SHIVAJI UNIVERSITY, KOLHAPUR.

Revised Syllabus For
B. Sc. Part-III
Information Technology (IT) Entire
Semester V and VI

Syllabus to be implemented from June 2015 onwards.

Semester- v

Paper No.	Name of the Paper	Total Marks	Theory Workload per Week	Practical Workload per Week
21.1	Introduction to VB.Net	40	**4**	**---**
22.1	OOP with Java	40	**4**	**---**
23.1	Data communication	40	**4**	**---**
24.1	Ecommerce	40	**4**	**---**
25.1	Introduction to ERP	40	**4**	**---**
26.1	Web Development using HTML	40	**4**	**---**
27	Laboratory Course IX (Based on Paper No. 21.1)		**--**	**4**
28	Laboratory Course X (Based on Paper No. 22.1)		**--**	**4**
29	Laboratory Course XI (Based on Paper No. 26.1)		**--**	**4**

Semester- VI

Paper No.	Name of the Paper	Total Marks	Theory Workload per Week	Practical Workload per Week
21.1	Introduction to VB.Net	40	**4**	**---**
22.1	OOP with Java	40	**4**	**---**
23.1	Data communication	40	**4**	**---**
24.1	Ecommerce	40	**4**	**---**
25.1	Introduction to ERP	40	**4**	**---**
26.1	Web Development using HTML	40	**4**	**---**
27	Laboratory Course IX (Based on Paper No. 21.1 and 21.2)	**--**	**--**	**4**
28	Laboratory Course X (Based on Paper No. 22.1 and 22.2)	**--**	**--**	**4**
29	Laboratory Course XI (Based on Paper No. 26.1 and 26.2)	**--**	**--**	**4**
30	Laboratory Course XII Project- Viva	**--**	**--**	**4**

Practical Examination Annual Pattern

Sr.No.	Practical Paper	Marks
1	Laboratory Course IX (Based on Paper No. 21.1 and 21.2)	100
2	Laboratory Course X (Based on Paper No. 22.1 and 22.2)	100
3	Laboratory Course XI (Based on Paper No. 26.1 and 26.2)	100
4	Laboratory Course XII Project- Viva	100

Semester V

Paper No. 21.1
Paper Title-Introduction to VB.Net

Unit -1 Introduction to Visual Programming   **10 Lectures**

1.1 What is .NET

1.2 .NET framework

    1.2.1 CLR

    1.2.2 CTS

    1.2.3 CLS

    1.2.4 JIT

    1.2.5 FCL

1.3 Visual Basic .NET IDE and its features

1.4 Language basics

    1.4.1 Variables

    1.4.2.Keywords

    1.4.3 Data type

    1.4.4.Operators,

1.5 Control statements

    1.5.1 branching and looping

Unit-2 Console Applications   **10 Lectures**

2.1 Creating console application

    2.1.1 Reading data from console

    2.1.2 display text in dialog

2.2 Procedure and Function

    2.2.1 types of arguments

    2.2.2 Static variables

    2.2.3 Passing variables to sub by reference

    2.2.4 Recursion

Unit -3 .NET Controls   **10 Lectures**

3.1 Introduction to ActiveX controls

    3.1.1 Forms

    3.1.2 Textbox

    3.1.3 Labels

    3.1.4 Button

    3.1.5 RadioButton

    3.1.6 CheckBoxes

    3.1.7 ListBox and ComboBox

    3.1.8 Timer

    3.1.9 DateTimePicker

    3.1.10 GroupBox

    3.1.11 RichTextBox,

    3.1.12 PictureBox

    3.1.13 DataGrid

Unit-4 Strings and Arrays   **10 Lectures**

4.1 Arrays

   4.1.1 Working with Arrays

   4.1.2 Redim and Preserve Statement

   4.1.3 Rectangular array

   4.1.4 Jagged array

   4.1.5 Array Class

4.2 String

   4.2.1 String Manipulation Functions

      4.2.1.1 concatenation

      4.2.1.2 copy

      4.2.1.3 replace

      4.2.1.4 substring

      4.2.1.5 length

      4.2.1.6 Compare.

Recommended Books:-

1) Visual Basic.NET Black Book – Steve Holzner

2) Visual Basic.NET Programming Bible – Bill Evjen

Reference Books:

