Lagdu Singh Charitable Trust's (Regd.)
THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY
(Approved by AICTE, Govt. of Maharashtra & Affiliated to University of Mumbai*)
(Accredited Programmes by National Board of Accreditation, New Delhi**)
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*Permanent Affiliated UG Programmes : • Computer Engineering • Electronics & Telecommunication Engineering • Information Technology (w.e.f.: A.Y. 2015-16 onwards)
**1st time Accredited UG Programmes : • Computer Engineering • Electronics & Telecommunication Engineering • Information Technology
**2nd time Accredited UG Programmes : • Computer Engineering • Electronics & Telecommunication Engineering • Information Technology • Electronics Engineering (3 years w.e.f.: 01-07-2016)
ISO 9001 : 2008 Certified

TCET/FRM/IP-02/09 Revision: A

Semester Plan
(Theory)

Semester: III Course: IT

Subject: JAVA PROGRAMMING Class: SE-B

Sr. No	Module No.	Lesson No.	Topics Planned (Technology to be used)	Teaching Aids Required	Planned /Completion Date	Resource Book Reference	Remarks
1	--	L1	SOP-Theory	Power point presentation, Chalk & Board	10/07/17	---	
2	--	L2	SOP-Practical	Power point presentation, Chalk & Board	11/07/17	---	
3	--	L3	SOP-OBE	Power point presentation, Chalk & Board	12/07/17	---	
4	1	L1.1	1.1 Overview of procedure and object oriented Programming, Java Designing Goals, Features of Java Language.	Power point presentation, Chalk & Board	19-7-17	1.1	
5	1	L1.2	1.2 Introduction to the principles of object-oriented programming: Classes, Objects, Abstraction, Encapsulation, Inheritance, Polymorphism,	Power point presentation, Chalk & Board	19-7-17	1.1	
6	1	L1.3	1.3 Keywords, Data types, Variables, Operators, Expressions, Types of variables and methods.	Power point presentation, Chalk & Board	25-7-17	1.1	
7	1	L1.4	1.4 Control Statements: If Statement, If-else, Nested if, switch Statement, break, continue. Iteration Statements: for loop, while loop, and do-while loop	Power point presentation, Chalk & Board	28-7-17	1.1	

8	2	L2.1	2.1 Classes & Objects: Class Fundamentals: Assigning Object Reference Variables, Passing parameters to Methods and Returning parameters from the methods, Nested and Inner Classes.	Power point presentation, Chalk & Board	01-8-17	2.1	
9	2	L2.2	2.2 Constructors: Parameterized Constructors, finalize( ) Method, Method overloading, Constructors overloading, Recursion, Command-Line Arguments.	Power point presentation, Chalk & Board	04-8-17	2.1	
10	2	L2.3	2.3 Wrapper classes, Java.util.Scanner, Java. io.BufferedReader, Java.io.DataInputStream, Java.io.DataOutputStream and String Buffer classes and String functions.	Power point presentation, Chalk & Board	8-8-17	2.1	
11	2	L2.4	2.4 Arrays & Vectors: One Dimensional arrays, Two Dimensional array, Irregular arrays, dynamic arrays, Array List and Array of Object.	Power point presentation, Chalk & Board	11-8-17	2.1	
12	3	L3.1	3.1 Inheritance Basics, , Types of Inheritance in Java, Concept of Super and sub class, inheriting Data members and Methods, Role of Constructors in inheritance, Making methods and classes final , Method overriding, Dynamic Method Dispatch, Abstract classes and methods	Power point presentation, Chalk & Board	18-08-17	3.1	
13	3	L3.2	3.2 Defining an interface, extending interfaces , implementing interfaces, accessing implementations through interface references, Interfaces vs. Abstract classes.	Power point presentation, Chalk & Board	01-09-17	3.1	
14	3	L3.3	3.3 Packages – Steps for defining, creating and accessing a Package, importing packages,Making JAR Files for Library Packages, java.util.Vector	Power point presentation, Chalk & Board	05-09-17	3.1	
15	4	L4.1	4.1 Exception handling Mechanism: try, catch, throw, throws and finally.	Power point presentation, Chalk & Board	08-09-17	4.1	
16	4	L4.1	4.2 Multithreading: Need of Multithreading , Java thread Model, thread Life-Cycle,	Power point presentati	12-09-17	4.1	

