PROPOSED

First Year Curriculum Structure for B.Voc. Degree Programme in

Software Development

(Dr Babasaheb Ambedkar Technological University, Lonere)

Semester I

Sr. No.	Course Code	Name of the Course	Teaching scheme			Evaluation Scheme			Credits	Total Marks
			L	T	P	IA	MSE	ESE		
General Education										
		Theory								
1	BVSWC101	IT Foundation and Programming Concepts	3	0	0	25	0	25	3	50
2	BVSWC102	Professional Communication	3	0	0	25	0	25	3	50
3	BVSWC103	Programming in C++	3	0	0	25	0	25	3	50
4	BVSWC104	Operating System (OS)	3	0	0	25	0	25	3	50
							Total		**12**	**200**
Skill Components										
		Lab/Practical								
5	BVSWL105	Professional Communication Lab	0	0	1	25	0	25	1.5	50
6	BVSWL106	C++ Programming Lab	0	0	1	25	0	25	1.5	50
		On-Job-Training (OJT)/Qualification Packs (Any One)								
			IA			EA				
7	BVSWE117	Technical Writer (SSC/Q0505)	50			150			15	200
8	BVSWE128	Technical Support Engineer(SSC/Q5101)								
		Total							**18**	**300**

Semester II

Sr. No.	Course Code	Name of the Course	Teaching scheme			Evaluation Scheme			Credits	Total Marks
			L	T	P	IA	MSE	ESE		
General Education										
		Theory								
1	BVSWC201	Web Designing	3	0	0	25	0	25	3	50
2	BVSWC202	Object Oriented Modelling and Design	3	0	0	25	0	25	3	50
3	BVSWC203	Core Java	3	0	0	25	0	25	3	50
4	BVSWC204	Linux Operating System – Operations and Management	3	0	0	25	0	25	3	50
								Total	**12**	**200**
Skill Components										
		Lab/Practical								
5	BVSWL205	Web Designing Lab	0	0	1	25	0	25	1.5	50
	BVSWL206	Core Java Lab	0	0	1	25	0	25	1.5	50
		On-Job-Training (OJT)/Qualification Packs (Any one more QP to be opted from the QPs mentioned in the semester I)								
			IA			**EA**				
7	BVSWE217	Junior Software Developer (SSC/Q0508)	50			150			15	200
8	BVSWE228	Infrastructure Engineer (SSC/Q0801)								
		Total							**18**	**300**

Semester

I

Syllabus

Subject Name : **IT foundation and Programming Concepts**	
Course Code :BVSWC101	Semester: I
Weekly Teaching Hours: TH: 03 Tut: 00	Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 02 Hours	Scheme of Marking PR: --
Credit :03	

	Content	Hours
Unit – I	**Computer System Characteristics And Capability**	06
	Basic structure, ALU, memory, CPU, I/O devices. Development of computers. Classification of computers:(Micro, mini frame, super computer, pc, server, workstations)	
Unit – II	**Data Representation With in Computer**	06
	BIT, BYTE, WORD, ASCII, EBCDIC, BCD Code. Introduction to Number system: Binary, Octal, Decimal and Hexadecimal. Conversation from one number system to another number system. Introduction to Basic Gates.	
Unit – III	**Input Devices and Output Devices**	06
	Keyboard, Direct Entry: Card readers, scanning devices (BAR CODE, OMR, MICR),Voice input devices, Light pen, Mouse, Touch Screen, Digitizer, scanner. CRT, LCD/TFT, Dot matrix printer, Inkjet printer, Drum plotter, Flatbed plotter	
Unit – IV	**Memory Devices**	06
	RAM, ROM, PROM, EPROM, EEPROM. - Base memory, extended memory, expanded memory, Cache memory - Storage devices Tape, FDD, HDD, CDROM, Pen Drive.	
Unit – V	**Algorithm & Flowcharts**	06
	Definition and properties, Principles of flowcharting, Flowcharting symbols, Converting algorithms to flowcharts	
Unit – VI	**Introduction To Programming Environment**	06
	History of languages, high-level, Low level, Assembly languages etc. ,Compilers, Interpreters, Assemblers, Linkers, Loaders	

