Vidnyan Mahavidhyalaya Sangola Department of Computer Science <u>Teaching Plan</u>

Teacher Name-Bandgar N.H Academic Year :2021-22

Class	Subject	July	August
BCA-I	Web programming -I	Overview of HTML & HTML5: Introduction to Web technology, Introduction to Internet, Requirement for Internet, History of web technology, Introduction to HTML, Overview of basic HTML, Structure of HTML, Creat- ing and opening HTML file, Singular and paired tags, Text formLists, Image, Image Map, Table, FramForm, get and post method, input tag.	HTML5- Introduction to HTML5, Need of HTML5, DOCTYPE Element Tags-Section, Article, aside, header, foot figure etc., Events in HTML5, Input tag in HTML5- (Type, Auto focus, placeholder, required etc. attributes.), Graphics in HTML5, Media tags in HTML5
BSc-III	Core Java	Unit 1: Introduction to Java Programming (10) Overview of Java, Features of Java as programming language /Platform, JDK Environment and Tools Java Programming Fundaments:-Data types, Variables, Operators, Keywords, Naming Conventions, Structure of Java Program, Flow Control- Decision, Iterations, Arrays, Unit 2: Object oriented programming in Java (10) Class – Members access control, Objects, Constructors, Use of 'this' keyword, Static, non-static data members and methods., public, private & protected data members Inheritance & Polymorphism-Access/Scope specifiers protected, Super, extends, single,	Class – Members access control, Objects, Constructors, Use of 'this' keyword, Static, non-static data members and methods., public, private & protected data members Inheritance & Polymorphism-Access/Scope specifiers protected, Super, extends, single, multiple inheritance, Method overriding, Abstract classes & ADT, 'final' keyword, Extending interfaces

multiple inheritance, Method overriding, Abstract classes & ADT,	
'final' keyword, Extending interfaces	

Class	Subject	September	October
BSc-III	Core Java	Unit 3: Exception Handling, Threading and Collection framework (15) Exceptions and Types, trycatch, finally block, throw & throws statement, user-defined exceptions, Java I/O package, byte & character stream, reader & writer, file reader & writer Threading-Java thread lifecycle, Thread class & run able interface Thread priorities & synchronization, Usage of wait & notify Collection framework:-Collection overview, Collection interfaces, Collection classes Vector, Array list, Hash map, Hash table, Tree map, Tree set, Hash set, Properties, Stack	Unit 4: Swing and event handling: (10) Introduction to swing, difference between AWT and swing, hierarchy of Swing classes, Swing controls: - JButton, JTextfield, JLabel, JCheckBox, JRadionButton, JFame, Jtable, JList, JoptionPane, JMenuitem and JMenu ,etc
BCA-I	Web programming -I	CSS - Introduction to CSS, Use of CSS, Types of CSS, Selec- tors, Properties, Values., CSS Properties- Background, Text, Fonts, Link, List, Table, Box Model, Border, Margin, Padding, Display, Positioning, Floating, Opacity, Media type, Backgrounds and Borders Image, Values and Replaced Content,	Text Effects, 2D/3D Transformations, Animations, Multiple Column Layout, User Interface, CSS interact with JavaScript

Teacher Name & Signature

Head of Department

Vidnyan Mahavidhyalaya Sangola Department of Computer Science <u>Teaching Plan</u>

Teacher Name: BANDGAR.N.H Academic Year :2022-23

Class	Subject	December	January
BCA-I	Web Programming-II	JavaScript: Introduction to JavaScript, JavaScript Variables, Data types, Operators, Built in functions in JavaScript, Con- trol structure in JavaScript,	DOM, Math, Array, History, Navi- gator, Location, Windows, String, Date, Document objects, us- er defined function, Validation in JavaScript, Event & event handling in JavaScript.
BCA-III	Data Warehouse and Data Mining	Introduction to Data Warehouse Difference between operational database systems and data warehouses.) Data warehouse Characteristics,) Data warehouse Architecture and its Components,)	Introduction to Data Mining What is Data Mining, Difference between Database Management System, Data Warehouse and Data Mining KDD, Challenges, Data Mining Tasks, Need for Pre-processing the Data Data

	Extraction – Transformation –	Summarization Data Cleaning Data
	Loading, Logical (Multi –	Integration and Transformation, Data
	Dimensional), Data Modelling -	Reduction Discretization and Concept
	Schema Design, Star and Snow –	Hierarchy Generation Binaryzation
	Flake Schema, Fact) Constellation,	Data Transformation; Measures of
	Fact Table, Fully Addictive, Semi	Similarity and Dissimilarity – Basics)
	 Addictive, Non Addictive 	Association Rule problems Definition,
	Measures; Fact – Less – Facts,	Frequent Item Set Generation, The
	Dimension Table Characteristics;	APRIORI Principle, Support and
	OLAP Cube, OLAP Operations,	Confidence Measures, Association
	OLAP Server Architecture –	Rule Generation; APRIOIRI
	ROLAP, MOLAP and HOLAP	Algorithm, The Partition Algorithms,
		FP- Growth Algorithms, Compact
		Representation of Frequent Item set-
		Maximal Frequent Item Set, Closed
		Frequent Item Sets.

Class	Subject	Februey	March
BCA-I	Web Programming-II	JQuery: Introduction to jQuery, Need of JQuery, Adding jQuery to Your Web Pages, jQuery Syntax, jQuery Selectors, jQuery Event Methods, jQuery Effects - Hide and Show, Fading, Sliding, An- imation, jQuery Callback Functions, jQuery - Chaining,.	jQuery – Get and Set Content and Attributes, jQuery - Add El- ements, Add Several New Elements, jQuery - Remove Elements, jQuery - Get and Set CSS Classes, jQuery - css() Method, jQuery - The noConflict() Method
BCA-III	Data Warehouse and Data Mining	Classification Problem Definition, General Approaches to solving a classification problem, Evaluation of classifiers, Classification Techniques, Decision Tree – Decision tree Construction, Methods for Expressing attribute test conditions, Measures for Selecting the Best Split Algorithm for Decision tree Induction; Naive Bayes Classifier, Rule base classification Bayesaian Belief Networks; K – N earnest neighbor classification – Algorithm) and Characteristics.	Clustering Problem Definition, Clustering Overview, Evaluation of Clustering Algorithms, Partitioning Clustering -K-MeansAlgorithm, K-Means Additional issues, PAM Algorithm; Hierarchical Clustering – Agglomerative Methods and divisive methods, Basic Agglomerative Hierarchical Clustering, Strengths and Weakness; Outlier Detection. Application and trends in Data Mining Spatial Data Mining Text Data Mining Multimedia Data Mining Web Data Mining Application of data mining

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