

INFORMATION TECHNOLOGY (Subject Code 402) Class X (Session 2022-2023)

	UNITS	NO. OF HOURS for Theory and Practical 200		MAX. MARKS for Theory and Practical 100
Part A	Employability Skills			
	Unit 1: Communication Skills-II*	10		-
	Unit 2: Self-Management Skills-II	10		3
	Unit 3: ICT Skills-II	10		3
	Unit 4: Entrepreneurial Skills-II	15		4
	Unit 5: Green Skills-II*	05		-
	Total	50		10
Part B	SUBJECT SPECIFIC SKILLS	Theory (In Hours)	Practicals (In Hours)	Marks
	Unit 1: Digital Documentation (Advanced)	12	18	8
	Unit 2: Electronic Spreadsheet (Advanced)	15	23	10
	Unit 3: Database Management System	18	27	12
	Unit 4: Web Applications and Security	15	22	10
	Total	60	90	40
Part C	PRACTICAL WORK			
	Practical Examination			
	• Advanced Documentation	5 Marks		20
	• Advanced Spreadsheets	5 Marks		
	• Databases	10 Marks		
	• Viva Voce	10 Marks		10
	Total			30

Part D	PROJECT WORK/FIELD VISIT Any Interdisciplinary Real World Case Study to be taken. Summarized data reports of same can be presented in base. Input should be taken using forms and output should be done using reports using base. Documentation of the case study should be presented using writer.		10
	PORTFOLIO/ PRACTICAL FILE: (Portfolio should contain printouts of the practical done using Writer, Calc and Base with minimum 5 problems of each)		10
	Total		20
	GRAND TOTAL	200	100

Note: * marked units are to be assessed through Internal Assessment/ Student Activities. They are not to be assessed in Theory Exams

DETAILED CURRICULUM/ TOPICS:

Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-II*	10
2.	Unit 2: Self-management Skills-II	10
3.	Unit 3: Information and Communication Technology Skills-II	10
4.	Unit 4: Entrepreneurial Skills-II	15
5.	Unit 5: Green Skills-II*	05
	TOTAL	50

Note: * marked units are to be assessed through Internal Assessment/ Student Activities. They are not to be assessed in Theory Exams

The detailed curriculum/ topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

Part-B – SUBJECT SPECIFIC SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-II*	10
2.	Unit 2: Self-management Skills-II	10
3.	Unit 3: Information and Communication Technology Skills-II	10
4.	Unit 4: Entrepreneurial Skills-II	15
5.	Unit 5: Green Skills-II*	05

	TOTAL	50
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Note: * marked units are to be assessed through Internal Assessment/ Student Activities.
They are not to be assessed in Theory Exams

The detailed curriculum/ topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

CBSE | DEPARTMENT OF SKILL EDUCATION CURRICULUM FOR SESSION 2022-2023

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

CLASS – IX

	UNITS	NO. OF HOURS for Theory and Practical		MAX. MARKS for Theory and Practical
Part A	Employability Skills			
	Unit 1 : Communication Skills-I	10		2
	Unit 2 : Self-Management Skills-I	10		2
	Unit 3 : ICT Skills-I	10		2
	Unit 4 : Entrepreneurial Skills-I	15		2
	Unit 5 : Green Skills-I	05		2
	Total	50		10
	Subject Specific Skills	Theory	Practical	Marks
	Unit 1: Introduction to IT- ITeS industry	2	4	4

Part B	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
Part C	Practical Work			
	Practical Examination			15
	Written Test			10
	Viva Voce			10
	Total			35
Part D	Project Work/ Field Visit			
	Practical File/ Student Portfolio			10
	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

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1	Appreciate the applications of IT	<ul style="list-style-type: none"> • Introduction to IT and ITeS, BPO services, • BPM industry in India, • Structure of the IT-BPM industry, • 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, 	<ul style="list-style-type: none"> - Identify and list the various IT enabled services, Observe the application of IT in various areas.

UNIT 2: DATA ENTRY AND KEYBOARDING SKILLS

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

UNIT 3: DIGITAL DOCUMENTATION

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create a document using a word processor	<ul style="list-style-type: none"> • Introduction to word processing, • Word processing applications, • Introduction to Word Processing tool • Creating a document, Parts of a Word Processor Window, 	<ul style="list-style-type: none"> • List the available word processing applications. • Introduce with the parts of the main window. • Change document views. • Start a new document. • Open an existing document. • Save a document. • Close a document.

2.	Apply Editing features	<ul style="list-style-type: none"> • Text editing – Undo and Redo, • Moving and copying text, • Copy and Paste, • Selecting text, • Selection criteria, • Selecting non-consecutive text items, • Selecting a vertical block of text, • Find and replace option, • Jumping to the page number, • Non-printing characters, • Checking spelling and grammar, • Using Synonyms and Thesaurus. 	<ul style="list-style-type: none"> • Editing of text in a document • Demonstrate to use undo and redo option, • Use the keyboard and mouse options to select, cut, copy, paste, and move text. • Demonstrate to select nonconsecutive text items, vertical block of text, • Search and replace text in a document. • Jump to the given page number in a document, • Insert non-printing characters in a document, • Apply Spelling and grammar option of document. • Demonstrate to use Synonyms and Thesaurus.
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S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
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3.	Apply formatting features	<ul style="list-style-type: none"> • Page style dialog • Formatting text – Removing manual formatting, Common text formatting, Changing text case, Superscript and Subscript • Formatting paragraph – Indenting paragraphs, Aligning paragraphs, Font colour, highlighting, and background colour, Using bullets and numbering, Assigning colour, border and background to paragraph. • Page formatting – setting up basic page layout using styles, Inserting page break, Creating header/footer and page numbers, • Defining borders and backgrounds, Inserting images shapes, special characters in a document, Dividing page into columns, Formatting the shape or image. 	<ul style="list-style-type: none"> • Apply various text formatting options for the text, • Demonstrate to format paragraphs – indent/align paragraphs, assign font colour, highlighting, and background colour, • Assign number or bullets to the lists items • Demonstrate to assign colour, border and background to paragraph • Demonstrate the page formatting – set up basic page layout using styles, • Insert page break, Create header/footer and page numbers • Define borders and backgrounds • Insert images, shapes, special characters in a document • Divide page into columns, • Format the shape or image.
4.	Create and work with tables	<ul style="list-style-type: none"> • Creating table in Word Processor • Inserting row and column in a table • Deleting rows and columns • Splitting and merging tables • Deleting a table • Copying a table • Moving a table. 	<ul style="list-style-type: none"> • Demonstrate and do the following in Word Processor: • Create table, • Insert and delete rows and column in a table, • Split and merge tables, • Delete a table, • Copy or move from one location to another location of document.
5.	Use Print Options	<ul style="list-style-type: none"> • Printing options in Word Processor. • Print preview, • Controlling printing, • Printing all pages, single and multiple pages. 	<ul style="list-style-type: none"> • Demonstrate to print the document, selected pages in the document • Print the document with various options, • Preview pages before printing.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
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6.	Understand and apply mail merge	<ul style="list-style-type: none"> • Introduction to mail merge • Concept of data source for mail merge. 	<ul style="list-style-type: none"> • Demonstrate to print the letters using mail merge, • Do the following to achieve • Create a main document, • Create the data source, • Enter data in the fields, • Merge the data source with main document, • Edit individual document, • Print the merged letter, • Save the merged letter.
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UNIT 4: ELECTRONIC SPREADSHEET

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

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

UNIT 5: DIGITAL PRESENTATION

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

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