Solapur University, Solapur

Syllabus of BCA Semester V and VI to be implemented
from the **academic year 2009-10**

SEMESTER –V

Sr. No.	Name Of Subject	Total Marks	University Exam	Internal Evaluation
25	Client Server Environment (Using MS-SQL and VB)	100	80	20
26	Web Technologies –II	100	80	20
27	Linux and Shell Programming	100	80	20
28	Core Java	100	80	20
29	Management Information System	100	80	20
30	Lab. Course-5 Practical Paper- I based on Paper 27 and 28 Practical Paper-II Mini-Project based on paper 25	100	----	50
	Total	**600**	**400**	**200**

SEMESTER –VI

Sr. No.	Name Of Subject	Total Marks	University Exam	Internal Evaluation
31	Advanced Java and WAP	100	80	20
32	Cyber laws and Security Control	100	80	20
33	Software Project Management	100	80	20
34	Business Data Processing, ERP and BPR	100	80	20
35	Lab. Course-6	50	--	50
36	Major Project	150	80	70
	Total	**600**	**400**	**200**

Solapur University, Solapur
Revised New Syllabus
Class –B.C.A. Part III
Semester V

Name Of the Paper: CLIENT SERVER ENVIRONMENT (Using VB and
SQL Server)

Paper No : BCA-25

Max. Marks: 100
External Assessment: 80
Internal Assessment: 20

Objectives : 1) To introduce client server environment.
2) To make GUI database applications in VB by using SQL server connectivity like ADO,DAO and RDO.
3) To give the practical exposure of application of client server environment

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Contents of course

Unit No	Name of the topic	Details	Lecturers/ Periods
1	Introduction to Client – Server Environment:	Definition (Server Client), Role ofServer. Function, Single, Two Tier &Multi Tier Architecture.	8
2	Building User Interface	Defining Interface, Building Interface Code.	6
3	Structured Query Language	Table Creation and Manipulation, Data Types, Array Handling, Other Schema Object. Transactions Pattern and Ranges, Table Joins, Sorting and Grouping.	8
4	Connection to SQL Server	Connectivity using ADO, DAO, RDO	8
5	Overview of SQL Server	Programs installed with SQL Server, Parts of Database and SQL Server Storage Concepts.	8
6	Transact SQL	Transact SQL Syntax and Conventions, Data types, Operators, Wild Cards, Variables, Functions. Executing TSOL, Advance Features of Transactions. Row set Functions.	8
7	SQL Queries	Basic SELECT Queries, Using Joins, Report Generation, Full text Searching, Linked Server, Queries. Action Queries (Delete, Update and Insert)	8

8	View, Procedures and Triggers	Use of Views, Understanding Stored Procedure, Understanding Triggers.	8

Books

1. VB Complete References – Novel Terke (TMGH)
2. SQL ------ SAMS Techmedia
3. Mastering SQL Server 2000 – Mike Gunderloy (BPB)
4. Mastering SQL – Grubbon (BPB)

Distribution of Marks for University Exams

1. (a) 20 % Marks :   Objective questions

    40 % Marks :   Short notes/Short answer type questions/

                  Short Mathematical type questions

    40 % Marks : Descriptive type questions/Long mathematical type

              questions

        Out of 20 % marks for objective questions 10 % marks should be assigned to multiple choice questions and remaining 10 % be assigned to fill in the blanks /answer in one sentence etc. However ,each faculty may decide nature and types of questions to be set subject to distribution of above percentage of marks.

    (b) One descriptive type question will be compulsory

        Paper setter should mention approximate words limit for short note /short answer

        type questions except Diagrammatical and Numerical questions.

