

SVM Institute of Technology, Bharuch
 Department of CE & IT
 Syllabus: Mid Semester Examination (Even semester 2018-19)
 BE – III(6th Semester) CE and IT

Name of Faculty: S.T Patel, J. N. Patel, A. D. Patel

Subject Code: 2160707

Subject Name: Advance Java

Sr. No.	Unit	Topics
1	Unit 1	Java Networking Network Basics and Socket overview, TCP/IP client sockets, URL, TCP/IP server sockets, Datagrams, java.net package Socket, ServerSocket, InetAddress, URL, URLConnection.
2	Unit 2	JDBC Programming The JDBC Connectivity Model, Database Programming: Connecting to the Database, Creating a SQL Query, Getting the Results, Updating Database Data, Error Checking and the SQLException Class, The SQLWarning Class, The Statement Interface, Prepared Statement, Callable Statement The Result Set Interface, Updatable Result Sets, JDBC Types, Executing SQL Queries, ResultSetMetaData, Executing SQL Updates, Transaction Management
3	Unit 3	Servlet API and Overview Servlet Model: Overview of Servlet, Servlet Life Cycle, HTTP Methods Structure and Deployment descriptor ServletContext and ServletConfig interface, Attributes in Servlet, Request Dispatcher interface The Filter API: Filter, FilterChain, Filter Config Cookies and Session Management: Understanding state and session, Understanding Session Timeout and Session Tracking, URL Rewriting
4	Unit 4	Java Server Pages JSP Overview: The Problem with Servlets, Life Cycle of JSP Page, JSP Directives, JSP Action, JSP Implicit Objects

Text Book(s):

- 1) Black Book “ Java server programming” J2EE, 1st ed., Dream Tech Publishers, 2008. 3. Kathy walrath ”
- 2) Complete Reference J2EE by James Keogh mcgraw publication

SVM Institute of Technology, Bharuch
Department of CSE & IT
Syllabus: Mid Semester Examination (Even Sem 2018-19)
BE – III (6th Sem) CE

Name of Faculty: Vishal M. Patel, Akanksha A. Mishra

Subject Code: 2160703

Subject Name: Computer Graphics

Sr. No.	Unit	Topics
1	Unit 1	Basic of Computer Graphics: Basic of Computer Graphics, Applications of computer graphics, Display devices, Random and Raster scan systems, Graphics input devices, Graphics software and standards
2	Unit 2	Graphics Primitives: Points, lines, circles and ellipses as primitives, scan conversion algorithms for primitives, Fill area primitives including inside-outside test, boundary and flood-fill, character generation, line attributes, area-fill attributes, character attributers.
3	Unit 3	2D transformation and viewing: Transformations (translation, rotation, scaling), matrix representation, homogeneous coordinates, composite transformations, reflection and shearing.
4	Unit 5	3D transformation and viewing: 3D scaling, rotation and translation, composite transformation, viewing pipeline and coordinates, parallel and perspective transformation.

Text Book:

- 1) Computer Graphics, D.Hearn And P.Baker - Pearson Education - C Version

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Department of CE & IT

Syllabus: Mid Semester Examination (Even semester 2018-19)

BE – VI (6th Semester) CE & IT

Name of Faculty: Bhavin. I. Shah, Swati. L. Kariya

Subject Code: 2160711

Subject Name: Dot Net Technology

Sr. No.	Unit	Topics
1	Unit 1	Introduction to .NET Framework: NET framework, MSIL, CLR, CLS, CTS, Namespaces, Assemblies The Common Language Implementation, Assemblies, Garbage Collection, The End to DLL Hell - Managed Execution
2	Unit 2	C# - The Basics and Console Applications in C#: Name Spaces - Constructor and Destructors, Function Overloading & Inheritance, Operator Overloading, Modifiers - Property and Indexers , When to use Console Applications - Generating Console Output, Processing Console Input
3	Unit 3	C#.NET: Language Features and Creating .NET Projects, Namespaces Classes and Inheritance, Exploring the Base Class Library, Debugging and Error Handling , Data Types, Exploring Assemblies and Namespaces, String Manipulation, Files and I/O ,Collections
4	Unit 4	ADO.NET: Benefits of ADO.NET, ADO.NET compared to classic ADO -, Datasets, Managed Providers -, Data Binding: Introducing Data Source Controls -, Reading and Write Data Using the SqlDataSource Control
5	Unit 8	ASP.NET: Introduction to ASP.NET, Working with Web and HTML Controls, Using Rich Server Controls, Login controls, Overview of ASP.NETValidation Controls, Using the Simple Validations, Using the Complex Validators Accessing Data using ADO.NET, Using the Complex Validators Accessing Data using ADO.NET, Configuration Overview

6	Unit 10	Managing State: Preserving State in Web Applications and Page-Level State, Using Cookies to Preserve State, ASP.NET Session State ,Storing Objects in Session State, Configuring Session State, Setting Up an Out-of-Process State Server, Storing Session State in SQL Server, Using Cookieless Session IDs, Application State Using the DataList and Repeater Controls, Overview of List-Bound Controls, Creating a Repeater Control and DataList Control
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Text Book(s):

