

Name of Program: BCA + MCA

				Teachi	ng &	Evaluati	on Sch	em	me		
Subject			Г	heory		Pract	ical	ıl			6
Subject Code	Category	Subject Name	End Sem University Exam	Two Term Exam	Teacher Assessment	End Sem University Exam	Teacher Assessment	L	Т	Р	CREDIT
BCCA501	Compulsory	Java Programming and Technology(Core Java)	60	20	20			4	1		5

#### **Course Education Objectives (CEOs):**

- Students must be able to understand fundamentals of programming such as variables, conditional and iterative execution, methods, etc.
- Students must be able to understand fundamentals of object-oriented programming in Java, including defining classes, invoking methods, using class libraries, etc.
- Students must have the ability to write a computer program to solve specified problems.
- Students must be able to use the Java SDK environment to create, debug and run simple Java programs.

#### **Course Outcomes (COs):**

After the successful completion of the course students will be able to perform the following tasks:

- Write, compile, and execute Java programs that may include basic data types and control flow constructs using Integrated Development Environments (IDEs) such as Eclipse, NetBeans, and JDeveloper.
- Write, compile and execute Java programs using object oriented class structures with parameters, constructors, and utility and calculations methods, including inheritance, test classes and exception handling.
- Write, compile, and execute Java programs using arrays and recursion, manipulating Strings and text documents.
- Write, compile, and execute Java programs that include GUIs and event driven programming.
- Write a final project that may be selected from among the following: applets for inclusion in web pages; applets to access enterprise data bases in robust, enterprise three level applications; secure communications over the internet; or an approved project chosen by the student.

#### UNIT – I

Importance and features of Java, *Language Construct of java including* Keywords, constants, variables and looping and decision making construct, Classes and their implementation, Introduction to JVM and its architecture including set of instructions. Overview of JVM Programming. Internal and detailed explanation of a valid .class file format. Instrumentation of a .class file, Byte code engineering libraries, Overview of class loaders and Sandbox model of security.







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#### UNIT - II

**Introducing classes, objects and methods:** defining a class, adding variables and methods, creating objects, constructors, class inheritance. Arrays and String: Creating an array, one and two dimensional arrays, string array and methods, Classes: String and String Buffer classes, Wrapper classes: Basics types, using super, Multilevel hierarchy abstract and final classes, Object class, Packages and interfaces, Access protection, Extending Interfaces, packages.

#### UNIT – III

**Exception Handling:** Fundamentals exception types, uncaught exceptions, throw, throw, final, built in exception, creating your own exceptions,

**Multithreaded Programming:** Fundamentals, Java thread model: priorities, synchronization, messaging, thread classes, Runnable interface, inter thread Communication, suspending, resuming and stopping threads.

**Input/output Programming:** Basics, Streams, Byte and Character Stream, predefined streams, Reading and writing from console and files.

Using Standard Java Packages (lang, util, io, net). Networking: Basics, networking classes and interfaces, using java.net package, doing TCP/IP and Data-gram Programming, RMI (Remote Method Invocation).

#### UNIT – IV

**Event Handling:** Different Mechanism, the Delegation Event Model, Event Classes, Event Listener Interfaces, Adapter and Inner Classes, Working with windows, Graphics and Text, using AWT controls, Layout managers and menus, handling Image, animation, sound and video, Java Applet.

**The Collection Framework:** The Collection Interface, Collection Classes, Working with Maps & Sets **JDBC:** Introduction to DBMS & RDBMS, DBC API, JDBC Application Architecture, Obtaining a Connection, JDBC Models: Two Tier and Three Tier Model, ResultSet, Prepared Statement, Callable Statement.

#### UNIT – V

**RMI (Remote Method Invocation):** Introduction, Steps in creating a Remote Object, Generating Stub & Skeleton, RMI Architecture, RMI packages.

**Java Bean:** Introduction, Bean Architecture, Using the Bean Development Kit, Creating simple beanproperties, methods and events, Packing beans- the manifest & the jar, Java bean package, Introduction to NetBean.

