



PES University, Bengaluru  
(Established under Karnataka Act 16 of 2013)

UE14CS151

JULY 2016 : SUMMER TERM END SEMESTER ASSESSMENT (ESA) B. TECH. II SEMESTER

UE14CS151 Computer Science 2 (CS2)

Theme: Object Oriented Programming in Java

Time:3Hrs		Answer All Questions	Max Marks: 100
1.	a)	Mention and write a line about 8 built-in primitive data types available in java with one example.	8
	b)	Write the output for the following program.If there are errors in the program ,specify the error and correct the errors. <pre>public class Test { final int a=10; public static void main(String args[]) { System.out.println(a); }}</pre>	5
	c)	How does Java treat uninitialized variable I) within a method II) within a class (field)	4
	d)	Write any major rules for writing class names in java.Write simple structure of a java program.	3(2+1)
2	a)	What is overloading of methods? How does the compiler find which method to call? Write one example program for method overloading.	6 (2+2+2)
	b)	Assume that the variables x, y, z are of int type and have been initialized to 10, 20, 30 respectively. State what happens in the following cases. i) x = y++; what is the value of x? ii) System.out.println(x > y > z); iii) System.out.println(x > y);iv) System.out.println(x == y);	8 (2*4)
	c)	Complete the following java program to get the below mentioned output. <pre>import java.io.*; public class Employee{     public String name;     private double salary;     public Employee (String empName){         name = empName;}     public void setSalary(double empSal){         salary = empSal;}     public void printEmp(){         System.out.println("name : " + name );         System.out.println("salary :" + salary);     }     public static void main(String args[]){         //todo         //todo         //todo     } }</pre> OUTPUT:  name: hello  salary: 1000	6
3.	a)	Write a java program that assigns a grade based on the value of a test score : i) Testscore is a user input from the standard input device keyboard ii) assign an A for a score of 90% or above, a B for a score of 80% or above, a C for a score of 70% or above, D for a score of 60% or above.	8M
	b)	Write expressions for the following. i) $(-b + \sqrt{b^2 - 4ac}) / (2a)$ II) $4/3 \pi r^3$	4

P2/3

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		al.add(1,"Sachin"); System.out.println("element: "+al.get(2)); }	
b)	Write the output for the following code. public class ExcepTest{ public static void main(String args[]){ int a[] = new int[2]; try{ System.out.println("Access element three : " + a[3]); }catch(ArrayIndexOutOfBoundsException e){ System.out.println("Exception thrown : " + e); } finally{ a[0] = 6; System.out.println("First element value: " +a[0]); System.out.println("The finally statement is executed"); }}}	5	
c)	Write a line about the following a)explicit vs implicit typecasting in java b)multiple inheritance in java	8	
d)	"Strings are immutable in java".Justify with one example.	4	

P3/3