Solapur University, Solapur
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Semester V

Name Of the Paper: WEB TECHNOLOGIES II

Paper No : BCA-26

Max. Marks: 100
External Assessment: 80
Internal Assessment: 20

Objectives : 1) To introduce server Scripting .
2) To use ASP objects for developing web based applications
3) To create WEB based database applications

Contents of course

Unit No	Name of the topic	Details	Lecturers/ Periods
1	Active Server Pages	Getting started with ASP, Understanding Client server model, ASP vs. Client Side Scripting, Setting PWS and IIS, ASP and Browser.	8
2	Language Reference	delimiters, Data types, variables, constants, arrays, Understanding VBScript control structures, conditional and looping, using built in functions , typecasting variables, Math, Date, String formatting functions	8
3	ASP Obje cts	Working with objects, built-in-objects, Response, Request, Server, Session, Application, Events.	12
4	Using Response	**Response:** Sending HTML input to browser, buffering, sending to another page : redirect, cookies, receiving info through GET and POST by using querystring and form method, Client side validation. Using Request : **Accessing Environment variables, using cookies, read and** write cookies, using application objects	12
5	Using other objects	**session object and variables, using server objects and server variables,**	12
6	Database Handling	Communicating with database using ASP ; Connection to database using system DSN, different properties, command and recordset object,	8

		inserting, updating and deleting records, lock types. **Using SQL statements to query data :** Executing SQL statements using ASP, and ADO, SQL Statements,	

Reference Books:
1. ASP Complete Reference – Wrox publications.
2. Mobile Communication – Schiller

Distribution of Marks for University Exams

1. (a) 20 % Marks : Objective questions

     40 % Marks : Short notes/Short answer type questions/

                   Short Mathematical type questions

    40 % Marks : Descriptive type questions/Long mathematical type

              questions

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   b) One descriptive type question will be compulsory

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Semester V

Name Of the Paper: LINUX AND SHELL PROGRAMMING
Paper No : BCA-27   **Max. Marks: 100**
                                                        External Assessment: 80
                                                        Internal Assessment: 20

Objectives : 1) To introduce Linux OS and Shell programming
2) To Check how to install Linux .
3) To study different editers

Contents of course

Unit No	Name of the topic	Details	Lecturers/ Periods
1	Introduction	**Linux Operating Systems,** History of Linux and Unix, Linux overview, **shell**: Bourne, Korn and C-shell, File Structure: Directories and files, Utilities: Editors, Filters, and Communications.	6
2	**Installing Linux**	Hardware and software requirements, Creating Linux partition, Creating install disks, Installing Open Linux System, Network Configuration, Final configuration, Installing LILO, Installing and Configuring X-Windows	8
3	**Linux Startup and Setup**	User Accounts, Accessing your Linux System Starting and Shutting down, Login/Logout, Linux Commands, Installing Software packages, Remote communications, Modern Setup, Internet Connections with Modems: pppd & ezppp, XFmail, X-Windows and network configuration.	12
4	**Shell operations**	The command Line, Standard I/O and Redirection, Pipes, Shell Variables, Shell Scripts, User defined commands, Jobs: Background, Kills and Interruptions, Delayed Execution.	8

5	**Linux File**	Linux Files, File Types, File	
	Structure	Classifications: the file & od commands. The file structure, Home Directories, Path Names, System Directories. Listing, Displaying and Printing files, Ls, cat, more and lpr commands. Managing directories: mkdir, ls, cd and pwd. Nested directories, File and Directory Operations: find cp, mv, rm, ln.	10
6	**File Management Operations**	Displaying File Information; ls –l, File Directory permissions : Chmod, Setting Permissions: Permission Symbols, chown and chgrp, Mounting and Formatting Floppy Disks, Mounting CD-ROMs, Mounting Head Drives Partitions Linux and MS-DOS. The fstab file: Lisa and fstool, NFS' and /etc/exports, NIS, Archive Files and Devices: tar, Xtar, File Compression: gzip, Installing Software from Compressed Archives: .tar.gz, Downloading, Compressed Archives, Compiling Software, The mtools Utilities: msdos, Dos and Windows Emulators, DOSemu, Wine and Willow.	8
7	**vi editor**	Create a file. Enter the text. Edit Text, Moving around. Save the file. customizing ex/vi, .exrc file & Exinit, options to vi, splitting a file using split command. (Study all important commands & key combinations)	8

Reference Books :
1) Operating Systems by William Stallings(PHI)
2) Operating System by Achyut Godbole (TMH)
3) Linux the complete refrence by Richard Mathews(TMH)
4) Red Hat Linux :The Complete Reference by Peterson (TMH)
5) Unix Systems V 4 Concepts & Applications by Sumitabha Das
6) Using Linux by Bill Ball

Distribution of Marks for University Exams

1. (a) 20 % Marks : Objective questions
      40 % Marks : Short notes/Short answer type questions/
                    Short Mathematical type questions
      40 % Marks : Descriptive type questions/Long mathematical type
                    questions
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etc. However ,each faculty may decide nature and types of questions to be set subject to

distribution of above percentage of marks.

c) One descriptive type question will be compulsory

Paper setter should mention approximate words limit for short note /short answer

type questions except Diagrammatical and Numerical questions.