1)Visual Basic .Net-C Muthu

2)Visual Basic .Net-Rajendra Salokhe-Aruta Publishers

Paper No. 22.1
Paper Title-OOP with JAVA

Unit-1 An Overview of Java   **10 Lectures**

1.1 features

1.2 comparison with C++

1.3 Java virtual Machine

1.4 Java byte code

1.5 Java execution model

1.6 editions of Java

1.7   a Java program

   1.7.1 source code

   1.7.2 compile and execute

   1.7.3 keywords

   1.7.4 identifiers

   1.7.5 variables

   1.7.6 data types

   1.7.7 operators

   1.7.8 selection and iteration constructs in Java.

Unit- 2. Classes, objects and methods   **10 Lectures**

2.1 Overview of classes and objects

2.2 writing a Java class

2.3 adding fields and methods

2.4 instantiating of an object

2.5 methods

2.6 static data member and static methods

2.7 parameter passing and method overloading

2.8 constructors

   2.8.1 default constructors

   2.8.2 parameterized constructor

   2.8.3 overloading constructors

2.9 this keyword

2.10 garbage collection

2.11 finalize() method.

Unit - 3. Object Oriented Concepts in Java   **12 Lectures**

3.1 Inheritance

   3.1.1 An overview of inheritance and implementation

   3.1.2 Single versus multiple inheritance

   3.1.3 method overriding

3.2 keywords

   3.2.1 super , final ,Static

3.3 object class and its methods

3.4 Interfaces

    3.4.1 definition

    3.4.2 user defined interfaces and their applications

    3.4.3 implementing an interface

    3.4.4 extending interfaces

3.5 Packages

3.6 Polymorphism

    3.6.1 An overview of polymorphism

    3.6.2 virtual methods

    3.6.3 abstraction

    3.6.4 abstract classes

    3.6.5 abstract methods.

Unit - 4. Exception Handling   **8 Lectures**

4.1 Overview of exception handling

4.2 Runtime exceptions

4.3 Checked exceptions

4.4 flow of control

4.5 throwable classes

4.6 catching exceptions

4.7 multiple catch blocks

4.8 throws keyword

4.9 throwing exception

4.10 finally keyword, User defined Exceptions.

Recommended Books :

 1. The Complete Reference Java2 Tata Mcgraw-Hall

 2. Learning Java, Rich Raposa, WILEY- dreamtech India Pvt. Ltd.

Reference Books:

1.Programming With Java A Primer-E. Balgurusamy

Paper No. 23.1
Paper Title -Data communication

Unit-1 Data Communication Fundamentals   **10 Lectures**

1.1 Data transmission concept and terminology

1.2 Transmission impairments

   1.2.1 Attenuation

   1.2.2 Delay distortion

   1.2.3 Dispersion

   1.2.4 Noise.

1.3 Data communication Types and modes

   1.3.1 Serial and Parallel

   1.3.2 Synchronous and asynchronous transmission

   1.3.3 Simplex

   1.3.4 Half duplex

   1.3.5 full duplex

Unit-2 Data Transmission   **12 Lectures**

2.1 Guided transmission media

   2.1.1 Twisted pair

   2.1.2 Coaxial cable

   2.1.3 Fiber optics

2.2 Unguided transmission media

   2.2.1 Radio

   2.2.2 Microwave

   2.2.3 Infrared

   2.2.4 Light Wave.

2.3 Multiplexing

2.4 Switching

2.5 Introduction to Public Switch Telephone Network(PSTN).

2.6 Network Components

   2.6.1 Bridge

   2.6.2 Hub

   2.6.3 Switch

   2.6.4 Router

   2.6.5 Gateway

   2.6.6 Reapeter

   2.6.7 NIC.

Unit-3 Network Models   **12 Lectures**

3.1 Computer network definition

3.2 Uses of computer network

3.3 Introduction to LAN, WAN, MAN and Wireless network

3.4 Peer to peer network

3.5 Client/Server network

3.6 Host terminal network

3.7 Virtual private network

3.8 Network Software

   3.8.1 Protocol hierarchies

   3.8.2 Design issues for the layers

   3.8.3 connection oriented and connectionless services

3.9 Reference models

   3.9.1 The OSI reference model

   3.9.2 the TCP/IP reference model

   3.9.3 comparison of OSI and TCP/IP

Unit-4 Data link layer Fundamentals   **8 Lectures**

4.1 Design issues

   4.1.1 Services provided to the network layer

   4.1.2 Framing

   4.1.2 Error control

   4.1.3 Flow control

4.2 Error correcting codes and error detecting codes

4.3 Sliding window protocol

   4.3.1 A One bit sliding window protocol

   4.3.2 A protocol using Go Back N

   4.3.3 Protocol using selective repeat.

Recommended Books :.

   1) Data Communication and Networking – Behrouza A Forouzan

   2) Computer Networks – Tannenbaum A.S

   3) Data and Computer Communications –Williams Stallings(5thEdition) (PHI)

Reference Books:

   1) Computer Networks – Stalling A.S.

   2) Computer Networks Protocols, Standards and Interface – Block C

Paper No. 24.1
Paper Title-E-commerce

Unit – 1 E-COMMERCE and EDI   **10 Lectures**

1.1 Meaning

1.2 Objectives

1.3 challenges and opportunities

1.4 Basic models of E-commerce

   1.4.1B2B

   1.4.2 B2C

   1.4.3 C2B

   1.4.4 C2C

1.5 Electronic Data Interchange

   1.5.1 Concept of EDI

   1.5.2 Requirements

   1.5.3 Benefits

   1.5.4 Comparison with trade cycle

   1.5.5 Components and applications of EDI.

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Unit – 2 ELECTRONIC PAYMENT SYSTEM   **10 Lectures**

2.1 Overview of electronic payment technology

2.2 prepaid , postpaid payment systems

2.3 cyber cash

2.4 electronic cash

2.5 digital cash

2.6 electronic checks

2.7 online credit-based systems

2.8 consumer legal and business issue

Unit – 3 ELECTRONIC COMMERCE AND BANKING   **10 Lectures**

3.1 Changing dynamics in the banking industry

3.2 home banking

   3.2.1 History

   3.2.2 Implementation approaches

   3.2.3 Open verses closed models

3.3 management issues in online banking

3.4 online customer services and support

3.5 technology and marketing strategies.

Unit -4 E-Business   **10 Lectures**

4.1 Introduction

4.2 Internet books shop

4.3 Grocery supplies

4.4 Software supplies and support

4.5 Electronic Newspapers

4.6 Internet banking

4.7 Virtual Auctions

4.8 Online share dealing

4.9 e-diversity

Recommended books :

1) E Commerce A Managers Guide by Ravi Kalakota

2) E -commerce By Kennneth C Lauden and Carol Guercio Traver, Pearson Edn.

3) E-Commerce By C.S.V Murthy, Himalaya Publication

4) E- commerce Fundamentals and applications by Henry Chan, Raymond Lee, Tharan Dillon and Elizabeth Chang.

