INFORMATION TECHNOLOGY (Code No. 802)
Class XII (Session 2023-2024)
Total Marks: 100 (Theory-60 + Practical-40)

	UNITS	NO. OF HOURS for Theory and Practical		MAX. MARKS for Theory and Practical
Part A	**Employability Skills**			
	Unit 1 : Communication Skills- IV	10		2
	Unit 2 : Self-Management Skills- IV	10		3
	Unit 3 : ICT Skills- IV	10		1
	Unit 4 : Entrepreneurial Skills- IV	15		3
	Unit 5 : Green Skills- IV	05		1
	Total	**50**		10
Part B	**Subject Specific Skills**	**Theory**	**Practical**	**Marks**
	Unit -1 : Database Concepts – RDBMS Tool	30	45	15
	Unit -2 : Operating Web Based Applications	15	20	10
	Unit-3: JAVA - Fundamentals of Java programming, Introduction to Java, Object Oriented Programming, Java Language Elements, Operators, Control Flow, Array, Class Design, Exception Handling, Assertions, Threads, Wrapper Classes, String Manipulation.	30	50	20
	Unit-4: Work Integrated Learning IT – DMA	10	10	5
	Total	**85**	**125**	**50**
Part C	**Practical Work:**			
	Java Program			10
	SQL Queries(Table Creation + 5 Queries)			10
	Practical File Must contain minimum 15 Java Programs and minimum 15 queries in MySQL.			10
	Viva			5
	Total			**35**
Part D	**Project Work** (Any Application made using Java Netbeans IDE)			5
	Total			**5**
	GRAND TOTAL	**260**		**100**

DETAILED CURRICULUM/TOPICS FOR CLASS XII:

Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration(in Hours)
1.	Unit 1: Communication Skills- IV	10
2.	Unit 2: Self-management Skills- IV	10
3.	Unit 3: Information and Communication Technology Skills- IV	10
4.	Unit 4: Entrepreneurial Skills- IV	15
5.	Unit 5: Green Skills- IV	05
	TOTAL DURATION	**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: Database Concepts – RDBMS tool

- Unit -2: Operating Web Based Applications

- Unit-3: JAVA - Fundamentals of Java programming, Introduction to Java, Object Oriented Programming, Java Language Elements, Operators, Control Flow, Array, Class Design, Exception Handling, Assertions, Threads, Wrapper Classes, String Manipulation.

- Unit-4: Work Integrated Learning IT – DMA

DETAILED CURRICULUM:

UNIT	TOPICS/ SUB-TOPICS	MARKS
UNIT 1	**DATABASE CONCEPTS – RDBMS TOOL** • Basics of RDBMS. • SQL – Creating and Opening Database. • Creating and populating tables. • Modifying the content and structure of table. • Ordering and Grouping. • Operating with multiple tables.	15

UNIT	TOPICS/ SUB-TOPICS	MARKS
UNIT 2	**Operating Web Based Applications** • Online Reservation Systems. • E-Governance. • Online Shopping and Bill payments. • Online Tutorials and Tests. • Project Management – Web Based Application development. • Project essentials and tips. • Case Study - Online Game. • Case Study - Online Quiz. • Case Study – Online Bill Calculator.	10
UNIT 3	**Fundamentals of Java programming, Introduction to Java, Object** • Oriented Programming, • Java Language Elements, • Operators, • Control Flow, • Array, • Class Design, • Exception Handling, • Assertions, • Threads, • Wrapper Classes, • String Manipulation	20
UNIT 4	**Work Integrated Learning IT – DMA** • Identification of Work Areas. • Work Experience.	5
	TOTAL	50

Practical: **40 Marks**

DETAILS	MARKS
Practical Work: • Java Program • SQL Queries (Table Creation + 5 Queries)	10 10
Practical File Must contain minimum 15 Java Programs and minimum 15 queries in MySQL.	10
Viva Voce	5
Project (Any Application made using Java Netbeans IDE)	5
Total	40

LIST OF EQUIPMENT AND SUPPORT MATERIAL:

The list given below is suggestive and an exhaustive list should be compiled by the teacher(s) teaching the subject. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

- computer/ laptop / tablet
- scanner
- projector
- printer
- software: OpenOffice, Java Netbeans, MySQL
- hub/switch
- Internet

Students should be exposed to various functional units, Office applications, Network securitysystems/ devices / field visits to gain knowledge and expertise.

CAREER OPPORTUNITIES:

- Customer Service Associate

- Customer Service Representative

- Customer Care Executive

- Customer Service Advisor

- Helpdesk Coordinator

- Customer Support Representative

- IT Support Specialist

- Documentation Assistant

- Programming Assistant

VERTICAL MOBILITY:

This course will assist the participating students to further update their career by vertically moving either to BA (programming) and other programming oriented applied undergraduate courses of different universities

They may also move to their corporate career by starting as a desktop data entry operator orsmall developer for desktop applications and move up to a corporate ladder in the role of software developer in different sectors.