

Diploma in Web Development/ Design

Semester Second

Professional Conduct & OHS

Unit I - Human Values, Morals, Values and Ethics, Integrity, Work Ethic, Service Learning, Civic Virtue, Respect For Others, Living Peacefully, Caring, Sharing, Honesty, Courage

Unit II - Valuing Time, Cooperation, Commitment, Empathy, Self-Confidence, Character, Spirituality, Introduction To Yoga And Meditation For Professional Excellence And Stress Management.

Unit III - Introduction to Professional Ethics, Professional Competency and Life-Long Learning - Uses, Misuses and Risks of Software, Information Security and Privacy, Business Practices and Economics of Software - Intellectual Property and Software Law (Cyber Law)

Unit IV - Social Responsibilities, Software Related Contracts, Intellectual Property - Computer Crime. Quality of Work or Work Quality, Contemporary Trends in Professional Practice: Contemporary Issues - Privacy/Information Security - Social Issues, Digital Issues

Unit V -Occupational Health Concept, Concept of Safety, Accident Causes and Prevention, Safety Management, Computing and Health, Potential Computing-Related Disorders, Current Regulatory Requirements, Risk Reduction and Information

Books

1. Professional Ethics by R. Subramaniam – Oxford Publications, New Delhi.
2. Professional Ethics and Human Values by Prof.D.R.Kiran-Tata McGraw-Hill – 2013
3. Human Values And Professional Ethics by Jayshree Suresh and B. S. Raghavan, S.Chand Publications
4. Principles of Occupational Health and Hygiene - An Introduction 3rd edition by Sue Reed, Dino Pisaniello & Geza Benke
5. e- book - Handbook of occupational safety and health by S Z Mansdorf (Editor) Edith Cowan University

Web Database Management

Unit-1: Overview of DBMS - Basic DBMS terminology, file system Vs DBMS, advantages of DBMS, database applications, different users of DBMS, DBA and his responsibilities, data abstraction, physical and logical data independence, architecture of DBMS, views of DBMS, DBMS languages, transaction management.

Unit-2 Data Models and E-R Diagram- Different Data Models, Entity-Relationship Model, entity, entity set, attributes, tuples, null values, domains, keys, relationship and relationship set, cardinality and connectivity, overview of hierarchical, network and relational models, comparison of network, hierarchical and relational models

Unit-3 Relational Model- Concept of relational data model, Relational algebra, Selection, Projection, Union and Cartesian product, set operators, relational operators, join operations, condition join, equi join, natural join, division operation.

Unit-4 SQL - General Concepts: Advantages of using SQL, Data Definition Language and Data Manipulation Language, **Data Types:** number, decimal, character, varchar, varchar2, date.

Unit-5 Sql Commands-Create table, drop table, alter table, update, insert, delete; select, distinct, from, where, in, between, group by, having, order by, commit and rollback and sum(savepoint), **Sql Functions:** , avg(), count(), max() and min().

Book:-

1. "Database System Concepts" by Abraham Silberschatz, Henry F. Korth and S. Sdarshan, Publication McGraw Hill Education
2. "Database Management Systems" by Johannes Gehrke and Raghu Ramakrishnan, Publication McGraw Hill Education

Website Designing

Unit-1 A Walk Through PHP Language Basics: Lexical Structure, Data Types, Variables, Expressions and Operators, Flow-Control Statements: Including Code, Embedding PHP in Web Pages

Unit-2 Functions: Calling a Function, Defining a Function, Variable Scope, Function Parameters, Return Values.

Unit-3 Working with String, Dates & Time: Quoting String Constants, Printing Strings, Accessing Individual Characters, Cleaning Strings, Comparing Strings, Manipulating and Searching Strings, Formatting String with PHP. Using Date and Time Functions with PHP. Other String, Date/Time Functions.

Unit-4 Arrays: Storing Data in Arrays, Identifying Elements of an Array, Multidimensional Arrays, Extracting Multiple Values, Indexed Versus Associative Arrays, Converting Between Arrays and Variables, Traversing Arrays, Sorting, Acting on Entire Arrays, Using Arrays Functions

Unit-5 Databases: Using PHP to Access a Database, Some essential SQL, Introduction, Connect, Create Database, Create Table, Insert, Prepared, Select. Where Limit, Order By, Update, Delete.

Books:-

1. The complete reference PHP by Steven Holzner
2. The Joy of PHP Programming: A Beginner's Guide to Programming Interactive Web Applications with PHP and MySQL by Alan Forbes

E-Business and E-Governance

Unit-1 E-Commerce Introduction: History of E-Commerce, Traditional versus Electronic Commerce, Types of Business Models, Electronic and Media Convergence, Framework of E-Commerce, Anatomy of E-Commerce, Network Infrastructure of E-Commerce, I-way Elements/Components.

Unit-2 Mobile Computing and M-Commerce: Overview of Mobile Computing Technology, Mobile Computing Applications, Client Server Network and Security Threats, Network Security and Firewalls, the Future of M-Commerce, Mobile Devices.

Unit-3 Encryption: Introduction to Encryption and Decryption Process, World Wide Web and Security, Electronic Data Interchange (EDI), EDI Applications in Business, EDI Document Management, Electronic Payment Process.

Unit-4 Mercantile Process Models: Mercantile Process Models from Consumer's and Merchant's Perspective, Customer Relationship Management, Supply Chain Management.

Unit-5 E-Governance: An Introduction, Origins in India, E-Governance Projects in India, Governance and Democracy, Measures to be considered before going for E-Governance, Work plan and Infrastructure

Books:-

1. The Complete E-commerce Book: Design, Build and Maintain a Successful Web-based Business by Janice Reynolds and Roya Mofazali
2. Electronic Commerce Principles and Practice by Hossein Bidgoli