**Swing :** Introduction to JFC (Java Foundation Classes), Features of Swing, Comparison with AWT, Advanced Control .

#### **TEXT BOOKS:**

- 1. Patrick Naughton and Herbertz Schildt, "Java-2: The Complete Reference", TMH, 5<sup>th</sup> editio, 2002.
- 2. Bill Venners, "Inside Java Virtual Machine", TMH, 2<sup>nd</sup> edition.
- 3. Rick Darnell, "HTML 4 unleashed", Techmedia Publication, 2000
- 4. Shelley Powers, "Dynamic Web Publishing", 2<sup>nd</sup> edition, Techmedia, 1998.
- 5. Paul Dietel and Harvey Deitel, "Java How to Program", PHI, 8<sup>th</sup> edition, 2010.







## **Shri Vaishnav Institute of Computer Applications**

#### **REFERENCE BOOKS:**

- 1. E. Balagurusamy, "Programming with Java: A Primer", TMH, 1998.
- 2. Horstmann, "Computing Concepts with Java 2 Essentials", John Wiley.
- 3. Decker and Hirshfield, "Programming Java: A Introduction to Programming Using JAVA", Vikas Publication, 2000.
- 4. N.P. Gopalan and J. Akilandeswari, "Web Technology- A Developer's Perspective", PHI, 2<sup>nd</sup> edition
- 5. Eric Jendrock, Jennifer Ball, Debbei Carson, "The Java EE5 Tutorial", Pearson, 3<sup>rd</sup> edition, 2007.
- 6. Daniel Liang, "Introduction to Java Programming", Pearson, 7<sup>th</sup> edition, 2010.

#### Name of Program: BCA + MCA

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SUBJEC	Catago		THF	THEORY		PRACTI CAL					rs			
T CODE	Catego ry	SUBJECT NAME	EN D SE M	MS T	Q/ A	EN D SE M	Q/ A	Th	Т	Р	CREDI			
BCCA502	Compul sory	OPERATION RESEARCH	60	20	20	-	-	3	1	-	4			

#### **Course Objective**

• To introduce the students with the Fundamentals of the Operations Research.

#### **Course Outcomes**

After the successful completion of this course students will be able to

- apply the methods of the OR and the LPP.
- understand and design the graphical test of the LPP with conclusions.
- know the fundamental principles of the simplex method and the duality.
- solve the transportation problems.
- find the solution of the assignment problems.

#### Unit 1

**Introduction to Operations Research & Linear Programming:** Introduction, Historical Background, Scope of Operations Research , Features of Operations Research, Phases of Operations Research, Types of Operations Research Models, Operations Research Methodology, Operations Research Techniques and Tools , Structure of the Mathematical Model, Limitations of Operations, Introduction, Linear Programming Problem, Requirements of LPP, Mathematical Formulation of LPP, Case Studies of LPP, Graphical Methods to Solve Linear Programming Problems, Applications, Advantages, Limitations

#### Unit 2

Graphical Analysis of Linear Programming Problems: Introduction, Graphical Analysis, Some





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Basic Definitions, Graphical Methods to Solve LPP, Some Exceptional Cases, Important Geometric Properties of LPP

#### Unit 3

**Simplex Method & Duality in Linear Programming Problem:** Introduction, Standard Form of LPP, Fundamental theorem of LPP, Solution of LPP – Simplex Method, The Simplex Algorithm, Penalty Cost Method or Big M-method, Introduction, Importance of Duality Concepts, Formulation of Dual Problem, Economic Interpretation of Duality, Sensitivity Analysis

#### Unit 4

**Transportation Problem:** Introduction, Formulation of Transportation Problem (TP), Transportation Algorithm (MODI Method), the Initial Basic Feasible Solution, Moving Towards

#### Unit 5

Assignment Problem: Introduction, Mathematical Formulation of the Problem, Hungarian Method Algorithm, Routing Problem, Travelling Salesman Problem

