

# CBSE | DEPARTMENT OF SKILL EDUCATION

## CURRICULUM FOR SESSION 2020-2021

### INFORMATION TECHNOLOGY (CODE – 402)

JOB ROLE: DOMESTIC DATA ENTRY OPERATOR

#### RATIONALIZED CURRICULUM FOR CLASS–X FOR SESSION 2020-21

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

	UNITS	NO. OF HOURS for Theory and Practical 200		MAX. MARKS for Theory and Practical 100
		Theory (In Hours)	Practical (In Hours)	Marks
<b>Part A</b>	<b>Employability Skills</b>			
	Unit 1 : Communication Skills-II	10		10
	Unit 2 : Self-Management Skills-II	10		
	Unit 3 : Information and Communication Technology Skills-II	10		
	Unit 4 : Entrepreneurial Skills-II	15		
	Unit 5 : Green Skills-II	05		
	<b>Total</b>	<b>50</b>		<b>10</b>
<b>Part B</b>	<b>Subject Specific Skills</b>			
	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
		<b>Total</b>	<b>60</b>	<b>90</b>
<b>Part C</b>	<b>Practical Work</b>			
	Practical Examination			15
	Written Test			10
	Viva Voce			10
		<b>Total</b>		
<b>Part D</b>	<b>Project Work/Field Visit</b>			
	Practical File/ Student Portfolio			10
	Viva Voce			05
		<b>Total</b>		
	<b>GRAND TOTAL</b>	<b>200</b>		<b>100</b>

## **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
	<b>TOTAL DURATION</b>	<b>50</b>

**NOTE:** For 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: Digital Documentation (Advanced)	30
2.	Unit 2: Electronic Spreadsheet (Advanced)	38
3.	Unit 3: Database Management System	45
4.	Unit 4: Web Applications and Security	37
	<b>TOTAL DURATION</b>	<b>150</b>

#### **UNIT 1: DIGITAL DOCUMENTATION (ADVANCED)**

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create and Apply Styles in the document	<ul style="list-style-type: none"><li>• Styles/ categories in Word Processor</li><li>• <b>Styles and Formatting window.*</b></li><li>• <b>Fill Format.*</b></li><li>• Creating and updating new style from selection</li><li>• Load style from template or another document.</li><li>• <b>Creating a new style using drag-and-drop.*</b></li><li>• Applying styles.</li></ul>	<ul style="list-style-type: none"><li>• List style categories. Select the style from the Styles and Formatting window.</li><li>• Use Fill Format to apply a style to many different areas quickly.</li><li>• Create and update new style from a selection.</li><li>• Load a style from a template or another document.</li><li>• Create a new style using drag-and-drop.</li></ul>

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S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
2.	Insert and use images in document	<ul style="list-style-type: none"> <li>Options to insert image to document from various sources.</li> <li>Options to modify, resize, crop and delete an image. Drawing objects and its properties.</li> <li>Creating drawing objects and changing its properties. Resizing and grouping drawing objects.</li> <li>Positioning image in the text.</li> </ul>	<ul style="list-style-type: none"> <li>Insert an image to document from various sources.</li> <li>Modify, resize, crop and delete an image.</li> <li>Create drawing objects</li> <li>Set or change the properties of a drawing object</li> <li>Resize and group drawing objects</li> <li>Position the image in the text</li> </ul>
3.	Create and use template	<ul style="list-style-type: none"> <li>Templates.</li> <li>Using predefined templates.</li> <li>Creating a template. *</li> <li>Set up a custom default template.</li> <li>Updating a document.*</li> <li>Changing to a different template.</li> <li>Using the Template.</li> </ul>	<ul style="list-style-type: none"> <li>Create a template.</li> <li>Use predefined templates.</li> <li>Set up a custom default template.</li> <li>Update a document.</li> <li>Change to a different template.</li> <li>Use the Template.</li> </ul>
4.	Create and customize table of contents	<ul style="list-style-type: none"> <li>Table of contents. Hierarchy of headings. Customization of table of contents.</li> <li>Character styles. Maintaining a table of contents.</li> </ul>	<ul style="list-style-type: none"> <li>Create table of contents. Define a hierarchy of headings.</li> <li>Customize a table of contents.</li> <li>Apply character styles. Maintain a table of contents.</li> </ul>
5	Implement Mail Merge	<ul style="list-style-type: none"> <li>Advance concept of mail merge in word processing,</li> <li>Creating a main document,</li> <li>Creating the data source,</li> <li>Entering data in the fields,</li> <li>Merging the data source with main document,</li> <li>Editing individual document,*</li> <li>Printing a letter and its address label</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate to print the label using mail merge, 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 letter and address label</li> </ul>

