Lesson Plan for the Session 2024-25

CLASS: BCA 6th Sem

SUBJECT: Programming in Core Java

Name: Kamal Kishore

Month/Week	Topic
Jan/First	Basic Principles of Object Oriented Programming, Introduction to Java, History and Features of Java
Jan/Second	Java Virtual Machine (JVM), Java's Magic Bytecode; The Java Runtime Environment
Jan/Third	Basic Language Elements: Lexical Tokens, Identifiers, Keywords, Literals, Comments, Primitive Data types, Operators, Assignments
Jan/Fourth	Input/output in Java: Basics, I/O Classes, Reading Console Input, Control Structures in Java: Decision and Loop Control Statements
Feb/First	Class and Object in Java: Defining Class in Java, Creating Objects of a Class, Defining Methods, Argument Passing Mechanism, Using Class and Objects
Feb/Second	Constructors, Nested Class, Inner Class
Feb/Third	Abstract Class, Dealing with Static Members; Array & String in Java
Feb/Fourth	Defining an Array, Initializing & Accessing Array, Multi–Dimensional Array, Defining String, Operation on Array and String, Creating Strings using String Class, Creating Strings using StringBuffer Class
March/First	Polymorphism in Java: Basic Concept, Types, Overriding vs. Overloading, Implementation
March/Second	Holi Vacations
March/Third	Extending Classes and Inheritance in Java: Benefits of Inheritance, Types of Inheritance in Java, Access Attributes, Inheriting Data Members and Methods
March/Fourth	Role of Constructors in Inheritance, Use of "super"; Packages & Interfaces: Basic Concepts of Package and Interface, Organizing Classes and Interfaces in Packages
April/First	Defining Package, Adding Classes from a Package to Your Program, CLASSPATH Setting for Packages, Import Package, Naming Convention

Kamal Kishore

	For Packages , Access Protection in Packages, Standard Packages
April/Second	Exception Handling in Java: The Idea behind Exception, Types of Exception, Use of try, catch, finally, throw, throws in Exception Handling, In-built and User Defined Exceptions, Checked and Un-Checked Exceptions, Catching more than one Exception
April/Third	Applet in Java: Applet Basics, Applet Architecture, Applet Life Cycle, Applet Tag, Parameters to Applet, Embedding Applets in Web page, Creating Simple Applets
April/Fourth	GUI Programming: Designing Graphical User Interfaces in Java, Components and Containers, Using Containers, Layout Managers, AWT Components, AWT Classes, AWT Controls

Kamal Kishore

Lesson Plan for the Session 2024-25

CLASS: M.Com 4th Sem

SUBJECT: IT and E-Commerce

Name: Kamal Kishore

Month/Week	Topic
Jan/First	Introduction to E-commerce: Meaning of electronic commerce
Jan/Second	Business applications of e-commerce, comparison with traditional commerce; Business models in E-commerce
Jan/Third	E-shops, e-procurement, e-auctions, value chain integrators, information brokerage, telecommunication, collaboration platforms, etc.;
Jan/Fourth	Electronic payment system; E-Banking –concept, operations. Online fund transfer – RTGC, ATM, etc.
Feb/First	Online share market operations. Online marketing, Web-based advertising – concept, advantages
Feb/Second	Types of online advertisements; Search engine – as an advertising media, search engine optimisation – concept and techniques; Email marketing;
Feb/Third	Social Networking and marketing – promotion, opinion formulation, etc.;
Feb/Fourth	Viral Marketing, E-retailing-concept, advantages, limitations;
March/First	CRM and Information Technology, Tools to conducting online research – secondary research
March/Second	Holi Vacations
March/Third	Online focus groups, web based surveys, data mining from social networking sites;
March/Fourth	Cloud computing – Concept, uses in business; Enterprise Resource Planning;
April/First	Security issues in e-commerce - Online frauds, Privacy issues;
April/Second	Cyber laws including Information Technology Act.
April/Third	Revision
April/Fourth	Revision

Kamal Kishore

Lesson Plan for the Session 2024-25

CLASS: B.Sc. 2nd Sem

SUBJECT: Programming Methodologies

Name: Kamal Kishore

Month/Week	Topic
Feb/Second	Problem Solving: Understanding the problem
Feb/Third	Analyzing the problem, and Identifying the solution.
Feb/Fourth	Tools for Problem-Solving: Flowcharts and its Symbols.
March/First	Algorithm designing. Examples of Algorithms with flow chart. Decision Table.
March/Second	Holi Vacations
March/Third	Program: Concept of a program, Need for writing programs, Characteristics of a good program, Programming style, Documentation, and Program Maintenance.
March/Fourth	Debugging Programs: Syntax Errors, Run-Time Errors, Logical Errors. Process of conceptualizing a solution to a problem and moving from algorithm to programming.
April/First	General Concepts: Clarity and Simplicity of Expressions, Use of proper names for Identifiers, Comments, Indentation; and Documentation.
April/Second	Programming Constructs: Sequence, Selection, and Iteration
April/Third	Simulation (dry run) of the program for better understanding of algorithm
April/Fourth	Comparison and Analysis of Algorithms through simulations.
May/First	Methodologies: Structured programming, Top-down approach, Bottom-up approach
May/Second	Functional programming, Modular programming, and Object-oriented programming.
May/Third	Revision
May/Fourth	Revision

Kamal Kishore