- 1) Christian Nagel, Professional C# .Net, Wrox Publication
- 2) Matthew Macdonald and Robert Standefer, ASP.NET Complete Reference, TMH
- 3) Vijay Mukhi, C# The Basics, BPB Publications

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Department of CE & IT

Syllabus: Mid Semester Examination (Even semester 2018-19)

BE – IV (6th Semester) CE and IT

Name of Faculty: V R Patel, H M Patel

Subject Code: 2160701

Subject Name: Software Engineering

Sr. No.	Unit	Topics
1	Unit 1	Introduction to Software and Software Engineering: The Evolving Role of Software, Software: A Crisis on the Horizon and Software Myths, Software Engineering: A Layered Technology, Software Process Models, The Linear Sequential Model, The Prototyping Model, The RAD Model, Evolutionary Process Models, Agile Process Model, Component-Based Development, Process, Product and Process.

2	Unit 2	Agile Development: Agility and Agile Process model, Extreme Programming, Other process models of Agile Development and Tools..
3	Unit 4	Requirement Analysis and Specification: Understanding the Requirement, Requirement Modeling, Requirement Specification (SRS), Requirement Analysis and Requirement Elicitation, Requirement Engineering.
4	Unit 5	Software Design: Design Concepts and Design Principal, Architectural Design, Component Level Design (Function Oriented Design, Object Oriented Design) (MS Visio Tool),User Interface Design, Web Application Design
5	Unit 6	Software Coding & Testing: Coding Standard and coding Guidelines, Code Review, Software Documentation, Testing Strategies, Testing Techniques and Test Case, Test Suites Design, Testing Conventional Applications, Testing Object Oriented Applications, Testing Web and Mobile Applications, Testing Tools (Win runner, Load runner).

Reference Books:

1. Roger S.Pressman, Software engineering- A practitioner's Approach, McGraw-Hill International Editions
2. Ian Sommerville, Software engineering, Pearson education Asia
3. Pankaj Jalote, Software Engineering – A Precise Approach Wiley
4. Software Engineering Fundamentals by Ali Behhforoz & Frederick Hudson OXFORD
5. Rajib Mall, Fundamentals of software Engineering, Prentice Hall of India.
6. Engineering Software as a Service An Agile Software Approach, Armando Fox and David Patterson
7. John M Nicolas, Project Management for Business, Engineering and Technology, Elsevier

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BE – III(6th Semester) CE

Name of Faculty:A. D. Patel, H. M. Patel

Subject Code: 2160704

Subject Name:Theory of Computation

Sr. No.	Unit	Topics
1	Unit 1	Review of Mathematical Theory: Sets, Functions, Logical statements, Proofs, relations, languages, Mathematical induction, strong principle, Recursive definitions
2	Unit 2	Regular Languages and Finite Automata: Regular expressions, regular languages, applications, Automata with output-Moore machine, Mealy machine, Finite automata, memory requirement in a recognizer, definition, union, intersection and complement of regular languages.Non Determinism Finite Automata, Conversion from NFA to FA, ^- Non Determinism Finite Automata Conversion of NFA- ^ to NFA and equivalence of three Kleene's Theorem, Minimization of Finite automata Regular And Non Regular Languages
3	Unit 5	Turing Machine (TM): TM Definition, Model Of Computation And Church Turning Thesis, computing functions with TM, Combining TM, Variations Of TM, Non Deterministic TM, Universal TM
4	Unit 6	Computable Functions: Partial, total, constant functions, Primitive Recursive Functions, Bounded Mineralization, Regular function, Recursive Functions

Text Book(s):

- 1) Introduction to computer theory by Deniel I. Cohen , Joh Wiley & Sons, Inc
- 2) Introduction to languages and the theory of computation by John C Martin, Third Edition, McGraw Hill

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BE – VI(6th Semester) CE& IT

Name of Faculty:A. D. Patel, B. I. Shah, S. L. Kariya

Subject Code: 2160708

Subject Name:Web Technology

Sr. No.	Unit	Topics
1	Unit 1	Introduction: Concept of WWW, Internet and WWW, HTTP Protocol : Request and Response, Web browser and Web servers, Features of Web 2.0
2	Unit 2	Web Design: Concepts of effective web design, Web design issues including Browser, Bandwidth and Cache, Display resolution, Look and Feel of the Website, Page Layout and linking, User centric design, Sitemap, Planning and publishing website, Designing effective navigation
3	Unit 3	HTML: Basics of HTML, formatting and fonts, commenting code, color, hyperlink, lists, tables, images, forms, XHTML, Meta tags, Character entities, frames and frame sets, Browser architecture and Web site structure. Overview and features of HTML5
4	Unit 4	JavaScript: Client side scripting with JavaScript, variables, functions, conditions, loops and repetition, Pop up boxes, Advance JavaScript: JavaScript and objects, JavaScript own objects, the DOM and webbrowser environments, Manipulation using DOM, forms and validations, DHTML: Combining HTML, CSS and JavaScript, Events and buttons

Text Book(s):

- 1) Developing Web Applications, Ralph Moseley and M. T. Savaliya, Wiley-India
- 2) Web Technologies, Black Book, Dreamtech Press