#### **TEXT BOOKS:**

- 1. Hillier FS and Liberman GJ; Introduction to Operations Research concept and cases; TMH
- 2. Srinivasan G; Quantitative Models In Operations and SCM; PHI Learning
- 3. Taha H; Operations research; PHI
- 4. Sen RP; Operations Research-Algorithms and Applications; PHI Learning
- 5. Sharma JK; Operations Research; Macmillan
- 6. Ravindran, Philips and Solberg; Operations research; Wiley India
- 7. Bronson R ;Theory and problems of OR; Schaum Series; TMH

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SUBJECT CODE				TEAC	HING & I	EVALUAT	ION SCH	EMI	£		
			r	THEORY		PRAC	ГICAL		ИЕ - Т Р - 1 0		
	Category	SUBJECT NAME	End Sem University Exam	Two Term Exam	Teachers Assessment*	End Sem University Exam	Teachers Assessment*	L	Т	Р	CREDITS
BCCA503	COMPU LSORY	Web Designing	60	20	20			4	1	0	5

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit; Q/A – Quiz/Assignment/Attendance, MST - Mid Sem Test.

\***Teacher Assessment** shall be based on following components: Quiz/Assignment/Project/Participation in class (Given that no component shall be exceed 10 Marks)

**Course Educational Objectives (CEOs):** 







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- To provide an introduction to the fundamental concepts of HTML and PHP.
- To familiarize with web designing

Course Outcomes (COs): The student will be able to:

- Learn about basic Internet Knowledge.
- Understand how to develop static webpage.
- Develop static Website. Develop dynamic WebPages using PHP

#### **UNIT 1:- Introduction of HTML**

Introduction to HTML, HTML documents structure tags, HTML text formatting tags, Inserting Special characters, Anchor tag, List tag, Adding images and sound.

#### **UNIT 2: Advanced HTML**

Tables, Frames and floating, developing forms.

#### UNIT 3: CSS (Cascading Style Sheet)

Introduction to CSS, Need of design in HTML pages, Tag structure, various selectors (ID, class), Various properties of font and div tag

#### **UNIT4: Introduction to PHP**

Introduction to PHP, Data Types, Variables, Expressions and Operators, Flow-Control Statements, Including Code, Embedding PHP in Web Pages, Functions, Variable Functions, Anonymous Functions, Strings, String Manipulation, Regular Expressions, Arrays, Multidimensional Arrays, Traversing Arrays, Sorting, Acting on Entire Arrays,

#### **UNIT 5: Data Access & Error Handing**

Web Techniques, HTTP Basics, Server Information, Processing Forms, Setting Response Headers, Maintaining State, Databases, Using PHP to Access a Database, Security, Session Fixation, File Uploads, File Access, PHP Code, Handling Output, Error Handling.

#### **Text Books:**

- 1. Php, mysql and apache Julie c. Meloni.
- 2. Introduction to Internet and HTML scripting BhumikShroff.
- 3. Web Technology and design C Xavier.

#### **Reference Books:**

- 1. HTML & CSS Design and Build Websites Jon Ducket.
- 2. The Essential Guide to CSS and HTML Web Design-Craig Grannell.
- **3.** PHP: The Complete Reference.







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Subject Code			T	HEORY		PRAC	FICAL				
	Category	Subject Name	End Sem. University Exam	Two Term Exam	Teachers Assessment*	End Sem University Exam	Teachers Assessment*	L	Т	Р	CREDITS
BCCA504	Compulsor y	IT Infrastructure Management	60	20	20			4	1	0	5

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit; Q/A – Quiz/Assignment/Attendance, MST - Mid Sem Test.

\*Teacher Assessment shall be based on following components: Quiz/Assignment/Project/Participation in class (Given that no component shall be exceed 10 Marks)

#### **Course Educational Objectives (CEOs):**

- To understand technical and management issues in current infrastructure
- To pick up information technology, business administration and electronic commerce management
- To Demonstrate knowledge of data centers, virtualization, ethical hacking, computer forensics and cloud security
- To provide understanding of information security, Data Center Technology
- To study IT infrastructure Management in context of enterprise architecture

Course Outcomes (COs): After the successful completion of this course students will be able to