Text Books

Name of Authors	Title of the Book	Publisher
R. Hunt And Shell Y.	Computers And Commonsense	BPB Publications
V.Rajaraman	Computer Fundamentals	PHI Learning
Reference Books		
Ashok Arora	Fundamentals of Computer Systems.	
Russell A Stultz	Fundamentals of Computer Systems	

Subject Name: Professional Communication	
Course Code :BVSWC102	Semester: I
Weekly Teaching Hours: TH: 03 Tut: 00	Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 02 Hours	Scheme of Marking PR: --
Credit :03	

	Content	Hours
Unit – I	**Application of Grammar**	5
	• **Specific Objective**: • Apply grammatical rules to form correct sentences. • **Contents:** • **Articles**: Appropriate use of definite and indefinite Articles • **Prepositions**: To use correct Prepositions as per context • **Conjunctions**: Co-ordinating and sub-ordinating Conjunctions • **Tenses**: Correct usages of past, present and future tenses • **Active and Passive voice**: Use of Active and Passive voice • **Direct and Indirect sentences**: Conversion of direct into indirect • sentence and vice versa	
Unit – II	**Text**	7
	Specific Objectives: • Answer the questions based on the articles • State the meanings of the given words from the articles • Contents: • Articles	
Unit – III	**Paragraph Writing**	7
	Specific Objective: • Write a paragraph on a given topic • Contents: • Paragraph Writing: Elaborate and expand the ideas with cohesion, • coherence and use of correct punctuation marks • Types of Paragraph: Narrative, Descriptive, Technical, Comparison • and Contrast • Dialogue Writing: Based on various situations • Speech Writing based on situations: Welcome Speech, Farewell • Speech, Vote of Thanks and Introducing a Guest	
Unit – IV	**Comprehension**	7
	Specific Objective: • Comprehend and provide the answers on given passages • Contents: • Comprehension of Passage: Comprehending questions and writing the answers on unseen passages	
Unit – V	**Vocabulary Building**	7
	Specific Objective: • Use correct words in given situations • Contents: • Words Often Confused	

Unit – VI	Speeches	7
	Specific Objective: • Develop a welcome speech on the given theme/situation • Develop a welcome farewell speech on the given theme/situation • Develop a vote of thanks for the given situation	

Text Books		
Name	**Title of the Book**	**Publisher**
Raymo	Essential English Grammar	Cambridge
Wren	High School English Grammar And Composition	S Chand & Co.
Reference Website		
1	http://www.talkenglish.com/	
2	languagelabsystem.com	

Subject Name: **Programming in C++**		
Course Code :BVSWC103	Semester: I	
Weekly Teaching Hours: TH: 03 Tut: 00	Scheme of Marking TH: 25 IA: 25 Total: 50	
TH Exam Duration: 02 Hours	Scheme of Marking PR: -- 25 Practical 25 Term work	
Credit :3		

	Contents	Hours
Unit – I	**Introduction to C++**	06
	C++: history, uses, applications, structure of C++ program. Header files. Keywords, variable, variable scope - local and global; constants - character, integer, float, string; escape sequences, data types - built-in and user defined	
Unit – II	**Operators and I/O in C++**	06
	Operators - arithmetic, relational, logical, assignment, bitwise, conditional, operator precedence and associativity. Simple programs using cout and cin. Manipulator: definition, endl, setw and setfill	
Unit – III	**Control Structures and Looping**	06
	Decision making constructs - If, If-Else, Nested If-Else and Switch. Looping constructs - While, For, do-while and nested looping . Infinite loop, loop control statements - break, continue, go to and Exit statements.	
Unit – IV	**Array and Function**	06
	Array - definition, advantages, array declaration, initialisation, accessing element of array .Two dimensional array - declaration, initialisation, accessing element of two dimensional array, character array, pointer . Function, advantages of function, defining function - return type, function name and parameters; declaring function, function arguments - pass by value and pass by reference, function recursion	
Unit – V	**Exception Handling and File**	06
	Exception, handling exception in C++: Throw, Try, Catch. Stream, C++ stream classes, unformatted I/O operation, formatted I/O operation . File: introduction, file stream classes, opening & closing file, writing to file, reading from file, file position pointers	
Unit – VI	**Basic Information in Data structure**	06
	Introduction: Data Structures types, Importance of Data Structure, Abstract data Type. Algorithms: Complexity. Searching Techniques: List Searches using Linear Search, Binary Search, Sorting Techniques: Basic concepts, Sorting by: Bubble, Insertion and selection. Stack: LIFO structure, PUSH and POP operations. Queue: FIFO structure , Circular Queue.	

