

Internet Technology (IT-7004)

Course Code	IT-7004	Credits-4	L – 3, T- 1, P-0
Name of the Course	Internet Technology		
Lectures to be Delivered	52 (1 Hr Each) (L= 39, T = 13 for each semester)		
Semester End Examination	<i>Max. Marks: 100</i>	<i>Min. Pass Marks: 40</i>	Maximum Time: 3hrs
Continuous Assessment (based on sessional tests (2) 50%, Tutorials/Assignments 30%, Quiz/Seminar 10%, Attendance 10%)			<i>Max. Marks: 50</i>

Instructions

- For Paper Setters:** The question paper will consist of five sections A, B, C, D, and E. Section E will be Compulsory, it will consist of a single question with 10-20 subparts of short answer type, which will cover the entire syllabus and will carry 40% of the total marks of the semester end examination for the course. Section A, B, C and D will have two questions from the respective sections of the syllabus and each section will carry 15% of the total marks of the semester end examination for the course.
- For Candidates:** Candidates are required to attempt five questions in all selecting one question from each of the sections A, B, C and D of the question paper and all the subparts of the questions in section E. Use of non-programmable calculators is allowed.

Section A

Introduction to Java, Difference between C/C++ and Java, Applets and Applications, Java Development Kit, Advantages of Java, (Data types, modifiers, expressions, operators in Java), Control Statements in Java, Classes statements in Java, Classes, Inheritance (single, multilevel, hierarchical), Multiple Inheritance using Interfaces, Arrays, Strings and Vectors, Java packages, Exception handling, Multithreading, Applets, Graphics and AWT.

Section B

Multithreading: Java Thread Model, Thread Priorities, Creating Multiple Threads, Synchronization, Inter thread communication.

Applets: Applet Basic, Applet Architecture, Display Methods, HTML APPLET tag.

Event Handling: Event Handling Modles, Event classes, Event Listener Interfaces, Adapter Classes.

AWT Classes: Window fundamentals, working with frames windows, Panels, working with color, fonts, AWT Controls, layout Manager & Menus.

Section C

Swing: Swing components classes and their brief description such as buttons, boxes, panes, tables, fields and trees.

JDBC: Java as a database front end, Database Client/Server methodology, Two-and three-tier database design, The JDBC API, A JDBC database example.

Section D

Java Beans: The Java Bean component model, The Java “Bean”, Bean introspection and customization, Simple Bean applications.

Servlets: Servlet engines, Life cycle of servlets, Run-time environment, Servlet exceptions.

Books Suggested:

1. Programming with JAVA, John R. Hubbard, Schaum’s Outline Series, McGraw Hill, New York.
2. Java Script, Don Gosselin, Thomson Learning, Cambridge, 2000.

3. Programming with Java, E Balagurusamy, Tata McGraw Hill, New Delhi, 2002.
4. The Complete Reference, Java™ 2, 3rd Edition, Patrick Naughton, Herbert Schildt, Tata McGraw Hill.