- Acquire a wealth of information about IT infrastructures
- Understand infrastructures and how to build more reliable, faster applications that are better manageable.
- Recognize crucial architectural decisions and principles in an infrastructure and ways to deal with them
- Get more insight in to the tasks and way of working of infrastructure architects

#### UNIT-I

IT infrastructure: introduction, infrastructure management activities, evolutions of systems and their management, growth of internet, information system design, IT service management process, current business demands and IT system issue, IT infrastructure management, attributes and benefits of IT service management







#### UNIT-II

Information Technology Infrastructure Library (ITIL), Introduction to the design process for information systems, IT service continuity management, capacity management, availability management, approaches for organization Management, Models in IT system design, IT management systems

#### UNIT-III

Introduction to storage, storage, archive and retrieve, types of storage management, benefits of storage management, space management, hierarchical storage management, network attached storage, storage area network, disaster recovery, space management, database and application protection, bare machine recovery (BMR), data retention, backup and recovery

#### **UNIT-IV**

Data center infrastructure design and architecture, elements and functions of data center, data center design models, network management, data center security, packet filtering, access layer, security for multi-tier server farms, virtual data center, virtual data center management, remote management

#### UNIT-V

Security management, computer security, internet security, physical security, identity management, access control, intrusion detection,IT ethics, intellectual property, privacy and law, computer forensics, ethics and internet, cyber crimes

#### **TEXT BOOKS:**

- 1. Phalguni Gupta, Surya Prakash,UmaraniJayaraman, "IT Infrastructure & Its Management", Tata McGraw Hill Education, 2010
- 2. SjaakLaan, "IT Infrastructure Architecture Infrastructure Building Blocks and Concepts", Lulu Press Inc., 2013
- **3.** Manoj Kumar Choubey, Saurabh Singhal, "IT Infrastructure and Management", Pearson Education, 2012
- **4.** Munesh Chandra TrivediAshish N. JaniKamaljit I. LakhtariaAmit B. Kalyani, "Information Technology Infrastructure and Its Management"Khanna Book Publishing 2010
- 5. Anita Sengar, "IT Infrastructure Management", S.K. Kataria& Sons, 2012
- 6. M.K. Choubey, "IT Infrastructure and Management", Pearson Education







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SUBJECT CODE				TEAO	CHING &	EVALUAT	ION SCH	EME	2		
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	ry	SUBJECT NAME	End Sem University Exam	Two Term Exam	Teachers Assessment*	End Sem University Exam	Teachers Assessment*		Т	Р	CREDITS
BCCA515	Electiv e	Computer Based Learning	60	20	20			3	1	0	4

 $\label{eq:Legends: L-Lecture; T-Tutorial/Teacher Guided Student Activity; P-Practical; Q/A-Quiz/Assignment/Attendance; MST-Mid Semester Test.$ 

**\*Teacher Assessment** shall be based on following components: Quiz/Assignment/Project/Participation in class activities, given that no component shall exceed more than 10 marks

#### Course Educational Objectives (CEOs): students will become familiar with the

- Basic principles of a personal computer, including the internal hardware
- To provide the concept of Software Applications.
- To provide the concept of DOS

Course Outcomes (Cos) students will be able to

- To understand the need, goal and function of the Computer
- Organizing and manipulating files and folders.
- To understand the DOS commands
- To understand the need of computer in business
- To export and import data stored from presentation s/w

#### UNIT 1;

Brief history of development of computers, computer system concept, characteristics, Generation of Computer, types of computers, Bios, software, Hardware, firmware, Booting files & Directory system. Data, information and their need, Levels of information, Quality of information, Comparison of manual & electronic storage of data, Organization of data as file, Use of information in data processing systems, various data processing methods.

#### UNIT 2

Advanced Features of Windows:-Managing Hardware & Software - Installation of Hardware & Software, Using Scanner web camera, printers sharing of printers System Tools - Backup, Character map, Clipboard Viewer, Disk Defragmenter, Drive Space, Scandisk, System Information System Monitor, Drive converter (FAT 32), disk cleanup ,using windows update. Communication - Dial up Networking, Direct Cable Connection, Hyper Terminal, Phone Dial, Browsing the Web with internet Explorer, communication through outlook expresses Multiple Users Features of Windows. Creating







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and deleting user, changing user password, etc.