Paper No. 25.1
Paper Title-Introduction to ERP

Unit –1 Introduction To ERP   **10 Lectures**

1.1 An overview of Enterprise

1.2   Business Functions and business processes

1.3   Integrated management information

1.4   What is ERP?

1.5 Evolution of ERP

1.6 Why ERP packages now?

1.7   Advantages of ERP

1.8   How does ERP create value

Unit –2 Risks and Benefits of ERP   **10 Lectures**

2.1 Benefits

   2.1.1 Quantifiable Benefits

   2.1.2 The intangible benefits and other factors

2.2 Risks

   2.2.1 What is Risk?

   2.2.2 Risk factors of ERP implementation

   2.2.3 People Issues

   2.2.4 Process risk

   2.2.5 Technological risks

   2.2.6 Implementation issues

   2.2.7 Operation and Maintenance issues

   2.2.8 Managing risks of ERP projects

2.3 Security and ERP.

Unit –3 Related Technologies and Modules in ERP   **12 Lectures**

3.1 Related Technologies

   3.1.1 Introduction

   3.1.2 BPR

   3.1.3 Data warehousing

   3.1.4 Data Mining

   3.1.5 OLAP

   3.1.6 PLM

   3.1.7 SCM

   3.1.8 CRM

   3.1.9 GIS

   3.1.10 Intranet and Extranet.

3.2 Functional Modules

   3.2.1 Introduction

   3.2.2 Functional Modules of ERP software

Unit –4 ERP Package Selection and Market   **8 Lectures**

4.1 ERP package Selection

    4.1.1 Reasons of ERP Implementation failure

    4.1.2 Package Evaluation and Selection

4.2 ERP packages: make or buy.

4.3 ERP Market

    4.3.1 Market overview

    4.3.2 Top 10 companies in ERP development

    4.3.3 Their Market share :global And Indian.

Recommended Books:

1) References: Enterprise Resource Planning, Alexis Leon (Tata MacGraw Hill)

2) ERP – A Managerial Perspective, S. Sadagopan (Tata MacGraw Hill)

Paper No. 26.1

Paper Title-Web Development using HTML

UNIT – 1 INTRODUCTION TO INTERNET   **10 Lectures**

1.1 Concept of Internet

1.2 Benefits of internet

1.3 Definitions and concepts (not in detail)

   1.3.1 ISP

   1.3.2 Browsers Web Page

   1.3.2 URL

   1.3.3 Cookies

   1.3.5 FTP

1.4 E-Mail

   1.4.1 Concept,

   1.4.2 E-mail service providers

   1.4.3 Creating account

   1.4.4 Sending mail

   1.4.5 Attachments

1.5 Introduction to World Wide Web

1.6 Architecture of World Wide Web.

UNIT – 2 HTML   **10 Lectures**

2.1 Introduction to HTML

2.2 Advantages of HTML

2.3 Essential tags

2.4 Heading and formatting tags

2.5 anchor tag

2.6 table tags

2.7 form tag

2.8 Introduction to frames

   2.8.1 Frameset tag

   2.8.2 Frame tags

   2.8.3 Frame linking

   2.8.4 Floating or inline frame

2.9 image maps<MAP> and <AREA> tags

2.10 form design

   2.10.1 <FORM> tag

   2.10.2 <INPUT> tag

   2.10.3 <SELECT> tag

   2.10.4 <OPTION> tag

   2.10.5 Inserting audio

   2.10.6 Video in HTML pages

2.11 <EMBED> tag.

UNIT – 3 CASCADING STYLE SHEET (CSS)   **10 Lectures**

3.1 Introduction to cascading style sheet (CSS)

3.2 CSS styles and <STYLE> tag

3.3 <LINK> tag

3.4 Classes and IDs

3.5 Contextual selectors

3.6 Group selectors

3.7 Positioning using CSS

3.8 3D Layers

3.9 CSS Properties

3.10 Cross browser testing.

UNIT – 4 XML and XHTML   **10 Lectures**

4.1 Introduction to XML

4.2 Features of XML

4.3 XML Basics

   4.3.1 XML Syntax

   4.3.2 Declaration

   4.3.3 Elements

   4.3.4 Attributes

   4.3.5 XML Parsers

   4.3.6 DTD

4.4 Comparison of XML with HTML

4.5 Introduction to XHTML.

Recommended Books :

1) Web Publishing- Monica D'Souza & Jude D'Souza (BPB)

2) HTML Black Book by Steven Holzner

3) HTML5 Black Book-Kogent((Dreamtech Press

4) The Complete Reference HTML – Thomas A. Powell

Reference Books:

1) HTML,DHTML,Javascript,Perl CGI - Ivan Bayross

Semester VI
Paper No. 21.2
Paper Title-OOP with VB.Net and ADO.Net

Unit-1 Working with Classes   **10 Lectures**

1.1 Classes and Objects

1.2 Abstraction

1.3 Encapsulation

1.4 Properties, Methods and Events

1.5 Attaching a class with a form

1.6 Delegates

1.7 Constructer and Destructor

   1.7.1 Using Sub New

   1.7.2 Overloading Constructors

   1.7.3 Initializing Objects

   1.7.4 Garbage Collection

   1.7.5 Using Dispose Method

Unit- 2 Inheritance and Polymorphism   **10 Lectures**

2.1 Inheritance

   2.2.1 Access Modifiers

   2.2.2 Inheritance Modifiers

2.2 Overloading and Overrinding

   2.2.1 Overloading

   2.2.2 Overriding

   2.2.3 Overridable

   2.2.4 MustOverride

   2.2.5 Overrides

   2.2.6 NotOverridable

2.3 Interfaces

   2.3.1 creating Interface

   2.3.2 Multiple Interfaces

2.4 Polymorphism

   2.4.1 Abstract Class and Methods

   2.4.2 Early and Late Binding

   2.4.3 Inheritance based polymorphism

   2.4.4 Interface based polymorphism

Unit-3 Exception Handling   **10 Lectures**

3.1 Types of errors

3.2 structured and unstructured exceptions

3.3 Tracing Errors

   3.3.1 breakpoints

3.3.2 watch

3.3.3 quickWatch

3.3.4 autos

3.3.5 locals

3.3.6 call stack.

Unit-4 ADO.NET   **10 Lectures**

4.1 ADO.NET its Components and features

4.2 ADO.Net namespaces

4.3 Data providers

4.4 Connected and Disconnected Architecture

4.5 datasets

4.6 data adapters

4.7 datatable

4.8 datarow

4.9 datacolumn

4.10 datareader

4.11 binding controls to database

4.12 Case Studies

Recommended Books:-

1) Visual Basic.NET Black Book – Steve Holzner

2) Visual Basic.NET Programming Bible – Bill Evjen

3) Pro ADO.NET with VB.NET – Sahil Mailk and Paul Dickinson

Reference Books:

1)MCM Semester-IV Program and Design with VISUAL BASIC .NET-G V R Sastry

1)Visual Basic .Net-C Muthu

2)Visual Basic .Net-Rajendra Salokhe-Aruta Publishers

Paper No. 22.2
Paper Title-GUI Development using JAVA

Unit-1 Multithreaded programming   **10 Lectures**

1.1 Main thread

1.2 Creating a thread

  1.2.1 Implementing runnable,

  1.2.2 Extending thread

1.3 Creating multiple threads

  1.3.1 Using isAlive () and join ()

1.4 Thread priorities

1.5 Synchronization

1.6 Deadlock issues

1.7 Suspending

1.8 Resuming and stopping threads.

Unit-2 GUI development using AWT , Applet   **12 Lectures**

2.1 AWT classes

2.2 Windows fundamentals

  2.2.1 Component

  2.2.2 Container

  2.2.3 Panel

  2.2.4 Window

  2.2.5 Frame

  2.2.6 Canvas

2.3 working with frame windows

  2.3.1 Setting the windows dimensions

  2.3.2 Hiding and showing window

  2.3.3 Setting a window title

  2.3.4 Closing a frame window

  2.3.5 Layout Manager

  2.3.6 Creating a frame

2.4 Window in an applet

  2.4.1 Life cycle of applet

  2.4.2 Creating and running applets

  2.4.3 HTML applet tab

2.5 Working with graphics

  2.5.1 Drawing lines

  2.5.2 Rectangles and circles.

Unit – 3 GUI development using Swing   **10 Lectures**

3.1 Two Key Swing Features

3.2 The Swing Packages

3.3 A Simple Swing Application

3.4 Create a Swing Applet, Painting in Swing.

3.5 JLabel and ImageIcon

3.6 JTextField

3.7 Swing Buttons

   3.7.1 JButton

   3.7.2 JToggleButton

   3.7.3 ChechBoxes

   3.7.4 RadioButtons

Unit-4 Event Handling   **10 Lectures**

4.1 Event , Delegation event model

4.2 Event classes

   4.2.1 Action event class

   4.2.2 Mouse event class

   4.2.3 Key event class

   4.2.4 Sources of events

4.3 Event listener interfaces:

   4.3.1 ActionListener interface

   4.3.2 MouseListener interface

   4.3.3 MouseMotionListener interface

   4.3.4 KeyListener interface.

Recommended Books :

1. The Complete Reference Java2 Tata Mcgraw-Hall

2. Learning Java, Rich Raposa, WILEY- dreamtech India Pvt. Ltd.

Reference Books:

1.Programming With Java A Primer-E. Balgurusamy

Paper No. 23.2
Paper Title-Computer Network

Unit-1 Network Layer and Routing   **10 Lectures**

1.1 Network layer design issue

   1.1.1 Service provided to the transport layer

   1.1.2 Comparison of virtual circuit and datagram subnets

1.2 Routing Algorithms

   1.2.1 Nonadaptive Algorithms

      1.2.1.1 The optimality principle

      1.2.1.2 Shortest path routing

      1.2.1.3 flooding

  1.2.2 Adaptive Algorithms

      1.2.2.1 Distance vector routing

      1.2.2.2 Link state routing.

Unit-2 Congestion Control and Internet Protocol   **12 Lectures**

2.1 Congestion control algorithms

   2.1.1 General principles of congestion control

   2.1.2 Congestion control in virtual circuit subnets

2.2 The network layer in the internet

   2.2.1 The IP protocol

   2.2.2 IPv4

      2.2.2.1 Address Space

      2.2.2.2 Classful Addressing

      2.2.2.3 Classless Addressing

   2.2.3 IPv6

      2.2.3.1 Structure

      2.2.3.2 Address space

   2.2.4 Internet control protocols

      2.2.4.1 DHCP

      2.2.4.2 ARP

      2.2.4.3 ICMP

Unit-3 The Transport Layer   **10 Lectures**

3.1 The Transport service

   3.1.1 Services provided to the upper layers

   3.1.2 Transport service primitives

   3.1.3 Berkely sockets

3.2 Elements of transport protocols

   3.2.1 Addressing

3.2.2 Connection establishment

3.2.3 Connection release

3.2.4 Flow control and buffering

3.3 Introduction to UDP.

Unit-4 Internet Transport Protocols and Application Layer   10 Lectures

4.1 TCP introduction to TCP

4.2 The TCP protocol

4.3 TCP segment header

4.4 Application Layer

   4.4.1 The domain name system

      4.4.1.1 DNS name space

      4.4.2.2 Resource records

      4.4.3.3 Name servers

4.5 SNMP Model

4.6 The World Wide Web: HTTP , FTP

Recommended Books :.

1) Data Communication and Networking – Behrouza A Forouzan

2) Computer Networks – Tannenbaum A.S

3) Data and Computer Communications –Williams Stallings(5thEdition) (PHI)

Reference Books:

1) Computer Networks – Stalling A.S.

2) Computer Networks Protocols, Standards and Interface – Block C

Paper No. 24.2
Paper Title-Network Security

Unit – 1 Introduction To Concepts Of Security   **8 Lectures**

1.1 Introduction

1.2 Need of security

1.3 Security approaches

1.4 Principles of security

1.5 Types of attack

1.6 Security Services-access control

1.7 Firewall and proxy services-introduction,

1.8 Digital signatures

        1.9 Electronic documents

Unit – 2 Cryptographic Techniques   **10 Lectures**

2.1 Introduction

2.2 plain text and cipher text

2.3 Substitution techniques

2.4 Transposition techniques

2.5 Encryption and Decryption

2.6 Symmetric and Asymmetric key cryptography

2.7 Steganography

2.8 Key range and Key size

Unit – 3 Computer Based Symmetric And Asymmetric Key Cryptography   **12 Lectures**

3.1 Introduction

3.2 algorithm types and modes

3.3 Data encryption standard

    3.3.1 Introduction, how DES works

    3.3.2 Strength of DES

    3.3.3 Variation of DES

3.4 An overview of Asymmetric key cryptography

3.5 The RSA algorithm.

Unit – 4 Internet Security Protocols   **12 Lectures**

4.1 Basic concepts

4.2 Secure Socket Layer(SSL)

4.3 Secure Hypertext Transfer Protocol (SHTTP)

4.4 TimeStamping Protocol (TSP)

4.5 E-Mail Security

    4.5.1 Pretty Good Privacy (PGP)

    4.5.2 S/MIME.

Recommended Books :

1) Williams Stallings – Cryptography and Network security principles and practices. Pearson Education (LPE)

2) Cryptography and network security – Atul Kahate (TMGH)

Reference Book :

1) Schneir, Bruce, "Applied Cryptography : Protocols and Algorithms"