Text Books

Name of Author	Title of the Book	Publisher
YashavantKanetkar	Let us C++	BPB Publication
John R. Hubbard	Programming with C++, 2nd Edition	Tata McGraw Hill
K.R. Venugopal	Mastering C++, 2nd	Tata McGraw Hill
M. P. Bhave	Object-Oriented Programming With C++	Pearson Education India

Digital Reference

1. C++ Language - C++ Tutorials (cplusplus.com)
2. http://nptel.ac.in/courses/106/105/106105225
3. http://www.cprogramming.com/tutorial/c-tutorial.html

Subject Name: Operating System	
Course Code :BVSWC104	Semester : I
Weekly Teaching Hours: TH: 03 Tut: 00	Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 02 Hours	Scheme of Marking PR: --
Credit:3	

	Content	Hours
Unit – I	**Introduction to Operating System**	06
	What is an operating system? History of operating system, Computer hardware & Software, Different operating systems, Various System Software associated with Operating Systems, Shell and Kernel, Systems Calls and Theirs types and implementation	
Unit – II	**Process & Threads**	06
	Processes, PCB, Process States, Threads & TCB, difference and Similarities in Threads and Process.Inter-process communication, CPU scheduling, IPC problems.	
Unit – III	**Process Synchronization & deadlocks**	06
	Critical Section Problems &Semaphores, Classical Problems of process Synchronization, Introduction to deadlocks, Deadlock detection and recovery, Deadlock avoidance, Deadlock prevention, issues	
Unit – IV	**Memory Management**	06
	Address Spaces and Address Translation, Swapping & memory allocation, Paging & Segmentation, Virtual Memory & Demand Paging, Page Replacement Algorithm, Thrashing	
Unit – V	**File Management**	06
	File Systems: Files, directories, file system & Directories implementation, file-system management and optimization, File Allocation Methods, MS-DOS file system, UNIX V7 file system	
Unit – VI	**Disk Management & Case Study**	06
	Disk Structure ,Disk Scheduling Algorithm (FCFS, RAID, Network Operating System, Real Time Operating System, Distributed Operating System	

Text Books		
Name of Authors	**Title of the Book**	**Publisher**
Silberschatz, Galvin, Gagne	Operating System Principles	Wiley
William Stalling	Operating System-Internal and Design Principles	Pearson Education India
Andrews Tanenbaum	Modern Operating System	Pearson Education India
Reference Books		
Dhanjay Dhamdhere	Operating System –A Concept-Based Approach	McGraw Hill Education
Dietel, Chofenes	Operating System	Pearson Education India
Achyut Godbole & Atul Kahate	Operating System	McGraw Hill Education

Lab- **Professional Communication Lab**	
Course Code :BVSWL105	**Semester: I**
Weekly Practicals: PR: 01 Tut: 00	**Scheme of Marking TH: --**
TH Exam Duration:--	**Scheme of Marking PR: 25, IA: 25, Total: 50**
Credit:1.5	
Content	

Suggested List of Experiments:

1. Punctuate 25 sentences given by the teacher.

2. Rewrite the passage/passages with correct form of verbs. [Teacher is expected to give
3. passage /passages of verbs used wrongly [at least 25 verbs.]

4. Write a paragraph each on descriptive, narrative, comparison, contrast and technical type in 75 to 100 words.

5. Write 10 words of prefixes and 10 words of suffixes and use them in sentences.

6. Select one news from any English newspaper. The news may be from any one of the following areas – Social, environmental, financial, economics, sports, etc. Prepare a summary of the news and make it presentable by using relevant photographs/graphics.

7. 5 Students will be given ten collocations, develop three sentences for each collocation.