#### UNIT 3

**Disk Operating System (DOS)**: Introduction, History & Versions of DOS, DOS Basics - Physical Structure of Disk, Drive Name, FAT, File and Directory Structure and Naming Rules, Booting Process, DOS System Files. DOS Commands: Internal - DIR, MD, CD, RD, COPY, COPY CON, DEL,REN VOL, DATE, TIME, CLS, PATH, TYPE, VER etc. External - CHKDSK, XCOPY, PRINT, DISKCOPY, DOSKEY, TREE, MOVE, LABEL, FORMAT, SORT, FDISK, BACKUP, EDIT, MODE, ATTIRIB, HELP, SYS etc., Executable V/s Non Executable files in DOS

#### UNIT 4

**Computer Applications in Business**-Need and Scope, Computer Applications in Project Management, Computer in Personnel Administration, Information System for Accounting-Cost and Budgetary Control, Marketing and Manufacturing, Computer Applications in Materials Management, Insurance and Stock-broking, Production planning and Control, Purchasing, Banking, Credit and Collection, Warehousing. Use of computers in common public services and e-governance.

#### UNIT 5

**Communications and collaboration**: Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration; Instant Messaging; Netiquettes.

**Making Small Presentation**: Basics of presentation software; Creating Presentation; Preparation and Presentation of Slides; Slide Show; Taking printouts of presentation / handouts.

#### **TEXT BOOKS-**

- 1. Taxali R. K. "PC Software for Windows 98, Made Simple" TMH.
- 2. V. Rajaraman, "Fundamentals of Computers", PHI.
- 3. Peter Norton's, "Introduction to Computers", TMH

#### **REFERENCE BOOKS:**

- 1. Sanders, D.: Computers Today, Tata McGraw-Hill
- Computer Fundamentals, Architecture & Organisation Paperback December 1, 2009 by <u>B. Ram</u> New Age International Pvt Ltd Publishers; 4th Ed. edition (December 1, 2009)
- 3. Digital Computers Electronics, Organization & Fundamentals by Rashid sheikh Nakoda publishers







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			ſ	THEORY	Y	PRACT	TICAL										
SUBJECT CODE	Categ ory	SUBJECT NAME	End Sem University Exam	Two Term Exam	Teachers Assessment*	End Sem University Exam	Teachers Assessment*	L	Т	Р	CREDITS						
BCCA525	Electi ve	Information Systems for Management	60	20	20			3	1	0	4						

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit; Q/A – Quiz/Assignment/Attendance, MST - Mid Sem Test.

**\*Teacher Assessment** shall be based on following components: Quiz/Assignment/Project/Participation in class (Given that no component shall be exceed 10 Marks)

#### **Course Educational Objectives (CEOs):**

- To develop the understanding among the students about the various management functions and the role of Information System.
- Make the students capable to Identify, conceptualize, and develop solutions as a group for successful information systems management and present them.
- To use and evaluate MIS to facilitate management of an organization
- To provide the students the knowledge of emerging information technologies
- Make the students aware of ethical and social issues relating to information systems.

Course Outcomes (Cos): At the end of the course, it is expected that students will be able to

- understand the activities that are undertaken in acquiring an Information System in an organization.
- In terms of understanding and knowledge, upon completing the course students will have acquired
- Understand Management Information Systems (MIS) and their role in today's organizations.
- Identify how MIS shapes and controls current (or prospective) jobs and how to use this insight to improve your own job performance and satisfaction and and enhance your career prospects.
- Become familiar with the major trends in MIS and MIS infrastructures (Cloud, Big Data, ERPs, and outsourcing) and how these evolutions will affect workplaces and business strategies.
- Bridge the MIS-related second "digital gap" that exists, after basic computer literacy, in most professional jobs.







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#### Unit-I

#### **Management in Organizations**

Management activities, roles and levels, Management Planning and Control: interrelationship b/w planning and control systems. Strategic Planning: activities, techniques and results. The nature of decision-making: decision-making models and classification of decision-making situations, decision making at different management levels.

