

USN

10CS252 Common for CSE & ISE																			



PES Institute of Technology, Bangalore
(Autonomous Institute under VTU, Belgaum)

B. E. 4th SEMESTER CSE & ISE
May / June 2012 SEMESTER END EXAMINATION (SEE)

10CS252 – OBJECT ORIENTED PROGRAMMING USING JAVA

Time: 03 Hrs

Answer All Questions

Max Marks: 100

1.	a	<p>Comment on the following statements</p> <ul style="list-style-type: none"> • "Java is intended for writing programs that must be reliable in a variety of ways" • "The CPU specific codes can be generated on the fly by the Java environment" • "Multithreading ensures better real time behavior" • "Java is interpreted so it is too slow for serious real time applications" • "Java script is a simpler version of java" 	2*5
	b	<p>Discuss the significance of the following with respect to java.</p> <ul style="list-style-type: none"> • Floating point representation in hexadecimal format • NaN and isNaN() • Casts • Code points and Code Units • Scanner Class 	2*5
2.	a	<p>With relevant set of examples indicate</p> <ul style="list-style-type: none"> • Block Scope • Method Scope • Class Scope • Project Scope • Package Scope 	1*5
	b	<p>What do you mean by a ragged array in Java? Indicate array copy, array sorting using sample code?</p>	2+3
	c	<p>Write a Java Program to accept the following set of strings {"PESIT", "VTU", "Autonomous", "Scheme", "batch of 2010", "Computer Science"} from the command line. Also generate and display the following</p> <ul style="list-style-type: none"> • The length of individual string • The number of vowels and consonants in each string • The concatenation of all strings along with the length 	3+4+3

3.	a	With sample java code demonstrate the following <ul style="list-style-type: none"> Dependence Aggregation Inheritance 	3+3+4
	b	Java supports initialization blocks (IB). How different they are from constructors? What is the reason for IB to be non static by default?	3+4+3
4	a	What is the significance of protected access in java? Is it really useful?	3+2
	b	Write short notes on the following <ul style="list-style-type: none"> Wrapper classes Variable number of parameters Enumerations Threads Strings 	2*5
	c	How does java implement inheritance by default? What is the significance of the super and this keyword in java?	05
5.	a	Which one of these lists contains only Java programming language keywords? <ol style="list-style-type: none"> class, if, void, long, Int, continue goto, instanceof, native, finally, default, throws try, virtual, throw, final, volatile, transient strictfp, constant, super, implements, do byte, break, assert, switch, include 	03
	b	Which of the following line of code is suitable to start a thread ? and why? <ol style="list-style-type: none"> Thread t = new Thread(X); Thread t = new Thread(X); t.start(); X run = new X(); Thread t = new Thread(run); t.start(); Thread t = new Thread(); x.run(); 	2+2
	c	What is the narrowest valid returnType for methodA in line 3? and why? <pre> public class ReturnIt { returnType methodA(byte x, double y) /* Line 3 */ { return (long)x / y * 2; } } </pre>	1+2
	d	What do you mean by garbage collection in java? How can one force garbage collection in java? Can an inner class declared inside of method access local variables of the method?	4+3+3