			thread class Methods, Implementing Runnable, Extending thread, Synchronizing threads, synchronized Statement, Critical Factor in Thread –Deadlock.	on, Chalk & Board			
17	5	L5.1	5.1 Applet: Applet fundamentals, Applet lifecycle, Creating applet, paint method Applet tag, Applet class methods.	Power point presentation, Chalk & Board	15-09-17	5.1, 5.2	
18	5	L5.2	5.2 Designing Graphical User Interfaces in Java, Components and Containers, Basics of Components, Using Containers, Layout Managers, AWT Components, Adding a Menu to Window, Extending GUI Features	Power point presentation, Chalk & Board	19-09-17	5.1, 5.2	
19	5	L5.3	5.3 Event-Driven Programming in Java, Event- Handling Process, Event- Handling Mechanism, Delegation Model of Event Handling, Event Classes, Event Sources, Event Listeners, Adapter Classes as Helper Classes in Event Handling.	Power point presentation, Chalk & Board	22-09-17	5.1, 5.2	
20	6	L6.1	1 Introducing Swing: AWT vs Swings, Components and Containers, Swing Packages, A Simple Swing Application, Painting in Swing	Power point presentation, Chalk & Board	26-09-17	6.1	
21	6	L6.2	Designing Swing GUI Application using Buttons,JLabels, Checkboxes, Radio Buttons, JScrollPane, JList, JComboBox, Trees, Tables Scroll pane Menus and Toolbars	Power point presentation, Chalk & Board	03-10-17	6.1	
22	1 to 6	L4	Practice session , Discussion on university question papers	Power point presentation, Chalk & Board	06-10-17		
23	1 to 6	L5	Doubt solving session		13-10-17		
24	1 to 6	L6	Doubt solving session		16-10-17		
		Syllabus Coverage:		Practice Session: L5,L6		Beyond Syllabus: Software Re-engineering,	

Text Books:

1. Herbert Schildt, "Java-The Complete Reference", Seventh Edition, Tata McGraw Hill Publication
2. E. Balguruswamy, "Programming with java A primer", Fifth edition, Tata McGraw Hill Publication

Reference Books:

1. D.T. Editorial Services, "Java 8 Programming Black Book", Dreamtech Press
2. H. M.Deitel, P. J. Deitel, S. E. Santry, "Advanced Java 2 Platform How to Program" Prentice Hall
3. Jaime Nino, Frederick A. Hosch, "An introduction to Programming and Object Oriented Design using Java", Wiley Student Edition.
4. "Learn to Master JAVA, " Staredu soutions

Digital Reference:

3.1 https://www.tutorialspoint.com/java/
3.2 https://www.javatpoint.com/java-do-while-loop
3.3 nptel.ac.in

-/Sd		
Mrs. Hetal Amrutia	-/Sd	-/Sd
Name & Signature of Faculty	Signature of HOD	Signature of Principal /Dean (Academics)
Date:	Date:	Date:

Note:

1. Plan date and completion date should be in compliance
2. Courses are required to be taught with emphasis on resource book, course file, text books, reference books, digital references etc.
3. Planning is to be done for 15 weeks where 1st week will be AOP, 2nd -13th for effective teaching and 14th -15th week for effective university examination oriented teaching, mock practice session and semester consolidation.
4. According to university syllabus where lecture of 4 hrs/per week is mentioned minimum 55 hrs and in case of 3 lectures per week minimum 45 lectures are to be engaged are required to be engaged during the semester and therefore accordingly semester planning for delivery of theory lectures shall be planned.
5. In order to improve score in NBA, faculty members are also required to focus course teaching beyond university prescribed syllabus and measuring the outcomes w.r.t learning course and programme objectives.
6. Text books and reference books are available in syllabus. Here only additional references w.r.t. non –digital/ digital sources can be written (if applicable)
7. Technology to be used in class room during lecture shall be written below the topic planned within the bracket.