

Hall Ticket Number:

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Code No.: 16110 N(C)

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E. (CBCS) VI-Semester Main Examinations, May-2019

Introduction to Java Programming
 (Open Elective-VII)

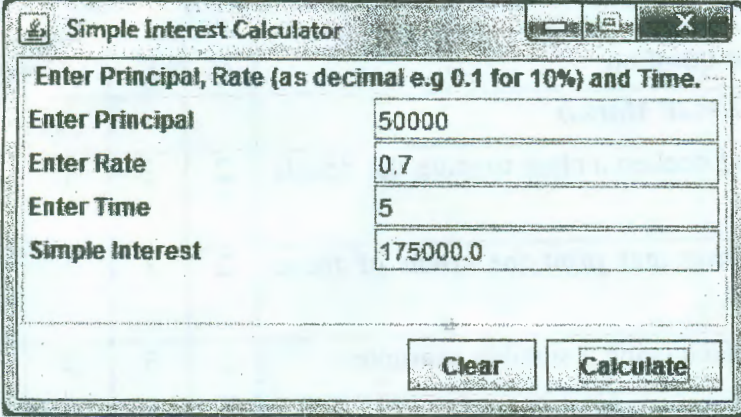
Time: 3 hours

Max. Marks: 70

Note: Answer ALL questions in Part-A and any FIVE from Part-B

Q.No.	Stem of the question	M	L	CO	PO
Part-A (10 × 2 = 20 Marks)					
1.	Give the syntax of a class in java and declare a class to store the details of the student.	2	3	1	1,2
2.	Write a program to initialize an array and print the count of those numbers which are greater than 100.	2	3	1	1,2
3.	Differentiate Abstract class and interface using a suitable example.	2	3	2	1,2
4.	Explain the Lifecycle of a Thread with a neat diagram.	2	2	2	1
5.	Develop a program to read the data from the keyboard and write it into a file.	2	3	3	1,2
6.	What is the main use of Timer class available in java.util package?	2	2	3	1,2
7.	Is it mandatory to use the Layout Managers to place the controls on the window? Justify your answer.	2	2	4	1
8.	List any 4 Event classes available in Java. In which package are those classes present?	2	1	4	1
9.	Differentiate between method overloading and overriding.	2	2	1	1
10.	Write a program to illustrate any 4 methods of Graphics class in java.	2	2	4	1,2
Part-B (5 × 10 = 50 Marks)					
11.a)	What is inheritance? Explain the different types of inheritance using appropriate examples.	5	2	1	1
b)	Write a program to create a class called Rectangle which includes methods for the initialization of the data members using method overloading, calculation of the area and display the data members and area.	5	3	1	1,2,3
12.a)	Explain the concept of Exception Handling in Java and illustrate the need for finally block.	5	2	2	1,2
b)	Write a program to accept two strings from the keyboard and perform any 2 operations on the string using the String methods.	5	3	2	1,2,3
13.a)	Differentiate between Byte streams and Character streams. Mention any two example classes available in java for each stream.	5	2	3	1,2
b)	Write a program to find the number of words in the given string using StringTokenizer class.	5	3	3	1,2,3

Contd... 2

14.a)	Explain the Lifecycle of an Applet with the help of an example.	2	2	4	1
b)	<p>Create an Applet, with the UI as shown below. Implement Event handling on each of these buttons, one to calculate the simple interest for the given values and the other to clear all the TextField contents. The Simple interest has to be displayed in the last TextField.</p> 	8	4	4	1,2,3
15.a)	Explain the concept of Dynamic method dispatch using an Example.	5	2	1	1
b)	Write a program to create two threads, one which calculates the factorial of the given no and the other thread to check whether the no is an even no with different priority.	5	3	2	1,2,3
16.a)	Compare Observer and Observable in java.	5	2	3	1
b)	Write a program to create a Frame and add MenuBar, MenuItem and Menu to it.	5	3	4	1,2,3
17.	Answer any <i>two</i> of the following:				
a)	What is a Constructor? Explain the concept of constructor overloading with the help of an example.	5	2	1	1
b)	Write a program to accept the current date and check whether the current year is a leap year or not.	5	3	3	1,2,3
c)	Explain the different Layout Managers available in java.	5	2	4	1

M: Marks; L: Bloom's Taxonomy Level; CO: Course Outcome; PO: Programme Outcome

S. No.	Criteria for questions	Percentage
1	Fundamental knowledge (Level-1 & 2)	60
2	Knowledge on application and analysis (Level-3 & 4)	40
3	*Critical thinking and ability to design (Level-5 & 6) (*wherever applicable)	-