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Revised New Syllabus
Class –B.C.A. Part III
Semester V

Name Of the Paper: <u>CORE JAVA</u>

Paper No : BCA-28   **Max. Marks: 100**

External Assessment: 80
Internal Assessment: 20

Objectives : 1) To introduce Java as a platform independent language.
2) To Check Object Oriented Features supported by Java.
3) To understand Event driven programming of Java.

Contents of course

Unit No	Name of the topic	Details	Lecturers/ Periods
1	Introduction to Java Programming	Overview of Java, Features of Java as programming language /Platform JDK Environment and Tools	6
2	Java – Programming Fundaments	Data types, Variables, Operators, Keywords, Naming Conventions Structure of Java Program Flow Control- Decision, Interaction, Arrays	6
3	Classes and Objects	Class – Members, access control Objects, Constructors, Use of 'this' keyword, static, non-static, public, private & protected data members	10
4	Inheritance & Polymorphism	Super, extends, single, multiple inheritance, Method overriding Abstract classes & ADT, 'final' keyword Extending interfaces	10
5	Exception Handling	Exceptions and Types , try.. catch, finally block, throw & throws statement, user-defined exceptions	6
6	Threading	Java thread lifecycle, Thread class & runnable interface, Thread priorities & synchronization, Usage of wait & notify	8
7	Java I/O	Java I/O package, byte & character stream, reader & writer, file reader & writer	6
8	Event Programming	Java awt components (windows, Frame, Panel, Dialog, File Dialog, Label, Button, List, Check Box, Text Components, Choice, Menu Components), Layout Managers Border, Flow, Grid, Event Model Listeners / Adapters	10

Reference Books :

1. Java 2 for professional developers by Michael Morgen

2. Core Java Vol 1 and vol 2 by Cay. S. Horstmann, Gray Cornell.

3. Java by Nutshell

4. Java 2 complete reference

Distribution of Marks for University Exams

1. (a) 20 % Marks :   Objective questions

      40 % Marks : Short notes/Short answer type questions/

                  Short Mathematical type questions

      40 % Marks : Descriptive type questions/Long mathematical type

                  Questions

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     d) One descriptive type question will be compulsory

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Name Of the Paper: **MANAGEMENT INFORMATION SYSTEM**

Paper No : BCA-29
Max. Marks: 100
External Assessment: 80
Internal Assessment: 20

Objectives : 1) To give the knowledge about the In formation system in the organization

2) To create the awareness about the implementation of Information System in to various functional areas of management.

Contents of course

Unit No	Name of the topic	Details	Lecturers/ Periods
1	Organization	Organisation, features of organization, the role of manager in organization, managers and decision making, types of decision, decision making life cycle.	10
2	Information system	Need, Role of information system in organization, importance of information system, Information needs of different organization levels, Concept of MIS, Definition, Characteristics of MIS, types of MIS – DSS and GDSS.	10
3	Application of MIS in Manufacturing sector	Marketing Management,Production Management, Financial Management and Personnel Management.	20
4	Application of MIS in Service sector	Airlines, Hotel, Hospital and Banking	10
5	Application of MIS in Marketing sector	Customer Relationship Management, Supply Chain Management	6
6	Information system security and control	System vulnerability, creating a control environment	4

Reference Books –

1. Management Information Systems- Kenneth C. Laudon and Jane P. Laudon
2. Management Information Systems – W.S.Jawadekar
3. Management Inforamtion Systems– C.S.V.Murthi
4. Management Information Systems – James A. O'Brien