#### Unit II:

Concepts of information: information presentation, quality, value of information in decision making, human as info processors, classifications and characteristics. MIS subtypes at different levels of management, Management, as the direct user of an MIS vs. Intermediary use.

**Introduction to MIS**: Definition, Computer based user machine system, Integrated system, Need for a database, Utilization of models, Evolution of IS, MIS Subsystems, Organizational and Activities subsystems. Structure of MIS, Operating Elements, Role and capabilities of various MIS applications, Mgmt. Reporting Systems, Management Reporting Systems (MRS) Decision Support Systems (DSS) Group Decision Support Systems (GDSS) Office Information Systems (OIS).

#### Unit-III

**Operating Elements** : Physical components, Processing functions, Outputs, MIS support for decision making, Structured programmable decisions, Unstructured non-programmable decisions, MIS structure based on management activity and organizational functions, Synthesis of MIS structure, issues

**Information System Technology**: H/W, S/W, Communication Technology, Storage and Retrieval of Data, Distributed Systems, Logical Data Concepts, Physical Storage Devices, File Organizations, Data Base Organization, Transaction Processing, Information, Processing Control, Control Functions For Info. Processing and Availability Control, Physical Facilities, Terminal Access, Backup and Recovery

#### UNIT IV

General system concept, system concept and MIS, organizational planning: concepts, process, conceptual support, characteristics of control process, nature of control in organization, IS support for control, Support systems for planning, control and decision making, support system for mgmt. of knowledge work

**Development, Implementation, and Mgmt of MIS:** Developing long range info. System Plan, Strategies for the determination of info requirements, database requirements, user interface requirement, developing and implementing application systems, Quality assurance and evaluation of information system.

#### Unit V:

**Future Trends:** Developments in hardware, software, Internet and communications capabilities and their implication for MIS. Trends in management and organizations, movement towards flexible, virtual organizations and the role of MIS. MIS and mobile computing. MIS and social media.

Introduction of OLAP, Data Mining, Business Intelligence (BI) tools in decision making. Data Warehouses and other MIS facilities. MIS and its applications such as ERP, CRM, Supply chain mgmt. etc., security issues.

#### References

1. Amrit Tiwana, 'The essential guide to knowledge management,' Pearson education-2001.



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2. Ratnaja Gogula, 'Knowledge management', A new dawn- ICFAI-2002

3. Gordon B. Davis, Margrethe H. Olson, 'Management Information Systems: Conceptual foundations, Structure and development', Tata-Mc Graw Hill

4. Kenneth C. Laudon & Jane P. Laudon, 'Essentials of Management Information Systems', Pearson Prentice-Hall.

5. McNurlin, Sprague & Bui, "Information Systems Management in Practice", Prentice Hall.

7. James, A. O'Brien (2006). "Introduction to Information Systems", Tata McGraw Hill.

8. Goyal, D.P. (2007). "Management Information Systems", Macmillan India Ltd.

9. Jawadekar, W. S. (2004). "Management Information Systems", Tata McGraw Hill.

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		Т	HEORY		PRACTI	CAL				S							
CODE	SUBJECT NAME	END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	Т	Р	CREDIT							
BBAI404	Introduction to Organizational Behavior	60	20	20	-	-	3	1	-	4							

**Legends**: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit; **\*Teacher Assessment** shall be based on following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

#### **Course Objectives**

The learners will be able to conceptualize the components of individual and group behaviour, understand the various work situations and apply behavioral techniques.

#### **Course Outcomes**

- 1. Understand the implications of individual and group behaviour in organizational context.
- 2. Understand the concept of organizational behaviour, the social organization and the diverse environment alongside with the management of groups and teams.
- 3. Appreciate the concept of organizational culture.
- 4. Manage conflict amongst groups in a business environment.
- 5. Comprehend and apply motivational theories in the workplace.
- 6. Identify changes within organizations and power and politics in organizations.