NOTE*: The following assignment should be performed in the Language Laboratory/with the help of interactive media.
Listen and practice the dialogues with the help of interactive media/ interactive software.

Lab- C++ Programming Lab	
Course Code :BVSWL106	**Semester: I**
Weekly Practicals: PR: 01 Tut: 00	**Scheme of Marking TH: --**
TH Exam Duration:--	**Scheme of Marking PR: 25, IA: 25, Total: 50**
Credit:1.5	
Content	

Suggested List of Experiments:

1.   Introduction Borland/Turbo C++ environment & basic C++ program syntax.)

2.   Write a C++ program to demonstrate the use of variables and various operators.

3.   Write a C++ program to demonstrate the use of loop constructs.

4.   Write a C++ program to demonstrate the use of array and string manipulations.

5.   Write a C++ program to demonstrate the use of function.

6.   Write a C++ program to demonstrate the concept of class, object, constructor &

7.   Destructor.

8.   Write a C++ program to demonstrate use of function overloading .

9.   Write a C++ program to demonstrate various operations on file.

10.   Write a program to demonstrate sorting algorithm. (using any one of these techniques:

        bubble, Insertion, selection).

11.   Write a program to demonstrate operations performed on stack.

Group GEM1 of Qualifier Packs

Subject Name: Technical Writer (SSC/Q0505)	
Course Code :**BVSWE117**	Semester : **I**
Weekly Skilling Hours: PR: **24** Tut: **00**	Scheme of Marking TH: **00,** IA: **00,** Total: **00**
PR Exam Duration: **06 Hours**	Scheme of Marking PR: **150,** IA: **50,** Total: **200**
Credit:**15**	**Choose any one from specified Group GEM1 of Qualification Packs**
Syllabus for this qualifier Pack is available on http://www.sscnasscom.com/qualification-pack/SSC/Q0505/	

Subject Name: Technical Support Engineer (SSC/ Q5101)	
Course Code :**BVSWE128**	Semester: **I**
Weekly Skilling Hours: PR: **24** Tut: **00**	Scheme of Marking TH: **00,** IA: **00,** Total: **00**
PR Exam Duration: **06 Hours**	Scheme of Marking PR: **150,** IA: **50,** Total: **200**
Credit:**15**	**Choose any one from specified Group GEM1 of Qualification Packs**
Syllabus for this qualifier Pack is available on http://www.sscnasscom.com/qualification-pack/SSC/Q5101/	

*Skill Practical assessment will be done rules/ procedure of respective Skill Sector Council of India.

Semester

II

Syllabus

Subject Name: **Web Designing**	
Course Code :BVSWC201	Semester: II
Weekly Teaching Hours: TH: 03 Tut: 00	Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 02 Hours	Scheme of Marking PR: --
Credit :03	

	Content		Hours
Unit – I	**Web Design Principles**		5
	Basic principles involved in developing a web site, Planning process, rules of web designing aviation bar, Page design, Home Page Layout, Design Concept, Brief History of Internet, what is World Wide Web, Why create a website, Web Standards		
Unit – II	**Introduction to HTML**		7
	What is HTML, HTML Documents, Basic structure of an HTML document, Creating an HTML document, Markup Tags, Heading-Paragraphs, Line Breaks, Introduction to elements of HTML, Working with Text, Working with Lists, Tables and Frames, Working with Hyperlinks, Images and Multimedia, Working with Forms and controls.		
Unit – III	**Introduction to Cascading Style Sheets**		7
	Concept of CSS, Creating Style Sheet, CSS Properties, CSS Styling (Background, Text Format ,Controlling Fonts), Working with block elements and objects, Working with Lists and Tables, CSS Id and Class, CSS Color		
Unit – IV	**Java Script**		7
	Java script Basics, Java script Events, Java script conditions and loop control structures, Alert, Prompt and Confirm statements, Java script validation		
Unit – V	**Introduction to Web Publishing or Hosting**		7
	Creating the Web Site, Saving the site, Working on the website, Creating web site structure, Themes-Publishing web sites.		
Unit – VI	**Introduction to Bootstrap**		7
	History, Fundamentals of Bootstrap, Bootstrap Grid System, Bootstrap Form and Form Components, Introduction Jquery, Element Selector, Document ready function, Events, Event handling with Html or Bootstrap components		