Distribution of Marks for University Exams

1. (a) 20 % Marks : Objective questions

     40 % Marks :   Short notes/Short answer type questions/

                  Short Mathematical type questions

     40 % Marks : Descriptive type questions/Long mathematical type

              questions

      Out of 20 % marks for objective questions, 10 % marks should be assigned to multiple choice questions and remaining 10 % be assigned to fill in the blanks /answer in one sentence etc. However ,each faculty may decide nature and types of questions to be set subject to distribution of above percentage of marks.

      e) One descriptive type question will be compulsory

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BCA-30

Weekly 4 hours
Max. Marks: 100
Internal Assessment: 100

Lab Course (5) Practical Paper-I

1. Compute the factorial of a integer larger than 20, using the Big Integer (or similar) class. The main() method should accept none, one or more integers from the keyboard, validate that the input is non-negative and call a method that returns the factorial value. The result should be output in main().

2. Create a class that represents a rectangle. The rectangle object could be created by specifying either the (x,y) co-ordinates of its two diagonally opposite corners, or by specifying its length and height and the (x,y) co-ordinates of its left and corner. The rectangle should be a square if only one of the length or breadth are provided. BY default, if no co-ordinates are provided the rectangle should be a square of unit length with two edges along positive x and y axis.

Define methods for the following.
(i) That moves the rectangle to another position.
(ii) That changes either the length or breadth of the rectangle or both
(iii) That determines whether a point (x,y) lies within the rectangle.
(iv) That returns the largest rectangle that includes the defined rectangle and another.
(v) That returns the overlap between the defined rectangle and another.
   Define another class that tests the above class.

3. Include sub-classes in the above rectangle class which do the following –
(i) Draws the rectangle on screen
(ii) Draws the border of one colour and fills the rectangle with the same or another colour.
Define another class that tests the rectangle class and its sub class

4. Define a subclass that extends the FilterReader class. The sub-class removes all the Tags from an HTML file to present plaintext output.
   Define a test class for the above class. An exception should be thrown and handled if the source file could not be found.
5. Define a subclass which extends the BufferedReader class. The sub-class fileters out and displays only those lines from a text file that contain a given character string. An exception should be thrown and handled if number of command line arguments are not proper and if the source file could not be found.

6. Define a class that copies a file to another, destination file with the following provisions.

If the destination is a directory, source file name should be used. If the destination file exists, first ensure that it could be overwritten and then overwrite it only after operator permission is received. If the destination file does not exists, ensure that the directory does and a file could be written to it before copying.
Define a class to test out the program completely.

7. Define a class to read a file, compress it and output the compressed file as another file on disk. The program should either compress a single file, or if the file parameter is a directory, compress all files in the directory. Define a test class to demonstrate the program.

8. Define a class that enables the drawing of freehand lines on a screen through moue clicking and dragging. Use anonymous inner classes to implement event listeners. The drawing should be cleared when a key is pressed and the line colour should be selectable. Define a test class to demonstrate the program.

9. Define a class that transforms a simple shape like a rectangle by translating, scaling, rotating and shearing it. Demonstrate the class by screen drawing.

10. Define a class that fills one shape by gradient fills, fills another with a tiling effect and still another by a window effect. Demonstrate the class by a screen drawing.

11. Create a form by using awt components, layout manager & write respective event handlers.

Reference:
Java Examples in a Nutshell – David Flannagans, SPD-O-Reilley (2000)

Note : minimum 10 practical should be covered

LINUX and SHELL PROGRAMMING
1. Creating a Linux Partition (Using either MS-DOS FDISK command or LINUX fips command), Creating boot disks for LINUX and Installing LINUX. Login and logout, shutting down the server. (This may be a demonstration experiment, the demo to be given by the teacher.)

2. Basic LINUX commands I:
   Logging on to LINUX, Creating a user account.
   File System: ls command with flags, pwd, cd, ls, cat, mkdir, rmdir, chmod, cp, rm, mv
   Basic LINUX commands II:General Purpose Utilities: more, file, wc, od, cmp, comm, diff, lp, banner, cal, date, who, tty, sty.

3. Basic LINUX commands III:
   Simple Filters: pr, head, tail, cut, paste, sort, uniq, nl, and kill, commands. Line editing with ex command, Logging out.