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## UNIT 2: ELECTRONIC SPREADSHEET (ADVANCED)

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Analyse data using scenarios and goal seek.	<ul style="list-style-type: none"> <li>• Using consolidating data. Creating subtotals.</li> <li>• Using “what if” scenarios. Using “what if” tools</li> <li>• Using goal seek and solver.</li> </ul>	<ul style="list-style-type: none"> <li>• Use consolidating data Create subtotals</li> <li>• Use “what if” scenarios Use “what if” tools</li> <li>• Use goal seek and solver</li> </ul>
2.	Link data and spreadsheets	<ul style="list-style-type: none"> <li>• Setting up multiple sheets. Creating reference to other sheets by using keyboard and mouse.</li> <li>• <b>Creating reference to other document by using keyboard and mouse.*</b></li> <li>• Relative and absolute hyperlinks</li> <li>• Hyperlinks to the sheet.                             <ul style="list-style-type: none"> <li>○ Linking to external data.</li> <li>○ Linking to registered data sources.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Setup multiple sheets by inserting new sheets.</li> <li>• Create reference to other sheets by using keyboard and mouse.</li> <li>• Create reference to other document by using keyboard and mouse.</li> <li>• Create, Edit and Remove hyperlinks to the sheet.</li> <li>• Link to external data.</li> <li>• Link to registered data source.</li> </ul>
3.	Share and review a spreadsheet	<ul style="list-style-type: none"> <li>• <b>Setting up a spreadsheet for sharing.*</b></li> <li>• Opening and saving a shared spreadsheet. Recording changes.</li> <li>• Add, Edit and Format the comments.</li> <li>• Reviewing changes – view, accept or reject changes. Merging and comparing.</li> </ul>	<ul style="list-style-type: none"> <li>• Set up a spreadsheet for sharing.</li> <li>• Open and save a shared spreadsheet.</li> <li>• Record changes.</li> <li>• Add, Edit and Format the comments.</li> <li>• Review changes – view, accept or reject changes.</li> <li>• Merge and compare sheets.</li> </ul>
4.	Create and Use Macros in spreadsheet	<ul style="list-style-type: none"> <li>• Using the macro recorder. Creating a simple macro. Using a macro as a function.</li> <li>• Passing arguments to a macro.</li> <li>• Passing the arguments areas values.</li> <li>• Macros to work like built-in functions.</li> <li>• Accessing cells directly.</li> <li>• Sorting the columns using macro.</li> </ul>	<ul style="list-style-type: none"> <li>• Use the macro recorder. Create a simple macro. Use a macro as a function.</li> <li>• Pass arguments to a macro.</li> <li>• Pass the arguments are as values.</li> <li>• Write macros that act like built-in functions</li> <li>• Access cells directly.</li> <li>• Sort the columns using macro.</li> </ul>

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### UNIT 3: DATABASE MANAGEMENT SYSTEM