Text Books

Name of Authors	Title of the Book	Publisher
Kogent Learning Solutions Inc.	HTML 5 in simple steps	Dreamtech Press
Murray,Tom/Lynchburg	Creating a Web Page and Web Site	College,2002
Murray,Tom/Lynchburg	Creating a Web Page and Web Site	College,2002

Reference Books

	Title of the Book	Publisher
	Web Designing & Architecture-Educational Technology Centre	University of Buffalo
Steven M. Schafer	HTML, XHTML, and CSS Bible, 5ed	Wiley India
John Duckett	Beginning HTML, XHTML, CSS, and JavaScript	Wiley India
Ian Pouncey, Richard York	Beginning CSS: Cascading Style Sheets for Web Design	Wiley India

Subject Name: **Object Oriented Modeling and Design**	
Course Code : BVSWC202	Semester: II
Weekly Teaching Hours: TH: 03 Tut: 00	Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 01 Hours	Scheme of Marking PR: --
Credit :03	

	Content	Hours
Unit – I	**Importance of Modeling**	08
	• Object Orientation Object Oriented Development and Themes - OO methodology, Three Models • Modeling as Design techniques - Brief overview of OMT by Rumbaugh, Importance of Modeling, Four principles of Modeling • Introducing the UML – overview, conceptual model, architecture, software development lifecycle	
Unit – II	**Class Modeling**	08
	• Object and Class Concepts Objects, Classes, Class Diagrams, Values and Attributes, Operations and Methods, Link and Association concepts **-**Links and Associations, • Multiplicity , Aggregation and Object Modeling Multiplicity, Aggregation, Propagation of operations, Metadata and Constraints**-**Metadata, Constraints on objects and links, Object modeling, Object instances	
Unit – III	**Basic Behavioral Modeling**	06
	• Use case Diagram Notations for Use case diagram – use cases, Actors, Communication lines, System boundaries, Use case relationships - Include and extend, Sample use case diagrams. • Sequence Diagrams Notations for Sequence diagram – Objects / Participants, Time, events, Activation Bars , signals , message arrows, synchronous and asynchronous messages, return message, create and destroy message	
Unit – IV	**Advanced Behavioral Modeling**	06
	• Activity Diagram Notations for Activity Diagram - Actions and Activity nodes, initialization and completion, Decisions. Sample Activity Diagram • State Diagram Notations for State diagram - initial state, final state, transitions and conditions, activity, event, Nested state diagram, concurrent / composite state diagram ,Sample state diagram	
Unit – V	**Architectural modeling**	06
	• Component Diagram Notations for component Diagram - component and interfaces, ports, connectors, Sample Component Diagram • Deployment Diagram Notations for Deployment diagram - nodes, artifacts, node, instances, communication between nodes, Sample Deployment diagram	

Text Books

Name of Authors	Title of the Book	Publisher
Blaha and Rumbaugh	Object oriented modeling and design with UML 2.0 (second edition)	Pearson
Miles and Hamilton	Learning UML 2.0	SPD O'REILLY
Booch, Rumbaugh, Jacobson	The unified modeling language user guide (second edition)	Pearson education

References

http://www.tutorialspoint.com/uml/uml_class_diagram.htm

http://uml-tutorials.trireme.com/

Subject Name : Core Java	
Course Code :BVSWC203	Semester : II
Weekly Teaching Hours: TH: 03 Tut: 00	Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 02 Hours	Scheme of Marking PR: --
Credit : 3	