4. To study vi editor: Create a file, Enter the text, Edit Text, Moving around, Save the file. Customizing ex/vi, exrc file and Exinit, options to vi, splitting a file using split command. (Study all important commands and key combinations)

5. Shell programming

1. ls all options, pwd, cd, cat, mkdir, rmdir, chmod, cp, rm, mv, more, file, wc, od, cmp, comm, diff, lp, banner, cal, date, who, tty, sty, pr, head, tail, cut, paste, sort, uniq, nl & kill commands.
2. vi editor- grep,egrep,fgrep,sed,tr, join
3. Write Shell scripts as Menu driven program
4. First 10 odd numbers
5. First 10 Even numbers
6. First 10 Fibonacci Numbers
7. Write Shell scripts to Checking Prime No.
8. Write Shell scripts for File Handling
9. Write Shell scripts to Display Armstrong numbers from 1 to 1000.
10. Write Shell scripts to Display perfect numbers upto range.
11. Write Shell scripts to change mode of file.
12. Write Shell scripts to check mode of entered file name.

Lab Course (5) Practical Paper-II
Mini Project based on Paper-25

Solapur University, Solapur
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Class –B.C.A. Part III
Semester VI

Name Of the Paper: <u>ADVANCED JAVA AND WIRELESS APPLICATION PROTOCOL</u>

Paper No : BCA-31   Max. Marks: **100**

External Assessment: 80
Internal Assessment: 20

Objectives : 1) To use Applets for Java based Web based programs.
2) To study advanced Java features like Servlets, JSP, Java Oriented
Beans ,EJB etc.

Contents of course

Unit No	Name of the topic	Details	Lecturers/ Periods
1	Applets	The applet class, applet architecture, applet skeleton : initialization and termination, handling events, HTML applet tags.	5
2	Java Database Connectivity	**JDBC, Drivers ODBC and JDBC, establishing connectivity, transaction with database using SQL .**	8
3	Servlets	**JSDK, HTTP, servlet life cycle, get and post method, Session handling**	8
4	JSP	**Introduction, JSP lifecycle, JSP elements-directive, scripting, action, comments & templates, using JSP in web applications & deploying in Java Enterprise Edition & Tomcat, objects in JSPresponse, request, session, exception & application,**	10
5	Java Beans	**BDK, Beans properties and methods, JAR file, introduction to EJB, types of EJB**	8
6	RMI : an overview of RMI application	**RMI architecture, remote classes & interface, RMI object hierarchy, writing server, compiler & client, remote method arguments & return value, dynamic loading of stub classes.**	6
7	EJB	**Introduction to EJB**	6

| 8 | WAP | Introduction to WAP and WAP architecture, Introduction and advantages of WAP, WAP Application architecture, WAP gateway, Software Products and Development Kit. | 8 |
| 9 | Technology Today | Wireless Technology, Interface WTAI, GPRS, Bluetooth, 3G, Support Application. | 4 |

Reference Books :

1. **Java 2 for professional developers by Michael Morgen**

2. **Core Java Vol 1 and vol 2 by Cay. S. Horstmann, Gray Cornell.**

3. **Java Examples by Nutshell**

4. **Java complete reference by Hetbert Schildtz**

5. **Beginning Java EE5 from novice to professionals by K.Makhar & C.Zelenk**

6. **Java Server Programming by Bayross & Shah**

Distribution of Marks for University Exams

1. (a) 20 % Marks : Objective questions

　　　40 % Marks : Short notes/Short answer type questions/

　　　　　　　　　　Short Mathematical type questions

　　　40 % Marks : Descriptive type questions/Long mathematical type

　　　　　　　　　　questions

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f) One descriptive type question will be compulsory

Paper setter should mention approximate words limit for short note /short answer type questions except Diagrammatical and Numerical questions.

Name Of the Paper: CYBER LAWS AND SECURITY CONTROL

Paper No : BCA-32   **Max. Marks: 100**
External Assessment: 80
Internal Assessment: 20

Objectives : 1) To get knowledge of various cyber laws .
2) To study various security controls .