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Appreciate the concept of Database Management System	<ul style="list-style-type: none"> <li>• Concept and examples of data and information,</li> <li>• Concept of database,</li> <li>• Advantages of database,</li> <li>• Features of database,</li> <li>• Concept and examples of Relational database,</li> <li>• Concept and examples of field, record, table, database,</li> <li>• Concept and examples of Primary key, composite primary key, foreign key,</li> <li>• Relational Data base management system (RDBMS) software.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the data and information,</li> <li>• Identify the field, record, table in the database,</li> <li>• Prepare the sample table with some standard fields.</li> <li>• Assign the primary key to the field,</li> <li>• Identify the primary key, composite primary key, foreign key.</li> </ul>
2.	Create and edit tables using wizard and SQL commands	<ul style="list-style-type: none"> <li>• Introduction to a RDBMS</li> <li>• Database objects – tables, queries, forms, and reports of the database,</li> <li>• Terms in database – table, field, record,</li> <li>• <b>Steps to create a table using table wizard, *</b></li> <li>• Data types in Base,</li> <li>• Option to set primary key Table Data View dialog box</li> <li>• DDL Commands</li> </ul>	<ul style="list-style-type: none"> <li>• Start the RDBMS and observe the parts of main window,</li> <li>• Identify the data base objects Create the sample table in any category using wizard, Practice to create different tables from the available list and choosing fields from the available fields.</li> <li>• Assign data types of field, Set primary key,</li> <li>• Edit the table in design view, Enter the data in the fields.</li> <li>• Create and edit table using DDL Commands</li> </ul>
3.	Perform operations on table	<ul style="list-style-type: none"> <li>• Inserting data in the table,</li> <li>• Editing records in the table,</li> <li>• Deleting records from the table,</li> <li>• Sorting data in the table, Referential integrity,</li> <li>• Creating and editing relationships – one to one, one to many, many to many,</li> <li>• Field properties.</li> </ul>	<p>Demonstrate to:</p> <ul style="list-style-type: none"> <li>• Insert data in the table, Edit records in the table, Delete records from table, Sort data in the table,</li> <li>• Create and edit relationships</li> <li>• one to one, one to many, many to many,</li> <li>• Enter various field properties.</li> </ul>

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S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
4.	Retrieve data using query	<ul style="list-style-type: none"> <li>• Database query,</li> <li>• Defining query,</li> <li>• Query creation using wizard,*</li> <li>• Creation of query using design view,*</li> <li>• Editing a query,</li> <li>• Applying criteria in query – single field, multiple fields, using wildcard,</li> <li>• Performing calculations,</li> <li>• Grouping of data,</li> <li>• Structured Query Language (SQL).</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare a query for given criteria,</li> <li>• Demonstrate to create query using wizard, and using design view,</li> <li>• Edit a query,</li> <li>• Demonstrate to apply various criteria in query – single field, multiple fields, using wild card,</li> <li>• Performing calculations using query in Base,</li> <li>• Demonstrate to group data,</li> <li>• Use basic SQL commands,</li> </ul>
5.	Create Forms and Reports using wizard	<ul style="list-style-type: none"> <li>• Forms in Base,</li> <li>• Creating form using wizard,*</li> <li>• Steps to create form using Form Wizard,*</li> <li>• Options to enter or remove data from forms</li> <li>• Modifying form,</li> <li>• Changing label, background,</li> <li>• Searching record using Form,</li> <li>• Inserting and deleting record using Form View,</li> <li>• Concept of Report in Base,</li> <li>• Creating Report using wizard,*</li> <li>• Steps to create Report using Wizard.*</li> </ul>	<ul style="list-style-type: none"> <li>• Illustrate the various steps to create Form using Form Wizard,</li> <li>• Enter or remove data from Forms,</li> <li>• Demonstrate to modify Forms,</li> <li>• Demonstrate to change label, background,</li> <li>• Search record using Form,</li> <li>• Insert and delete record using Form View,</li> <li>• Illustrate the various steps to create Report using Report Wizard,</li> <li>• Demonstrate various examples of Report.</li> </ul>

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## UNIT 4: WEB APPLICATIONS AND SECURITY