Content		Hours
Unit – I	**Basics of Java**	06
	History of java, Advantages of java, JVM, Java Environment Setup, Programming Structure and naming conventions, Variables and Data types, Operators, Decision and Control Statements, Arrays and Strings	
Unit – II	**Object Oriented Programming with Java**	08
	Object Oriented Programming, Features of OOPS, Class and Object, Access modifiers, Methods, , Static variables and static methods, Overloading methods, Passing and returning object as argument, Constructors and Overloading constructors	
Unit – III	**Inheritance**	04
	Use of inheritance, IS-A,HAS-A,USES-A relationship, Method overriding, Super keyword and Final keyword, Abstract classes and methods, Packages, interfaces	
Unit – IV	**Exception handling and Multithreading**	06
	Exceptions and their types ,Handling exceptions, Use of Multithread programming, Thread class and Runnable interface, Thread priority, Thread synchronization	
Unit – V	**File handling and JDBC**	06
	Stream classes, Class hierarchy, Creation of text file, Reading and writing text files, JDBC Architecture, JDBC Drivers, Java Database Connectivity using JDBC	
Unit – VI	**GUI Applications**	06
	Applets and its life cycle, Graphics Class, AWT, Layout managers, Event handling classes and interfaces, SWING and Its Components	

Reference Books		
Name of Authors	**Title of the Book**	**Publisher**
Herbert Schildt	Java™: The Complete Reference, Seventh Edition	TMH
Cay S Horstmann, Fary Cornell	Core Java Vol I	Sun Microsystems Press
Ken,D.Holmers, J. Gosling, P. Goteti	The Java Programming Language 3rd Edition	Sun Microsystems Press
Deitel & Deitel	How To Program JAVA	Pearson Education
Text Books		
E Balguruswamy	Programming with Java- A Primer	TMH
Steven Holzner	JAVA 2 Programming Black Book,	Wiley India
Reference Website		
http://www.tutorialspoint.com		
http://www.javatpoint.com		
http://www.roseindia.net		
http://www.studytonight.com		

Subject Name : Linux Operating System – Operations and Management	
Course Code : BVSWC204	**Semester: II**
Weekly Teaching Hours: TH: 03 Tut: 00	**Scheme of Marking TH: 25 IA: 25 Total: 50**
TH Exam Duration: 02 Hours	**Scheme of Marking PR: --**
Credit:3	

Content		Hours
Unit – I	**Linux introduction**	
	Linux introduction and file system - Basic Features, Advantages, Installing requirement, Basic Architecture of Unix/Linux system, Kernel, Shell. How Linux access files, storage files, Linux standard directories, Commands for files and directories cd, ls, cp, md, rm, mkdir, rmdir, more, less, creating and viewing files, using cat, file comparisons, View files, Disk related commands, checking disk free spaces.	6
Unit – II	**Linux Shell and Commands Overview**	
	Partitioning the Hard drive for Linux, Installing the Linux system, System startup and shut-down. Essential Linux commands Understanding shells, Processes in Linux process fundamentals, connecting processes with pipes, redirecting input output, manual help, Background processing, managing multiple processes, batch commands, kill, ps, who, sleep, Printing commands,	6
Unit –III	**Linux File Permissions**	
	grep, fgrep, find, sort, Cal, banner, touch, file, file related commands-ws, sat, cut, grep, dd, etc. Mathematical commands- bc, expr, factor, units. vi, joe, vim editor	6
Unit – IV	**Shell Programming**	
	Shell programming Basic of shell programming, Various types of shell, shell programming in bash, conditional and looping statements, case statements, parameter passing and arguments, Shell variables, shell keywords.	6
Unit – V	**System Administrator**	
	System administration Common administrative tasks, identifying administrative files – configuration and log files, Role of system administrator, Managing user accounts-adding & deleting users, changing permissions and ownerships, Creating and managing groups, modifying group attributes, Temporary disable user's accounts, creating and mounting file system, becoming super user using su. Getting system information - host name, disk partitions & sizes, users, kernel. Backup and restore files, Linux conf.	6
Unit – VI	**Linux Networking Concepts**	
	Basic networking administration Setting up a LAN using Linux, choosing peer to peer vs client/server model, setting up an Ethernet Lan, configuring host computers, checking Ethernet connecting, connecting to internet, administration in a networked environment, common networking administrative tasks, the network file system, configuring Ethernet, initializing Ethernet Interface, ifconfig, netstat and netconfig commands a TCP/IP networks.	6

Text Books		
Name of Authors	**Title of the Book**	**Publisher**
	Linux Complete command reference	Sams Publishing
William E. Shotts	The Linux Command line	Second Internet Edition
	Linux System Administration	Paul Cobbaut
	Linux Fundamental	Paul Cobbaut

