INFORMATION TECHNOLOGY (SUBJECT CODE - 402)
CLASS – X (Session 2024-2025)

	UNITS	NO. OF HOURS for Theory and Practical		MAX. MARKS for Theory and Practical
Part A	**Employability Skills**			
	Unit 1: Communication Skills-II	10		2
	Unit 2: Self-Management Skills-II	10		3
	Unit 3: ICT Skills-II	10		1
	Unit 4: Entrepreneurial Skills-II	15		3
	Unit 5: Green Skills-II	05		1
	Total	**50**		**10**
Part B	**SUBJECT SPECIFIC SKILLS**	**Theory**	**Practical**	**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: Maintain Health, Safety and Secure Working Environment	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**

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

Part-B – SUBJECT SPECIFIC SKILLS

- Unit 1: Digital Documentation (Advanced)
- Unit 2: Electronic Spreadsheet (Advanced)
- Unit 3: Database Management System
- Unit 4: Web Applications and Security

UNIT 1: DIGITAL DOCUMENTATION (ADVANCED)

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	ApplyStyles in the document	• Styles/ categories in Writer • Styles and Formatting window • Using Fill Format. • Creating and updating new style from selection • Load style from template or another document. • Creating a new style using drag-and-drop. • Applying styles.	• List style categories in Writer. Select the style from the Styles and Formatting window. • Use Fill Format to apply a style to many different areas quickly. • Create and update a new style from a selection. • Load a style from a template or another document. • Create a new style using drag-and drop.
2.	Insert and use images in document	• Options to insert image to document from various sources. • Options to modify, resize, crop and delete an image. • Creating drawing objects, setting or changing its properties. Resizing and grouping drawing objects. • Positioning image in the text.	• Insert an image to document from various sources. • Modify, resize, crop and delete an image. • Create drawing objects • Set or change the properties of a drawing object • Resize and group drawing objects • Position the image in the text

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Create and use template	• Templates in Writer. • Using predefined templates. • Creating a template. • Set up a custom template. • Using a template • Changing to a different template. • Updating a Document	• Create a template. • Use predefined templates. • Set up a custom default template. • Update a document. • Change to a different template. • Use the Template. • Update the document.
4.	Create table of contents	• Table of contents. Hierarchy of headings. Customization of table of contents. • Character styles. Maintaining a table of contents.	• Create a table of contents. • Definea hierarchy of headings. • Customize a table of contents. • Apply character styles. • Maintain atable of contents.

UNIT 2: ELECTRONIC SPREADSHEET (ADVANCED)

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Analyse data using scenarios and goal seek.	• Using consolidating data. Creating subtotals. • Using "what if" scenarios. Using "what if" tools • Using goal seek and solver.	• Use consolidating data • Create subtotals • Use "what if" scenarios Use "what if" tools • Use goal seek and solver
2.	Link spreadsheets data	• Setting up multiple sheets. Creating reference to other sheets by using keyboard and mouse. • Creating reference to another document by using keyboard and mouse.	• Setup multiple sheets by inserting new sheets. • Create reference to other sheets by using keyboard and mouse. • Create references to other documents by using keyboard and mouse.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL

		• Relative and absolute hyperlinks
		• Hyperlinks to the sheet.
		  o Linking to external data.
		  o Linking to registered data sources.
			• Create, Edit and Remove hyperlinks to the sheet.
			• Link to external data.
			• Link to registered data source.

3.	Share and review a spreadsheet	• Setting up a spreadsheet for sharing. • Opening and saving a shared spreadsheet. • Recording changes. • Add, Edit and Format the comments. • Reviewing changes – view, accept or reject changes. Merging and comparing.	• Set up a spreadsheet for sharing. • Open and save a shared spreadsheet. • Record changes. • Add, Edit and Format the comments. • Review changes – view, accept or reject changes. • Merge and compare sheets.
4.	Use Macros in spreadsheet	• Using the macro recorder. • Creating a simple macro. • Using a macro as a function. • Passing arguments to amacro. • Passing the arguments as values. • Macros to work like built-in functions. • Accessing cells directly. • Sorting the columns using macro.	• Demonstrate the use of a macro recorder. • Create a simple macro. • Use a macro • Pass arguments to a macro • Pass the arguments as values • Write the macros that act like built – in functions • Access cells directly • Sort the columns using macro.