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Working With Accessibility Options.	<ul style="list-style-type: none"> <li>Understand various types of impairment that impact computer usage</li> <li>Computer Accessibility Dialog box and its tabs</li> <li>Serial Keys</li> </ul>	<ul style="list-style-type: none"> <li>Illustrate use of various options under Computer Accessibility like Keyboard , mouse, sound, display setting serial keys, cursor options</li> <li>use of toggle keys, filter keys, sticky keys,</li> <li>sound sentry, show sounds etc.</li> </ul>
2.	Understand Networking Fundamentals	<ul style="list-style-type: none"> <li>Network and its types.</li> <li>Client Server Architecture, Peer-to-peer (P2P) Architecture,</li> <li>internet, World Wide Web,</li> <li>benefits of networking</li> <li>internet, getting access to internet,</li> <li>internet terminology</li> <li>Some of the commonly used Internet connectivity options</li> <li>Data transfer on the Internet</li> </ul>	<ul style="list-style-type: none"> <li>Identify applications of Internet</li> <li>comparing various internet technologies</li> <li>identifying types of networks and selecting internet</li> </ul>
3.	Introduction to Instant Messaging	<ul style="list-style-type: none"> <li>learn key features of instant messaging</li> <li>Creating an instant messaging account</li> <li>Launching Google Talk *</li> <li>Signing In into your Google Talk Account*</li> </ul>	<ul style="list-style-type: none"> <li>Illustrate steps to create instant messaging account</li> <li>Signing In into your Google Talk Account</li> </ul>
4.	Chatting With a Contact – Google Talk	<ul style="list-style-type: none"> <li>learn to chat with a contact that is already added to your contact list.</li> <li>sending text chat messages instantly by double-clicking on a contact.</li> <li>general rules and etiquettes to be followed while chatting.</li> <li>chatting on various types of messengers</li> </ul>	<ul style="list-style-type: none"> <li>Illustrate chat with a contact and send messages,</li> <li>chatting with various messenger services</li> </ul>
5	Creating and Publishing Web Pages – Blog ...-	<ul style="list-style-type: none"> <li>learn and appreciate a blog and its creation with the help of some blog providers*</li> <li>set up title and other parameters in a blog posting comments</li> <li>using offline blog editors</li> </ul>	<ul style="list-style-type: none"> <li>Illustrate Blog Creation and setting various parameters in it</li> </ul>

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S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
6	Using Offline Blog Editors	<ul style="list-style-type: none"> <li>• Concept to create blogs using a blog application and publish the blog whenever internet connectivity is available.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration on how to create blogs using a blog application offline.</li> <li>• posting messages in an offline application</li> <li>• Publish the blog whenever internet connectivity is available using various examples</li> </ul>
7	Online Transaction	<ul style="list-style-type: none"> <li>• concept of e-commerce and various online applications</li> <li>• importance of secure passwords</li> </ul>	<ul style="list-style-type: none"> <li>• Illustration of online shopping using various e-commerce sites</li> <li>• Demonstration of securing passwords for online transactions.</li> </ul>
8.	Internet Security	<ul style="list-style-type: none"> <li>• Need of internet security</li> <li>• Cyber threats like phishing, email-spoofing, char spoofing etc.</li> <li>• best practices for internet security and secure passwords</li> <li>• concept of browser, cookies, backup, antivirus</li> <li>• clearing data in browsers</li> </ul>	<ul style="list-style-type: none"> <li>• Illustration of internet security threats through various ways</li> <li>• Cyber security tips</li> <li>• Tips for secure passwords</li> <li>• Demonstration of strong passwords using various websites.</li> <li>• Clearing data stored in browser applications.</li> </ul>
9.	Maintain workplace safety	<ul style="list-style-type: none"> <li>• Basic safety rules to follow at workplace – Fire safety,</li> <li>• Falls and slips, Electrical safety,</li> <li>• Use of first aid.</li> <li>• Case Studies of hazardous situations.</li> </ul>	<ul style="list-style-type: none"> <li>• Practice to follow basic safety rules at workplace to prevent accidents and protect workers – Fire safety,</li> <li>• Falls and slips, Electrical safety, Use of first aid.</li> </ul>
10.	Prevent Accidents and Emergencies	<ul style="list-style-type: none"> <li>• Accidents and emergency,</li> <li>• Types of Accidents,</li> <li>• Handling Accidents</li> <li>• Types of Emergencies.</li> </ul>	<ul style="list-style-type: none"> <li>• Illustrate to handle accidents at workplace,</li> <li>• Demonstrate to follow evacuation plan and procedure in case of an emergency.</li> </ul>
11.	Protect Health and Safety at work	<ul style="list-style-type: none"> <li>• Hazards and sources of hazards,</li> <li>• General evacuation procedures,</li> <li>• Healthy living.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify hazards and sources of hazards,</li> <li>• identify the problems at workplace that could cause accidents,</li> </ul>

			<ul style="list-style-type: none"><li>• Practice the general evacuation procedures in case of an emergency.</li></ul>
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