Lab-Web Designing Lab	
Course Code :BVSWL205	**Semester: II**
Weekly Practicals: PR: 01 Tut: 00	**Scheme of Marking TH: --**
TH Exam Duration:--	**Scheme of Marking PR: 25, IA: 25, Total: 50**
Credit:1.5	
Content	

1. Introduction to HTML Tags :- Working of Web browser, Introduction to static Web pages and dynamic web pages, HTML body structure, HTML Tags:- Elements, Attribute, Heading tag, Paragraph tag, Formatting tags (Bold text, Important text, Italic text, Emphasized text, Marked text, Small text, Deleted text, Inserted text, Subscripts, Superscripts), Background color, image, font color, effects, Table tag List.

2. Advance HTML tags :- Frames iframes, anchor tag, Multimedia

3. Create Static Website by using all HTML Tags.

4. Introduction to Internal CSS

5. Introduction to External CSS

6. HTML Form tags(Elements, Attributes, properties, etc)

7. Introduction to JAVA Script(Programming basics)

8. Advance JAVA Script programming basics(Alert,Confirm,prompt) and Validations.

9. Create 3 Web page using Bootstrap framework use bootstrap table, image and form elements etc.

10. Create the web page using Jquery effects, events on different elements.

Lab -Core Java	
Course Code :BVSWL206	**Semester : II**
Weekly Practicals: PR: 01 Tut: 00	**Scheme of Marking TH: --**
TH Exam Duration:--	**Scheme of Marking PR: 25, IA: 25, Total: 50**
Credit:1.5	

Contents

1. Design a simple java class with appropriate programming structure and naming conventions

2. Sample programs on conditional statements and loop controls

3. Demonstrate class, object and methods with various access modifiers

4. Sample program on static variables and static methods

5. Sample program on passing and returning object as argument

6. Demonstrate constructors overloading

7. Demonstrate types of inheritance

8. Abstract classes and methods

9. Program on Packages and Interfaces

10. Demonstration of threads using Thread class and Runnable Interface

11. Sample programs on file handling operations

12. CRUD operations using JDBC

13. Demonstrate Applets

14. Design form and event handling using AWT or Swings

Reference Books

Name of Authors	Title of the Book	Publisher
Herbert Schildt	Java™: The Complete Reference, Seventh Edition	TMH
Cay S Horstmann, Fary Cornell	Core Java Vol I	Sun Microsystems Press
Ken,D.Holmers, J. Gosling, P. Goteti	The Java Programming Language 3rd Edition	Sun Microsystems Press
Deitel&Deitel	How To Program JAVA	Pearson Education

Text Books

E Balguruswamy	Programming with Java- A Primer	TMH
Yashavant Kanetkar	"Let Us Java	BPB
Steven Holzner	JAVA 2 Programming Black Book,	Wiley India

Group GEM2of Qualification Packs

Subject Name: Junior Software Developer (SSC/Q0508)	
Course Code :**BVSWE217**	Semester: **II**
Weekly Skilling Hours: PR: **24** Tut: **00**	Scheme of Marking TH: **00**, IA: **00**, Total: **00**
PR Exam Duration: **06 Hours**	Scheme of Marking PR: **200**, IA: **00**, Total: **200**
Credit:**15**	**Choose any one from specified Group GEM1 of Qualification Packs**
Syllabus for this qualifier Pack is available on http://www.sscnasscom.com/qualification-pack/SSC/Q0508/	

Subject Name : Infrastructure Engineer (SSC/Q0801)	
Course Code :**BVSWE228**	Semester : **II**
Weekly Skilling Hours: PR: **24** Tut: **00**	Scheme of Marking TH: **00**, IA: **00**, Total: **00**
PR Exam Duration: **06 Hours**	Scheme of Marking PR: **200**, IA: **00**, Total: **200**
Credit:**15**	**Choose any one from specified Group GEM1 of Qualification Packs**
Syllabus for this qualifier Pack is available on http://www.sscnasscom.com/qualification-pack/SSC/Q0801/	