# CBSE | DEPARTMENT OF SKILL EDUCATION CURRICULUM FOR SESSION 2024-2025

# INFORMATION TECHNOLOGY (SUB. CODE – 402) JOB ROLE: DOMESTIC DATA ENTRY OPERATOR

# CLASS – IX

#### **COURSE OVERVIEW:**

A Data Entry Operator/Analyst is a person who is responsible for entering data into different applications and computer databases, manage and maintain effective record keeping. In addition, S/he is responsible for organizing files, collecting and managing data to be entered into the computer. S/he is also responsible for security of data and safeguard of the computer network.

With every office and organization seeking to become computerized, the demand for data entry operators/analysts is on a rise. Data entry operators/analysts usually work in an indoor, office setting using a computer and other electronic machines. To be in the profession of data entry/analysis, one has to have computer literacy, high typing speed, organization skills, concentration skills, communication skills and an ability to sit for long periods of time entering and computing data.

#### **OBJECTIVES OF THE COURSE:**

In this course, the students will be introduced to the fundamental concepts of digital documentation, digital spreadsheet, digital presentation, database management and internet security.

The following are the main objectives of this course:

- To familiarize the students with the world of IT and IT enabled services.
- To provide an in-depth training in use of data entry, internet and internet tools.
- To develop practical knowledge of digital documentation, spreadsheets and presentation.
- To enable the students to understand database management system and have updated knowledge about digital record keeping.

- To make the students capable of getting employment in Private Sector, Public Sector, Ministries, Courts, House of Parliament and State Legislative Assemblies.
- To develop the following skills:
  - Data Entry and Keyboarding skills
  - The concept of Digital Documentation
  - The concept of Digital Presentation
  - The concept of Electronic Spreadsheet
  - The concept of Databases
  - Internet Technologies

#### SALIENT FEATURES

To be a data entry operator/analyst, one requires a lot of hard work and practical hands-on experience. One should have an intensive knowledge of Office applications, computer operations, and knowledge of clerical, administrative techniques and data analysis. Along with this, as a data entry operator/analyst, you will be expected to have fast typing speed, accuracy, and efficiency to perform tasks.

As a data entry operator/analyst, one should improve their computer skills, numerical and literacy skills. These skills can help one expand into a new career path in the future.

#### SCHEME OF UNITS

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class IX opting for skill subject along with other education subjects. The unit-wise distribution of hours and marks for class IX is as follows:

# **INFORMATION TECHNOLOGY (SUBJECT CODE - 402)**

CLASS - IX (Session 2024-2025)

Total Marks: 100 (Theory-50 + Practical-50)

	UNITS	for	F HOURS Theory Practical	MAX. MARKS for Theory and Practical
	Employability Skills			
	Unit 1 : Communication Skills-I	10		2
4	Unit 2 : Self-Management Skills-I		10	3
Part A	Unit 3 : ICT Skills-I		10	1
ŭ	Unit 4 : Entrepreneurial Skills-I		15	3
	Unit 5 : Green Skills-I		05	1
	Total		50	10
	Subject Specific Skills	Theory	Practical	Marks
日	Unit 1: Introduction to IT- ITeS industry	2	4	4
Part	Unit 2: Data Entry & Keyboarding Skills	4	10	6
	Unit 3: Digital Documentation	10	26	10
	Unit 4:Electronic Spreadsheet	18	35	10
	Unit 5: Digital Presentation	10	31	10
	Total	44	106	40
U	Practical Work			
Part	Practical Examination			15
ے م	Written Test			10
	Viva Voce			10
	Total			35
D	Project Work/ Field Visit			
Part	Practical File/ Student Portfolio			10
Ľ	Viva Voce			05
	Total			15
	GRAND TOTAL		200	100

#### 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
	TOTAL	50

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

#### Part-B – SUBJECT SPECIFIC SKILLS

- Unit 1: Introduction to IT- ITeS industry
- Unit 2: Data Entry & Keyboarding Skills
- Unit 3: Digital Documentation
- Unit 4: Electronic Spreadsheet
- Unit 5: Digital Presentation

#### UNIT 1: INTRODUCTION TO IT-ITeS INDUSTRY

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1	Appreciate the applications of IT	<ul> <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> <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> <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> <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> <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> <li>Identify the user interface of</li> <li>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> <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> <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> <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> </ul>	<ul> <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> </ul>

S.	LEARNING	THEORY	PRACTICAL
No.	OUTCOMES	<ul> <li>Selecting non-consecutive text items,</li> <li>Selecting a vertical block of</li> <li>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> <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>
3.	Apply formatting features	<ul> <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> <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> </ul>
4.	Create and work with tables	<ul> <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> <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>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
5.	Use Print Options	<ul> <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> <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>
6.	Understand and apply mail merge	<ul> <li>Introduction to mail merge</li> <li>Concept of data source for mail merge.</li> </ul>	<ul> <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**

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create a Spreadsheet	<ul> <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> <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> <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> <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>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Format data in	Formatting tool,	Identify the formatting tool,
	the spreadsheet	<ul> <li>Use of dialog boxes to format values,</li> </ul>	Demonstrate to use of dialog boxes to format values,
		<ul> <li>Formatting a range of cells with decimal places,</li> </ul>	• Demonstrate to format range of cells with decimal places,
		<ul> <li>Formatting a range of cells to be seen as labels,</li> </ul>	• Demonstrate to format a range of cells to labels,
		<ul> <li>Formatting of a cell range as scientific,</li> </ul>	• Demonstrate to format of a cell range as scientific,
		<ul> <li>Formatting a range of cells to display times,</li> </ul>	• Demonstrate to format a range of cells to display time,
		<ul> <li>Formatting alignment of a cell range,</li> </ul>	• Demonstrate to align cell data range,
		<ul> <li>Speeding up data entry using the fill handle,</li> </ul>	<ul><li>Demonstrate to create</li><li>number series using fill handle,</li></ul>
		<ul> <li>Uses of fill handle to copy formulae.</li> </ul>	• Copy formula by dragging the formula using fill handle.
4.	Understand and apply Referencing	<ul> <li>Concept of referencing,</li> <li>Relative referencing,</li> <li>Mixed referencing,</li> <li>Absolute referencing.</li> </ul>	<ul> <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> <li>Importance of chart in spreadsheet</li> <li>Types of chart</li> </ul>	<ul> <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> <li>Concept of presentation,</li> <li>Elements of presentation,</li> <li>Characteristics of an effective presentation</li> </ul>	<ul> <li>Identify and list the elements of presentation,</li> <li>List the characteristics of an effective presentation.</li> </ul>
2.	Create a presentation	<ul> <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> <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>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Work with slides	<ul> <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> <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>
4.	Format text and apply animations	<ul> <li>Formatting toolbar,</li> <li>Various formatting features,</li> <li>Text alignment,</li> <li>Bullets and numbering.</li> <li>Custom Animation</li> </ul>	<ul> <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.  <ul> <li>Apply Animation</li> </ul> </li> </ul>
5.	Create and use tables	<ul> <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>	<ul> <li>Demonstrate the following:</li> <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> <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> <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> <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> <li>Create the slide masters,</li> <li>Apply the slide masters to the</li> <li>presentation,</li> <li>Add transitions to presentation.</li> </ul>