


Reg. No.:		22MCA-10071	
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Mid-Term Examinations – October 2022			
Programme	: MCA	Semester	: Fall 2022-23
Course	: Object Oriented Programming using JAVA	Code	: MCA1003
Faculty	: Dr. Kanchan Lata Kashyap	Slot/ Class No.	: A11+A12+A13/0790
Time	: 1 ½ hours	Max. Marks	: 50

Answer all the Questions

Q. No.	Sub. Sec.	Question Description	Marks
1		Why we use constructors in JAVA? What are different properties of constructors? Define different types of constructors with example.	10
2	(a)	Determine the output of following code: <pre>String s = "Jacobian"; System.out.println(s.indexOf('J')); System.out.println(s.indexOf('c')); System.out.println(s.indexOf('a')); System.out.println(s.indexOf('j')); System.out.println(s.indexOf('c'-1));</pre>	5
	(b)	Determine the output of following code: <pre>class temp { public static void main(String args[]) { int i=0,a=0,n=0; while((i=a+=2)<=100) { n++; } System.out.println(i+", "+a+", "+n); } }</pre>	5
3		Define a class TEST in JAVA with following description: Private Members <ul style="list-style-type: none"> TestCode of type integer Description of type string NoCandidate of type integer CenterReqd (number of centers required) of type integer A member function CALCNTR() to calculate and return the number of centers as: (NoCandidates/100+1) 	10

Public Members

- A function SCHEDULE() to allow user to enter values for TestCode, Description, NoCandidate & call function CALCNTR() to calculate the number of Centres
- A function DISPTST() to allow user to view the content of all the data members

4 Differentiate the method overloading and method overriding with suitable examples. 10

5 Write a Java program that calculates and shows the sum of all even integers from 0 to n, where n is specified by the user via keyboard. Assume that n is an integer greater than 0. 10

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