

Diploma in Computer Application (1 Year)

S. No	Topic
1	Information Technology and Office Tools- Introduction to Computer; Introduction to Operating System; Word Processing; Spreadsheet; Presentation; Introduction to Network, Internet and WWW; E-mail, Social Networking and e-Governance Services; Digital Financial Tools and Applications.
2	Problem solving and programming on Python – Introduction to Python, Operators, Expressions and Python Statements, Sequence Data Types, Functions, File Processing, Scope and Modules, NumPy Basics.
3	An Overview of the Database Management System: What is database?, Why database?, database system, database management system (DBMS), advantages of DBMS. An Architecture of the Database system: Three levels of architecture, mappings, role of Database Administrator (DBA), E-R model, three approaches of DBMS- relational, hierarchical and network. Relational Database Management System (RDBMS): Introduction, RDBMS terminology, relational model, base tables, keys. Normalization: Normal forms, Boyce-Codd Normal form, higher normal forms. The SQL Language: Introduction, Characteristics of SQL, data definition, data manipulation, SQL commands, SQL operators, Queries, aggregate functions. Backup and Recovery: Transaction recovery, system recovery, SQL support.
4	HTML Programming Basics: Introduction, Basic Structure of HTML, Head Section, Formatting Tags: Bold, Italic, Underline, Strikethrough, Anchor links and Named Anchors Image Tag, Paragraphs, Tables: Attributes –(Border, Cellpadding, Cellspacing , height , width), TR, TH, TD, Rowspan, Colspan Lists : Ordered List , Unordered List , Forms, Form Elements, Input types, Input Attributes, Text Input Text Area, Dropdown, Radio buttons , Check boxes, Submit and Reset Buttons
	Frames: Frameset, nested Frames. CSS: Introduction to CSS, Types of CSS, CSS Properties: Back Ground properties, Block Properties, Box properties, List properties, Border Properties, Positioning Properties, CSS Lists CSS Tables, CSS Menu Design CSS Image Gallery. JavaScript: Introduction to Scripting Language, Variables in Java Script, Operators in JS, Conditions Statements, JS Popup Boxes, JS Events, Basic Form Validations in JavaScript. Photo Editor: Basic photo editing using Photo editor software.