Paper No. 25.2
Paper Title-ERP Implementation

Unit –1 ERP Implementations   **12 Lectures**

1.1 ERP Implementation Challenges

1.2 Objectives of ERP implementation

1.3 Different phases of ERP Implementation,

1.4 Managing the implementation

  1.4.1 The hidden costs

  1.4.2 Training and education

  1.4.3 Data Migration.

Unit –2 ERP Implementation strategies   **6 Lectures**

2.1 Introduction

2.2 Implementation (Transition) strategies

  2.2.1 Big Bang

  2.2.2 Phased

  2.2.3 Parallel

  2.2.4 Process line

  2.2.5 Hybrid

  2.2.6 Choosing a strategy.

Unit –3 ERP Project Team and Careers in ERP   **12 Lectures**

3.1 Introduction

3.2 ERP implementation team

3.3 People involved in ERP Implementation

3.4Composition of the team

3.5 Organization of the implementation team

3.6 Role of Consultant

3.7 Role of vendor,

3.8 Employee,

3.9 Careers in ERP.

Unit –4 Future Directions and trends in ERP   **10 Lectures**

4.1 New Markets

4.2 New channels

4.3 Easier customization tools

4.4 Business Models and BAPIs

4.5 Application platforms

4.6 New business segments

4.7 Need - based applications

4.8 Open source

4.9 Web enabled and wireless Technologies

4.10 Enterprise Application Integration

4.11 Market Snapshot.

Recommended Books:

1) References: Enterprise Resource Planning, Alexis Leon (Tata MacGraw Hill)

2) ERP – A Managerial Perspective, S. Sadagopan (Tata MacGraw Hill)

Paper No. 26.2
Paper Title-Web Development using JAVA and ASP

Unit – 1 CLIENT SIDE SCRIPTING (JAVA SCRIPT – Basic)   **10 Lectures**

1.1 Limitation of HTML

1.2 requirement of script

1.3 features of Java Script

1.4 java script statement

  1.4.1 keywords

  1.4.2 datatypes

  1.4.3 basic statement

  1.4.4 control Statement (if-else, looping) with examples.

Unit – 2 DOM and Validations   **10 Lectures**

2.1 Document Object Model

  2.1.1 Document Object

  2.1.2 Window Object

  2.1.3 Navigator Object and HTML Object

2.2 Event overview

  2.2.1 Mouse events

  2.2.2 Error events

  2.2.3 Focus events.

2.3 Validations

  2.3.1 Different data types and input types validations

  2.3.2 E-mail validation

  2.3.3 Date validation

  2.3.4 User name and password validation

Unit-3 Server side scripting   (ASP with VB script)   **12 Lectures**

3.1 Introduction to VB Script

  3.1.1 VB scripts Variables

  3.1.2 Data types

  3.1.3 Operators

  3.1.4 Conditional and looping statements

  3.1.5 Procedures and its types .

3.2 ASP

  3.2.1 ASP advantages

  3.2.2 Server setup for ASP

  3.2.3 Built in object in ASP

  3.2.4 GET and POST methods

  3.2.5 Database handling-connection

  3.2.6 Record set object.

Unit –4 Web Site Development: Case Studies   **8 Lectures**

4.1 Development of web sites with full validations

   4.1.1 College web site

   4.1.2 Bank web site

   4.1.3 Travel agency web site

   4.1.4 Book agency web site

Recommended Books :

   1)   Web Publishing- Monica D'Souza & Jude D'Souza (BPB)

   2)   Web Technologies Black Book-Kogent (Dreamtech Press)

   3)   Learn Advanced JavaScript Programming – Ye huda Shiran & Tomer Shiran

Reference Books:

   1)   HTML,DHTML,Javascript,Perl CGI - Ivan Bayross

   2)   JavaScript-Bible

   3)   The ABC's of JavaScript – Lee Purcell & May Jane Mara

Paper No. 27

Paper Title-Programming Lab. Course – IX
Based on paper no 21.1 and 21.2

1) A console program to display square root of a given number in dialog box.