#### **Unit I: Introduction**

- 1. Introduction to Organizational Behaviour
- 2. OB History and Development







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- 3. Need and importance Of Organizational Behaviour
- 4. Nature and Scope of OB
- 5. Importance of OB to the field of management
- 6. Framework of Organizational Behaviour

#### Unit II: Personality, Perception and Learning

- 1. Personality Types, Factors Affecting Personality
- 2. Perception Importance
- **3.** Factors influencing Perception
- 4. Learning Types of Learning Styles
- 5. The Learning Process

#### **Unit III: Motivation**

- 1. Theories
- 2. Importance
- 3. Formation and Measurement
- 4. Applications to Management

#### **Unit IV: Leadership**

- 1. Leadership Meaning Importance
- 2. Role and functions of a leader
- 3. Leadership theories and styles
- 4. Leaders Vs Managers

#### **Unit V: Group Behavior**

- 1. Definition and classification of Groups
- **2.** Types of Group Structures
- **3.** Group decision making
- 4. Teams Vs Groups
- 5. Inter group problems in organizational group dynamics
- *6.* Management of conflict

#### Suggested Readings

- 1. Prasad L M. (1994), "Organizational Behavior", Sultan Chand & Sons, Latest edition
- 2. Stephen Robbins (2013), "Organizational Behavior", Pearson Education, Latest edition
- 3. Bhattacharya,(2013), "Organization Behavior", Oxford University Press, Latest edition





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Subject Code			Г	Theory Practical							S				
	Category	Subject Name	End Sem University Exam	Two Term Exam	Teacher Assessment	End Sem University Exam	Teacher Assessment	L	Т	Р	CREDITS				
BCCA506	Compulsory	Lab-1(Java Lab)				30	20			6	3				

#### **Course Education Objectives (CEOs):**

- Students must be able to understand fundamentals of programming such as variables, conditional and iterative execution, methods, etc.
- Students must be able to understand fundamentals of object-oriented programming in Java, including defining classes, invoking methods, using class libraries, etc.
- Students must have the ability to write a computer program to solve specified problems.
- Students must be able to use the Java SDK environment to create, debug and run simple Java programs.

#### **Course Outcomes (COs):**

After the successful completion of the course students will be able to perform the following tasks:

- Write, compile, and execute Java programs that may include basic data types and control flow constructs using Integrated Development Environments (IDEs) such as Eclipse, NetBeans, and JDeveloper.
- Write, compile and execute Java programs using object oriented class structures with parameters, constructors, and utility and calculations methods, including inheritance, test classes and exception handling.
- Write, compile, and execute Java programs using arrays and recursion, manipulating Strings and text documents.
- Write, compile, and execute Java programs that include GUIs and event driven programming.
- Write a final project that may be selected from among the following: applets for inclusion in web pages; applets to access enterprise data bases in robust, enterprise three level applications; secure communications over the internet; or an approved project chosen by the student.

#### List of Experiments:

- 1. Write a Java program that prompts the user for an integer and then prints out all prime numbers up to that. Integer.
- **2.** Write a Java program that checks whether a given string is a palindrome or not. Ex: MADAM is a palindrome.
- 3. Write a Java program for sorting a given list of names in ascending order.
- 4. Write a Java Program that reads a line of integers, and then displays each integer, and the sum







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of all the integers (use String Tokenizer class).

- 5. Write a Java program that reads a file and displays the file on the screen, with a line number before each line.
- 6. Write a Java program that displays the number of characters, lines and words in a text file.
- 7. Write a Java program for creating multiple threads
  - a) Using Thread class.
  - b) Using Runnable interface.
- 8. Write a Java program that illustrates how run time polymorphism is achieved.
- 9. Write a java program that illustrates the following
  - a) Creation of simple package.
  - b) Accessing a package.
  - c) Implementing interfaces.
- 10. Write a java program that illustrates the following
  - a) Handling predefined exceptions.
  - b) Handling user defined exceptions .
- **11.** APPLETS
  - a) Working with Frames and various controls.
  - b) Working with Dialogs and Menus.
  - c) Working with Panel and Layout.
  - d) Incorporating Graphics.
  - e) Working with colours and fonts.
- 12. SWINGS