UNIT 3: DATABASE MANAGEMENT SYSTEM

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Appreciate the concept of Database Management System	• Concept and examples of data and information, • Concept of database, • Advantages of database, • Features of database, • Concept and examples of Relational database, • Concept and examples of field, record, table, database, • Concept and examples of Primary key, composite primary key, foreign key, • Database management system (DBMS) software	• Identify the data and information, • Identify the field, record, table in the database, • Prepare the sample table with some standard fields. • Assign the primary key to the field, • Identify the primary key, composite primary key, foreign key.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
		• Relational Data base management system (RDBMS) software.	
2.	Create and edit tables using wizard and SQL commands	• Introduction to LibreOffice Base • Database objects – tables, queries, forms, and reports of the database, • Terms in database – table, field, record, • Steps to create a table using table wizard • Data types in database., • Option to set primary key Table Data View dialog box	• Start the Libre Office Base and observe the parts of mainwindow, • 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. • Assign data types of fields, Setprimary key, • Edit the table in design view, Enter the data in the fields.
3.	Perform operations on table	• Inserting data in the table, • Editing records in the table, • Deleting records from the table, • Sorting data in the table, • Referential integrity, • Creating and editing relationships – one to one, one to many, many to many • Field properties	Demonstrate to: • Insert data in the table, • Edit records in the table, • Delete records from table, • Sort data in the table, • Create and edit relationships - one to one, one to many,many to many, • Enter various field properties.
4.	Retrieve data using query	• Database query, • Defining query, • Query creation using wizard, • Creation of query using design view, • Editing a query, • Applying criteria in query – single field, multiple fields, using wildcard, • Performing calculations, • Grouping of data, • Structured Query Language (SQL).	• Prepare a query for given criteria, • Demonstrate to create query using wizard, and using design view, • Edit a query, • Demonstrate to apply various criteria in query – single field, multiple fields, using wild card, • Performing calculations using query in Base, • Demonstrate to group data, • Use basic SQL commands,

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
5.	Create Forms and Reports using wizard	• Forms in BASE. • Creating form using wizard, • Steps to create form using Form Wizard, • Options to enter or remove data from forms • Modifying form, • Changing label, background, • Searching record using Form, • Inserting and deleting record using Form, • Concept of Report in Base, • Creating Report using wizard, • Steps to create a Report using Wizard.	• Illustrate the various steps to create Form using Form Wizard, • Enter or remove data from Forms, • Demonstrate to modify Forms, • Demonstrate to change label, background, • Search record using Form, • Insert and delete record using Form View, • Illustrate the various steps to create Report using Report Wizard, • Demonstrate various examples of Report.

UNIT 4: MANAGING HEALTH AND SAFETY

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Maintain workplace safety	• Basic safety rules to follow at workplace – Fire safety, • Falls and slips, Electrical safety, Use of first aid. • Case Studies of hazardous situations.	• Practice to follow basic safety rules at workplace to prevent accidents and protect workers – Fire safety, • Falls and slips, Electrical safety, Use of first aid.
2..	Prevent Accidents and Emergencies	• Accidents and emergency, • Types of Accidents, • Handling Accidents • Types of Emergencies.	• Illustrate to handle accidents at workplace, • Demonstrate to follow evacuation plan and procedure in case of an emergency.
3.	Protect Health and Safety at work	• Hazards and sources of hazards, • General evacuation procedures, • Healthy living.	• Identify hazards and sources of hazards, • identify the problems at workplace that could cause accidents, • Practice the general evacuation procedures in case of an emergency.