Contents of course

Unit No	Name of the topic	Details	Lecturers/ Periods
1	Introduction	**Information Society, information Legal Practices, Theft of Information, Data Protection, Information technology copy right.**	6
2	Introduction to E-Commerce	**Introduction to E-Commerce, Internet application service, Ecommerce application, ECommerce and Indian Economy**	6
3	UNCITRAL Model law	**objectives, scope, structure, application**	4
4	Information TechnologyAct-2000	**key elements certification and monitoring prevention of crimes, security of data.**	6
5	Digital signatures	**Digital signature, Electronic records, regulation of certifying authorities, digital signature certificates, duties of subscribers.**	8
6	Cyber law	**contract aspect, security aspects, intellectual property aspects, Intellectual Property aspect, criminal aspect.**	12
7	Introduction to security	**Need for security and control, risks to information system data and resources, definition of information security, types of security, physical security, threats**	8

		to security, physical access, logical security, authentication and authorization	
8	Data Security	**Threat to security, back-up and recovery strategies, data encryption,**	5
9	Telecommunication security and network management control	**Authentication protocols, internet / extranet security, hardware and software security, security audit**	6

Reference Books :
1. EDP Auditing by Ron Weber
2. PC and LAN security by Stephan Codd
3. Enterprise Security – protecting information assets by Michael E. Kabey
4. Computer security by Dummies
5. Internet security by Derek Atkins et al
6. System Audit - Revati Shrira
7. Information technology law concepts, and enhancements by S. K. Saxena

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Semester VI

Name Of the Paper: SOFTWARE PROJECT MANAGEMENT

Paper No : BCA-33   **Max. Marks: 100**

External Assessment: 80
Internal Assessment: 20

Objectives : 1) To get knowledge of how to handle project development activities
2) To study various project cost, time estimation models.
3) To study how to make quality software products.

Contents of course

Unit No	Name of the topic	Details	Lecturers/ Periods
1	Introduction to Software Project Management	**What is project, Software project versus other types of project** Contract management and technical project management Activities covered by Software Project Management, plans, methods, and methodologies , Software projects category, Setting objectives, Stakeholders, Requirement specification, Management Control.	6
2	Overview of Project Planning	Introduction to stepwise Project Planning Steps- 1.Select Project, Identify scope and objectives 2. Identify project infrastructure 3. Identify project products and activities 4. Estimate effort for each activity 5. Identify activity risks. 6. Allocate resources 7. Review plan **8. Execute plan and lower levels of planning**	8
3	Project evaluation	Strategic assessment,Technical assessment,Cost-benefit analysis,Cash flow Forecasting,Cost-benefit evaluation techniques,Risk Evaluation	4
4	Project Approach Selection	Choosing technologies, Choice of process models among waterfall, Vprocess,	8

		Spiral, RAD etc. Software prototyping ,Incremental delivery,Dynamic system development method, Extreme programming, Managing iterative processes. Selecting most appropriate process model	
5	Software effort estimation	Introduction, Problems of over and under estimates, Software estimating Techniques,Expert judgment, Estimation by analogy, Albrencht function point Analysis, Function points Mark II, Object points, A procedural codeoriented Approach, COCOMO model	8
6	Activity Planning	The objectives of activity planning, Project schedules, Projects and activities Sequencing and scheduling activities, Network planning models, Adding the time Dimension, The forward pass and backward pass, Identifying the critical path, Shortening project duration, Identifying critical activities, Activity – on-arrow networks.	6
7	Risk management	The nature of Risk , Types of risk, Managing risk, Hazard Identification, Risk planning and control	4
8	Resource Allocation	**The nature resources, Identifying resource requirement, Scheduling resources, Creating critical path, Counting the paths, Publishing the resource schedule, Cost reschedule,The scheduling sequence**	6
9	Monitoring and control	**Creating framework, Colleting data and visualizing progress, Cost monitoring and earned value, Prioritizing monitoring,Getting project back to target, Change control**	6
10	Managing contracts	**Types of contract, Stages in contract placement, Terms of contracts,Contract management**	4
11	Human Resource management	Understanding behavior, Organizational behavior, Selecting right persons for job Instructions in best methods, Motivation, The Oldham-Hackman job haracteristics model ,Working in groups, Building a team, Decision making ,ledership.	6

		Organizational structure, Stress ,health and safety.	
12	Software quality	Need of software quality, Importance of software quality, defining software quality, ISO,CMM, Software quality measures, Product versus process quality management, External standards, Enhancing software quality, Quality plans	8

