

**“Education for knowledge, science and culture”
- Shikshanmaharshi Dr. Bapuji Salunkhe
Shri Swami Vivekanand Shikshan Sanstha”s
VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR
B. Sc. Part – III (Computer science Entire)
CBCS Syllabus with effect from June, 2023
Semester - V Computer Science DSE-1305E
Core Java and Operating system
Theory: 72 Hours (90 Lectures) credits -6**

**Section-I
Core java**

- Unit 1. An Introduction to Java
- Unit 2. Control statements, Classes and objects
- Unit 3. Package, Inheritance and Interface
- Unit 4. Exception Handling and Multithreading

**Section II
Operating system**

- Unit 1: Operating System overview
- Unit 2: Process Management
- Unit 3: Memory Management
- Unit 4: File management and Deadlocks

**Semester - V Computer Science DSE-1306E
Data Communication and Software Engineering with UML
Theory: 72 Hours (90 Lectures) credits -6**

**Section-I
Data Communication**

- Unit 1: Basics of Data communication
- Unit 2: Transmission media and modes
- Unit 3: Multiplexing, Switching Techniques and Protocols
- Unit 4: Physical Layer and Data Link Layer

**Section – II
Software Engineering with UML**

- Unit 1: Introduction to software engineering and process models
- Unit 2: Introduction to Requirements Analysis
- Unit 3: Introduction to UML Diagrams- I
- Unit 4: UML Diagrams- II and introduction to Software Testing

Semester - V Computer Science DSE-1307E
C# Programming and E-Commerce
Theory: 72 Hours (90 Lectures) credits -6

Section-I
C# Programming

Unit 1: Introduction
Unit 2: Data Types & Control Structure
Unit 3: Working with Classes
Unit 4: Developing GUI applications with Win Form

Section-II
E-Commerce

Unit 1: Introduction
Unit 2: Electronic Data Interchange (EDI)
Unit 3: E-Payment Systems
Unit 4: E-Security Issues and Threats

Semester: V Skill Enhancement course-II
PHP Programming
Theory: 30 Hours (38 Lectures) credits -2

Unit 1: Introduction to PHP
Unit 2: Functions and strings
Unit 3: Arrays and objects
Unit 4: Web technique and databases

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B. Sc. Part – III (Computer science Entire) CBCS Syllabus with effect from June, 2020

Semester - VI Computer Science DSE-1305F
Advanced Java and Data warehousing and mining
Theory: 72 Hours (90 Lectures) credits -6

Section-I
Advance java

Unit1: User Interface Components with AWT and Swing
Unit2: JDBC
Unit3: Servlet
Unit4: Jsp

Section-II
Data warehousing and mining

Unit 1: Introduction to data warehousing
Unit 2: Introduction to data mining
Unit 3: Data preprocessing and association rule mining

Unit 4: Classification, prediction and clustering

Semester - VI Computer Science DSE-1306F
Computer Networks and C# and introduction to ASP.Net
Theory: 72 Hours (90 Lectures) credits -6

Section-I
Computer Networks

Unit 1: Data Link Layer Protocols, Network Layer

Unit 2: Network Layer and Transport Layer

Unit 3: Session and Presentation layer

Unit 4: Application layer

Section II
C# and introduction to ASP.Net

Unit 1: Exception Handling

Unit 2: Database Connectivity in C#

Unit 3: Using Crystal Report

Unit 4: Introduction to ASP.Net with c#

Semester - VI Computer Science DSE-1307F
Linux OS and Artificial intelligence and Expert system
Theory: 72 Hours (90 Lectures) credits -6

Section-I
Linux Operating system

Unit 1: Linux Basics

Unit 2: Basic filters

Unit 3: VI editor

Unit 4: Essential shell programming

Section II
Introduction to Artificial Intelligence and Expert Systems

Unit 1: Introduction to Artificial Intelligence

Unit 2: Introduction to Intelligent System

Unit 3: Problem Solving in A.I.

Unit 4: Introduction to Expert System

Semester: VI Skill Enhancement course-II
Android Programming
Theory: 30 Hours (38 Lectures) credits -2

Unit -1 Fundamentals & developments of Android

Unit -2 Android Activities & UI Design

Unit - 3 Advanced UI Programming

Unit - 4: Toast, Menu, Dialog, List and Adapters

Nature of question Paper
Section-I

- Instructions: 1) All questions are compulsory.**
2) Figures to the right indicate full marks.

Q1 A) Select the correct alternative and rewrite the statement: [5]

Q1. B) Fill in The Blanks [2]

Q2) Attempt any Two of the following : [16]

Q3) Attempt any THREE of the following : [12]

Similarly for section-II