Jpanel- Jframe – Jtoolbar—JwindowFramework

#### **TEXT BOOKS:**

- 1. Patrick Naughton and Herbertz Schildt, "Java-2: The Complete Reference", TMH, 5<sup>th</sup> editio, 2002.
- 2. Bill Venners, "Inside Java Virtual Machine", TMH, 2<sup>nd</sup> edition.
- 3. Rick Darnell, "HTML 4 unleashed", Techmedia Publication, 2000
- **4.** Shelley Powers, "Dynamic Web Publishing", 2<sup>nd</sup> edition, Techmedia, 1998.
- 5. Paul Dietel and Harvey Deitel, "Java How to Program", PHI, 8<sup>th</sup> edition, 2010.

#### **REFERENCE BOOKS:**

- 1. E. Balagurusamy, "Programming with Java: A Primer", TMH, 1998.
- 2. Horstmann, "Computing Concepts with Java 2 Essentials", John Wiley.
- **3.** Decker and Hirshfield, "Programming Java: A Introduction to Programming Using JAVA", Vikas Publication, 2000.
- **4.** N.P. Gopalan and J. Akilandeswari, "Web Technology- A Developer's Perspective", PHI, 2<sup>nd</sup> edition
- **5.** Eric Jendrock, Jennifer Ball, Debbei Carson, "The Java EE5 Tutorial", Pearson, 3<sup>rd</sup> edition, 2007.
- 6. Daniel Liang, "Introduction to Java Programming", Pearson, 7<sup>th</sup> edition, 2010.







## Name of Program: BCA + MCA

SUBJECT CODE				TEA	CHING &	EVALUAT	TION SCH	IEM			
			Т	HEORY		PRACT	TICAL				
	Category	SUBJECT NAME	End Sem University Exam	Two Term Exam	Teachers Assessment*	End Sem University Exam	Teachers Assessment*	L	Т	Р	CREDITS
BCCA507	COMPU LSORY	Lab-2 (Web Designing Lab)				30	20	0	0	4	2

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit; Q/A – Quiz/Assignment/Attendance, MST - Mid Sem Test.

**\*Teacher Assessment** shall be based on following components: Quiz/Assignment/Project/Participation in class (Given that no component shall be exceed 10 Marks)

#### **Course Educational Objectives (CEOs):**

- To provide an introduction to the fundamental concepts of HTML and PHP.
- To familiarize with web designing

Course Outcomes (COs):: The student will be able to:

- Learn about basic Internet Knowledge.
- Understand how to develop static webpage.
- Able to develop static Website.
- Able to develop dynamic WebPages using PHP

#### List of Practical for HTML

- **1.** How to develop a simple webpage.
- 2. Develop a webpage using different HTML tags.
- **3.** Develop a webpage using Table tag.
- 4. Develop a webpage using Frame tag.
- 5. Develop a webpage using Form tag
- 6. Develop a static website using HTML tags.

#### List of Practical for PHP

- 1. Write PHP program to print "Hello World" on the screen.
- 2. Write PHP program to create a variable and assign value to the variable.
- 3. Write a program using string operator.
- 4. Write a program to find the length of string.
- 5. Write a program using strops () function.







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- 6. Make a program using operators in PHP.
- 7. Write a program using If...Else statement.
- 8. Write a program using Numeric array, Associate array and Multidimensional array
- 9. Write a program using While, for and do...while looping statement.
- 10. Write a program using switch statement.
- 11. Write a program that writes my name when function called.
- 12. Create a Form using PHP. 13. Create a connection to a MYSQL database.
- 13. Create an ODBC connection.
- 14. Make one application using PHP for select, Insert, Update and Delete from the Database.

#### **Text Books**

- 1. Php, mysql and apache Julie c. Meloni.
- 2. Introduction to Internet and HTML scripting BhumikShroff.
- 3. Web Technology and design C Xavier

#### **Reference Books:**

- 1..HTML& CSS Design and Build Websites Jon Ducket
- 2. The Essential Guide to CSS and HTML Web Design-Craig Grannell
- 3.PHP: The Complete Reference.