Reference:

1. Software Project management By BOB HUGHES and MIKE COTTERELL

2. Software Project management By EDWIN BENNATAN

3. Management of Information Technology BY PRAVIN MULAY

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     40 % Marks : Descriptive type questions/Long mathematical type

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Semester VI

Name Of the Paper   BUSINESS DATA PROCESSING, ENTERPRISE
RESOURCE PLANNING AND BUSINESS PROCESS REENGINEERING

Paper No : BCA-34   Max. Marks: **100**
External Assessment: 80
Internal Assessment: 20

Objectives : 1) To get knowledge of various cyber laws .
2) To study various security controls .

Contents of course

Unit No	Name of the topic	Details	Lecturers/ Periods
1	Enterprise Resource Planning:	**Evolution of ERPEarly ERP implementation:** MRP & MRPII **Packages:** SAP AG, people soft, Baan company, JD Edwards world solutions company, Oracle corporation etc. **Erp markets:** Global market share and indian market share	12
2	Opportunities and problems in ERP selection and implementation	ERP implementation – Identifying ERP benefits, team formation. - Consultant intervention, Selection ERP, Process of ERP - Implementation, Meaning benefits of ERP.	12
3	Business Systems and ERP	Different ERP modules-Finance, Manufacturing(production), Human Resources, Plant Maintenance, Materials management, Quality mgt, Sales and Distribution	12
4	Careers in ERP.	Careers in ERP.	4
5	Business Process Reengineering	Reengineering concepts – The emergence of reengineering concept, concept of business process, rethinking of process, Identification reengineering need, preparing for reengineering, implementing change, ERP vs BPR.	10

Books Recommended

1. Enterprise Resource Planning – Leon (Tata McGraw Hill)

2. ERP Demystified – By Alexis Leon

3. Reengineering the Corporation – Micheal Hammer and James Chamby.

4. ERP-A Managerial Prospective – S. Sadagopan (Tata McGraw Hill)

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1. (a) 20 % Marks :   Objective questions

      40 % Marks :   Short notes/Short answer type questions/

                       Short Mathematical type questions

      40 % Marks :   Descriptive type questions/Long mathematical type

                       questions

     Out of 20 % marks for objective questions, 10 % marks should be assigned to multiple choice questions and remaining 10 % be assigned to fill in the blanks /answer in one sentence etc. However ,each faculty may decide nature and types of questions to be set subject to distribution of above percentage of marks.

i) One descriptive type question will be compulsory

   Paper setter should mention approximate words limit for short note /short answer

   type questions except Diagrammatical and Numerical questions.

Name Of the Paper   **LAB COURSE-6**

Paper No : BCA-35

Max. Marks: 50
External Assessment: 00

Internal Assessment: 50

ADVANCED JAVA

1. write a program to create and display a applet on the web browser

2. write a program to show database connectivity and manipulations of data through a applet

3. write a program through RMI which will allow communication between two nodes and will accepts the address as command line argument.

4. Create a bean and embed it in BDk

5. Creating a servlet and embedding it with web application.

6. Create a JSP which will accept user's id, password and choice on second page & redirect the page according to request the session should be terminated if the choice is wrong.

Solapur University, Solapur
Revised New Syllabus
Class –B.C.A. Part III
Semester VI

Name Of the Paper   **MAJOR PROJECT**
Paper No : BCA-36

Max. Marks: 150
External Assessment: 80
Internal Assessment: 70

Note – 1) Internal Assessment - To keep student updated with corporate demand, the subject of ASP.Net is included under the major project. 70 Marks will be given by the Internal teacher on the basis of students performance. Students have to maintain the proper record of practicals and teacher may take assignments /mid test to test the knowledge of students. Weekly 4 theory periods are allotted for this.

