF,</li> <li>• Closing a presentation,</li> <li>• Using Help.</li> </ul>	<ul style="list-style-type: none"> <li>• Start the presentation application</li> <li>• various components of main Impress window</li> <li>• Observe the different workspace views.</li> <li>• Create a new presentation using wizard.</li> <li>• Run the presentation,</li> <li>• Save the presentation,</li> <li>• Close the presentation,</li> <li>• Demonstrate to use Help in presentation.</li> </ul>
3.	Work with slides	<ul style="list-style-type: none"> <li>• Inserting a duplicate slide,</li> <li>• Inserting new slides,</li> <li>• Slide layout,</li> <li>• Copying and moving slides,</li> <li>• Deleting and renaming slides</li> <li>• Copying, moving and deleting contents of slide,</li> <li>• View a presentation,</li> <li>• Controlling the size of the view,</li> <li>• Workspace views – Normal, Outline, Notes, Slide sorter view.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to insert a new slide and duplicate slide in a presentation,</li> <li>• Change the slide layout,</li> <li>• Demonstrate to copy and move slides in the presentation,</li> <li>• Demonstrate to copy, move and delete contents of the slide,</li> <li>• Demonstrate to view a presentation in different views.</li> </ul>



<b>S. No.</b>	<b>LEARNING OUTCOMES</b>	<b>THEORY</b>	<b>PRACTICAL</b>
4.	Format text and apply animations	<ul style="list-style-type: none"> <li>• Formatting toolbar,</li> <li>• Various formatting features,</li> <li>• Text alignment,</li> <li>• Bullets and numbering.</li> <li>• Custom Animation</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and list the various options in formatting toolbar,</li> <li>• Apply the appropriate formatting option</li> <li>• Align the text in presentation,</li> <li>• Apply bullets and numbering to the list items in presentation. □ Apply Animation</li> </ul>
5.	Create and use tables	<ul style="list-style-type: none"> <li>• Inserting tables in presentation,</li> <li>• Entering and editing data in a table,</li> <li>• Selecting a cell, row, column, table,</li> <li>• Adjusting column width and row height,</li> <li>• Table borders and background</li> </ul>	<p>Demonstrate the following:</p> <ul style="list-style-type: none"> <li>• Insert table in presentation,</li> <li>• Enter and edit data in a table,</li> <li>• Select a cell, row, column, table,</li> <li>• Adjust column width and row height,</li> <li>• Assign table borders and background.</li> </ul>
6.	Insert and format image in presentation	<ul style="list-style-type: none"> <li>• Inserting an image from a file,</li> <li>• Inserting an image from the gallery,</li> <li>• Formatting images,</li> <li>• Moving images,</li> <li>• Resizing images,</li> <li>• Rotating images,</li> <li>• Formatting using the Image toolbar,</li> <li>• Drawing graphic objects – line, shapes,</li> <li>• Grouping and un-grouping objects</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to insert an image from file, gallery in presentation,</li> <li>• Apply formatting options to image in presentation,</li> <li>• Demonstrate to move, resize and rotate images,</li> <li>• Apply formatting options of Image toolbar,</li> <li>• Drawing line, shapes using graphic objects,</li> <li>• Demonstrate to group and ungroup objects.</li> </ul>
7.	Work with slide master	<ul style="list-style-type: none"> <li>• Slide masters,</li> <li>• Creating the slide masters,</li> <li>• Applying the slide masters to all slide,</li> <li>• Adding transitions.</li> </ul>	<ul style="list-style-type: none"> <li>• Create the slide masters,</li> <li>• Apply the slide masters to the presentation,</li> <li>• Add transitions to presentation.</li> </ul>