

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
	<ul style="list-style-type: none"> • 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
	<ul style="list-style-type: none"> • 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
	<ul style="list-style-type: none"> • 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
	<ul style="list-style-type: none"> • 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
	<ul style="list-style-type: none"> • Specific Objective: • Use correct words in given situations • Contents: • Words Often Confused 	

Unit – VI	Speeches	7
	<p>Specific Objective:</p> <ul style="list-style-type: none"> • 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 \(cplusplus.com\)](http://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 Dhamdhare	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.

Semester I - On-Job-Training (OJT)/Qualification Packs (Any One)

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		
	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
	<ul style="list-style-type: none"> Object Orientation Object Oriented Development and Themes - OO methodology, Three Models <ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> Object and Class Concepts Objects, Classes, Class Diagrams, Values and Attributes, Operations and Methods, Link and Association concepts -Links and Associations, <ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> Activity Diagram Notations for Activity Diagram - Actions and Activity nodes, initialization and completion, Decisions. Sample Activity Diagram <ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> Component Diagram Notations for component Diagram - component and interfaces, ports, connectors, Sample Component Diagram <ul style="list-style-type: none"> 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.treeme.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	
<ol style="list-style-type: none">1. Design a simple java class with appropriate programming structure and naming conventions2. Sample programs on conditional statements and loop controls3. Demonstrate class, object and methods with various access modifiers4. Sample program on static variables and static methods5. Sample program on passing and returning object as argument6. Demonstrate constructors overloading7. Demonstrate types of inheritance8. Abstract classes and methods9. Program on Packages and Interfaces10. Demonstration of threads using Thread class and Runnable Interface11. Sample programs on file handling operations12. CRUD operations using JDBC13. Demonstrate Applets14. 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

Semester II - On-Job-Training (OJT)/Qualification Packs (Any One)

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/	