Contents of course

Unit No	Name of the topic	Details	Lecturers/ Periods
1	Introduction to ASP.Net	Introduction & diff. between ASP & ASP.Net 1.1 & 2.0 Application Web Architecture Model Introduction to Visual Studio for Web Application	**5**
2	Application and Page Frameworks	Application Location Options Built-In Web Server IIS FTP Web Site Requiring FrontPage Extensions The ASP.NET Page Life Cycle The ASP.NET Page Structure Options Inline Coding New Code-Behind Pages ASP.NET 2.0 Page Directives @Page @Master @Control @Import @Implements @Register @Assembly @PreviousPageType @MasterType @OutputCache @Reference ASP.NET Page Events	**8**

		Dealing with PostBacks	
		Cross-Page Posting	
		ASP.NET Application Folders	
		\App_Code Folder	
		\App_Data Folder	
		\App_Themes Folder	
		\App_GlobalResources Folder	
		\App_LocalResources	
		\App_WebReferences	
		\App_Browsers	
		Compilation	
		Global.asax	
3	ASP.NET Server Controls and Client-Side Scripts	ASP.NET Web Server Controls	8
		Types of Server Controls	
		Building with Server Controls	
		Working with Server Control Events	
		Applying Styles to Server Controls	
		Examining the Controls' Common Properties	
		Changing Styles Using Cascading Style Sheets	
		HTML Server Controls	
		Looking at the HtmlControl Base Class	
		Looking at the HtmlContainerControl Class	
		Looking at All the HTML Classes	
		Using the HtmlGenericControl Class	
		Manipulating Pages and Server Controls with JavaScript	
		Using Page.ClientScript.RegisterClientScript Block	
		Using Page.ClientScript.RegisterStartupScript	
		Using Page.ClientScript.RegisterClientScriptInclude	
		Client-Side Callback	
		Comparing a Typical Postback to a Callback	
		Using the Callback Feature—A Simple Approach	
		Using the Callback Feature with Parameters	
		Creating user controls	
4	Validation Server Controls	Understanding Validation	6
		Client-Side versus Server-Side Validation	
		ASP.NET Validation Server Controls	
		Validation Causes	

		The RequiredFieldValidator Server Control	
		The CompareValidator Server Control	
		The RangeValidator Server Control	
		The RegularExpressionValidator Server Control	
		The CustomValidator Server Control	
		The ValidationSummary Server Control	
		Turning Off Client-Side Validation	
		Using Images and Sounds for Error Notifications	
		Working with Validation Groups	
5	Working with Master Pages	Why Do You Need Master Pages?	**5**
		The Basics of Master Pages	
		Coding a Master Page	
		Coding a Content Page	
		Mixing Page Types and Languages	
		Specifying Which Master Page to Use	
		Working with the Page Title	
		Working with Controls and Properties from the Master Page	
		Specifying Default Content in the Master Page	
		Programmatically Assigning the Master Page	
		Nesting Master Pages	
		Master Page Events	
6	Themes and Skins	Using ASP.NET 2.0 Themes	**8**
		Applying a Theme to a Single ASP.NET Page	
		Applying a Theme to an Entire Application	
		Removing Themes from Server Controls	
		Removing Themes from Web Pages	
		Understanding the StyleSheetTheme Attribute	
		Creating Your Own Themes	
		Creating the proper folder structure	
		Creating a Skin	
		Including CSS Files in Your Themes	
		Having Your Themes Include Images	
		Defining Multiple Skin Options	
		Programmatically Working with Themes	
		Assigning the Page's Theme Programmatically	
		Assigning a Control's SkinID Programmatically	
		Themes and Custom Controls	

7	ASP.Net State Management	Application State Session State Client & server storing View state Cache Hidden Variable Session object Profiles Overview of HTTP Handler & Modules	6
8	ASP.NET web security	Application State Session State Client & server storing View state Cache Hidden Variable Session object Profiles Overview of HTTP Handler & Modules	8
9	Web Services	Remoting over Web Simple Object Access Protocol (SOAP) Web Service Description Language (WSDL) Writing Web Service In ASP .NET Consuming Web Service	6

References:

Professional ASP.NET 2.0 – Wrox Publication.

By Bill Evjen, Scott Hanselman, Farhan Muhammed, Sirnivasa Sivakumar, Devin Rader.

Microsoft ASP.NET 2.0 Step by Step - Microsoft Press

By George Shepherd.

2) External Assessment

- Student can do the major project by using Java or ASP.Net. Viva- Voce will be conduct on major project. The viva voce committee will be of three members(Two External and One Internal teachers appointed by the University)