2) A console program to calculate sum of numbers of given range

3) A console program to calculate factorial of given number using function

4) A console program to find maximum of given numbers using array

5) A GUI program to sort given array data

6) A GUI program compare given two strings

7) A GUI program to calculate percentage from given test marks

8) A GUI program to Accept and display students details

9) A GUI application to define class employee and use to store and process employee details

10) A GUI application to demonstrate class inheritance

11) A GUI application to demonstrate polymorphism

12) A GUI application to demonstrate exception handling

13) A GUI application to demonstrate database access

Paper No. 28
Paper Title-Lab Course X
Based on paper no. 22.1 and 22.2

1.Write a program to show use of static data member and static member function.

2.Write a program to show overloading of constructors and use of this reference in constructors.

3.Write a program to show call by value concept in parameter passing to a function.

4.Write a program showing use of inheritance concept.

5.Write a program to implement and extend interfaces.

6.Programs based on Exception handling

7.Programs based on Multithreading.

8.Programs based use of AWT components

9.Programs based on Applets.

10.Programs based on event handling unit.

11.Programs based on Swing

Paper No. 29
Paper Title-Laboratory Course XI
Based on Paper no. 26.1 and 26.2

1.Creating web pages using basic HTML tags

2.Creating web pages using Table tag

3.Creation of web pages using frames and CSS

4.Creating web pages using audio and video

5. Create XML Document using Internal DTD

6.Create XML document using External DTD

7.Design a web page with different form object. Example – Feedback from, Data entry form

8.Develop web pages using java script for various validations

9.Write VB script to validate date

10.Write VB script to validate e-mail id

11.Write VB script to validate user name and password

12.Developing complete web-site.

Paper No. 30

Paper Title-Laboratory Course –XII (Project and Viva)

The project should be undertaken preferably by group of two to four students who join the work and implement the project. The group is expected to complete analysis of problem/Task, System design, coding and minimum five to six reports .The external viva-voce examination will be conducted by external examiners appointed by the university.

Marks Distribution:

Documentation -20 Marks

On-line presentation-30 Marks

Viva -50 Marks

Nature of the Theory Question Paper –

Que 1 Multiple choice questions.   [8 Marks]

   (It contains total 8 questions.)

Que 2 Attempt any two out of three.   [2*8 = 16]

Que 3 Attempt any four out of six.   [4*4 = 16]

Nature of Practical Question Paper-

The practical examination will be conducted at the end of year (end of Sem-VI).

The practical paper will contain the questions from Sem-V and Sem-VI syllabus .

The practical examination of each Lab course carried out of 100 marks.

Structure of Practical question paper for Laboratory Course –IX , X and XI is as follows

1. Solve any three questions (Out of five questions).

2. Each question carries 25 marks.

3. 15 marks for Viva and 10 marks are reserved for journal.

Equivalence in accordance with titles and contents of papers (For revised Syllabus)

Sr. No.	TheoryPaper/ LabCourseNo	Old Title	New Title
		SEMESTER –V	
1	21.1	VB.Net Programming part I	Introduction to VB.Net
2	22.1	Java Programming part I	OOP with Java
3	23.1	Computer Networks part I	Data communication
4	24.1	Ecommerce and Network Security part I	Ecommerce
5	25.1	ERP part I	Introduction to ERP
6	26.1	Web Designing part I	Web Development using HTML
7	27	Laboratory Course IX (Based on Paper No. 21.1)	
8	28	Laboratory Course X (Based on Paper No. 22.1)	
9	29	Laboratory Course XI (Based on Paper No. 26.1)	
		SEMESTER –VI	
1	21.2	VB.Net Programming part II	OOP with VB.Net and ADO.Net
2	22.2	Java Programming part II	GUI development using JAVA
3	23.2	Computer Networks part II	Computer Network
4	24.2	Ecommerce and Network Security part II	Network Security
5	25.2	ERP part II	ERP Implementation
6	26.2	Web Designing part II	Web Development using JAVA and ASP
7	27	Laboratory Course IX (Based on Paper No. 21.2)	
8	28	Laboratory Course X (Based on Paper No. 22.2)	
9	29	Laboratory Course XI (Based on Paper No. 26.2)	
10	30	Laboratory Course XII(Project Viva)	

Nature of Question papers (Theory)

COMMON NATURE OF QUESTION   FOR THEORY PAPER MENTIONED SPERATELY: