LESSON PLAN

CLASS: -B.Sc. (CS) SEMESTER:- 6th

Name of Asst/Associate Prof: - **Manoj Kumar**

Subject/Paper: - **Paper-6.2: Software Engineering**

S.No.	Week Days	Syllabus
Unit-1	01/01/2024- 15/01/2024	Software and software engineering: Software characteristics, Software Processes, software crisis.
	16/01/2024- 30/01/2024	Software life cycle models, Waterfall, Prototype, Evolutionary and Spiral Models, software Engineering paradigms, goals and principles of software engineering. Unit test
Unit-2	01/02/2024- 15/02/2024	Software requirement analysis – Structured analysis, object-oriented analysis and data modeling, software requirement specification, validation.
	16/02/2024- 28/02/2024	Software requirements Analysis and Specifications: Requirement engineering, requirements analysis using DFD, Data Dictionaries and E-R Diagram, requirement documentation, nature of SRS, Characteristics and organization of SRS. Unit Test
Unit-3	01/03/2024- 15/03/2024	Software project management: Planning a software project, Software cost estimation, project scheduling, personnel planning, team structure
	16/03/2024- 31/03/2024	Software configuration management, software quality and quality assurance, project monitoring, risk management. Unit Test
Unit-4	01/04/2024- 15/04/2024	Design and implementation of software- Software design fundamentals, software design principles, Cohesion and Coupling, Classification of Cohesion and Coupling. Unit test.
	16/04/2024- 30/04/2024	Function oriented design, object-oriented Design, design verification, monitoring and control. Unit Test. Course Revision and case studies.

LESSON PLAN

CLASS: -B.Sc. (CS) SEMESTER:- 6th

Name of Asst/Associate Prof: - **Manoj Kumar**

Subject/Paper: - **Paper-6.1: Visual Basic Programming**

S.No.	Week Days	Syllabus
Unit-1	01/01/2024-15/01/2024	Introduction to VB: Visual & Non-visual programming, Procedural, Object-oriented and event- driven programming languages, The VB environment: Menu bar, Toolbar, Project explorer, Toolbox.
	16/01/2024-30/01/2024	Properties window, Form designer, Form layout, Immediate window. Event driven programming.
Unit-2	01/02/2024-15/02/2024	Basics of Programming: Variables: Declaration, Types of variables, Converting variables types, Userdefined data types, Scope & lifetime of variables. Constants: Named & intrinsic. Operators:
	16/02/2024-28/02/2024	Arithmetic, Relational & Logical operators. I/O in VB: Various controls for I/O in VB, Message box, Input Box, Print statement.
Unit-3	01/03/2024-15/03/2024	Programming with VB: Decisions and conditions: If statement, If-then-else, Select-case. Looping statements: Do-loops, For-next, While-wend, Exit statement. Nested control structures. Arrays:
	16/03/2024-31/03/2024	Declaring and using arrays, one-dimensional and multi-dimensional arrays, Static & dynamic arrays, Arrays of array.
Unit-4	01/04/2024-15/04/2024	Programming with VB: Procedures: General & event procedures, Subroutines, Functions, Calling procedures, Arguments- passing mechanisms, Optional arguments, Named arguments, Functions returning custom data types.
	16/04/2024-30/04/2024	Working with forms: Adding multiple forms in VB, Hiding & showing forms, Load & unload statements, Activate & deactivate events, Form-load event, menu designing in VB, Database Programming using DAO & ADO, Simple Active X controls.

LESSON PLAN

CLASS: - **BCA** SEMESTER:- 4th

Name of Asst/Associate Prof: - **Manoj Kumar**

Subject/Paper: - **BCA-207 Software Engineering**

S.No.	Week Days	Syllabus
Unit-1	01/01/2024- 15/01/2024	Software engineering definition and paradigms, A generic view of Software Engineering, Requirements analysis, Statement of system scope, isolation of top level processes and entities and their allocation to physical elements, refinement and review.
	16/01/2024- 30/01/2024	Analyzing a problem, creating a software specification document, review for correctness, Consistency and completeness. Unit Test
Unit-2	01/02/2024- 15/02/2024	Designing software solutions : Refining the software specifications : Application of fundamental Design concept for data. Unit Test
	16/02/2024- 28/02/2024	architectural and procedural designs using software blue print methodology and object oriented design paradigm; Creating a design document Review of conformance to software requirements and quality. Unit Test
Unit-3	01/03/2024- 15/03/2024	Software Implementation : Relationship between design and implementation; Implementation issues and programming support environment; Coding the procedural design; Good coding style, and review of correctness and readability. Case study.
	16/03/2024- 31/03/2024	Software testing : Role of testing and its relationship to quality assurance; Nature and limitation of software testing, Software testing methods. Unit Test
Unit-4	01/04/2024- 15/04/2024	Software maintenance : Maintenance as part of software evaluation, reason for maintenance, types of maintenance (Perfective, adoptive, corrective), designing for maintanability, teachniques for maintenance, Configuration management. Case study
	16/04/2024- 30/04/2024	Comprehensive examples using available software platform/case tools. Unit Test and syllabus revision.