

Charotar University of Science and Technology
Devang Patel Institute of Advance Technology and Research
Department of Computer Engineering
Subject: CE251 - Java Programming
External Exam

Semester: 3rd (B. Tech.) Maximum Marks: 70 Date: 01/12/2021, Saturday Time: 10:00 am to 01:00 pm

Instructions:

- (i) Attempt *all* the questions.
- (ii) Figures to the right indicate *full* marks.
- (iii) Make suitable assumptions and draw neat figures wherever required.

Section : 1

Sr. No	Questions	Marks	CO	BL
1	Which provides a runtime environment for java byte code to be executed? a. JDK b. JVM c. JRE d. JAVAC	1	3	U
2	Which of the following are not Java keywords? a. double b. switch c. then d. instanceof	1	2	U
3	The default value of a static integer variable of a class in Java is, a. 0 b. 1 c. Garbage value d. Null	1	2	R
4	Multiple inheritance means, a. one class inheriting from more superclasses b. more classes inheriting from one superclass c. more classes inheriting from more super classes more classes inheriting from more superclasses d. None of the above	1	4	U

5	<p>Which statement is not true in the java language?</p> <p>a. A public member of a class can be accessed in all the packages.</p> <p>b. A private member of a class cannot be accessed by the methods of the same class.</p> <p>c. A private member of a class cannot be accessed from its derived class.</p> <p>d. A protected member of a class can be accessed from its derived class.</p>	1	2,3	R
6	<p>To prevent any method from overriding, we declare the method as,</p> <p>a. static</p> <p>b. const</p> <p>c. final</p> <p>d. abstract</p>	1	6	C
7.	<p>Which one of the following is not true?</p> <p>a. A class containing abstract methods is called an abstract class.</p> <p>b. Abstract methods should be implemented in the derived class.</p> <p>c. An abstract class cannot have non-abstract methods.</p> <p>d. A class must be qualified as an 'abstract' class if it contains one abstract method.</p>	1	1	N
8	<p>The fields in an interface are implicitly specified as,</p> <p>a. static only</p> <p>b. protected</p> <p>c. private</p> <p>d. both static and final</p>	1	1,4	A
9	<p>Which of the following is true?</p> <p>a. A finally block is executed before the catch block but after the try block.</p> <p>b. A finally block is executed, only after the catch block is executed.</p> <p>c. A finally block is executed whether an exception is thrown or not.</p> <p>d. A finally block is executed, only if an exception occurs.</p>	1	5	R
10	<p>What is garbage collection in the context of Java?</p> <p>a. The operating system periodically deletes all the java files available on the system.</p> <p>b. Any package imported in a program and not used is automatically deleted.</p> <p>c. When all references to an object are gone, the memory used by the object is automatically reclaimed.</p> <p>d. The JVM checks the output of any Java program and deletes anything that doesn't make sense</p>	1	3,4	C

11	<p>The java run time system automatically calls this method while garbage collection.</p> <p>a. finalizer() b. finalize() c. finally() d. finalized()</p>	1	4	N
12	<p>The correct order of the declarations in a Java program is,</p> <p>a. Package declaration, import statement, class declaration b. The import statement, package declaration, the class declaration c. Import statement, class declaration, package declaration d. Class declaration, import statement, package declaration</p>	1	2	A
13	<p>An overloaded method consists of,</p> <p>a. The same method name with different types of parameters b. The same method name with different number of parameters c. The same method name and same number and type of parameters with different return type d. Both (a) and (b) above</p>	1	5	R
14	<p>A protected member can be accessed in, Which is the false option?</p> <p>a. a subclass of the same package b. non-subclass of the same package c. a non-subclass of different package d. a subclass of different package</p>	1	6	C
15	<p>All exception types are subclasses of the built-in class</p> <p>a. Exception b. RuntimeException c. Error d. Throwable</p>	1	1	N
16	<p>When an overridden method is called from within a subclass, it will always refer to the version of that method defined by the</p> <p>a. Super class b. Subclass c. Compiler will choose randomly d. Interpreter will choose randomly</p>	1	1,3	A
17	<p>Java compiler javac translates Java source code into</p> <p>Category: Ce251 Java Programming, Sub Category: A- Ce251 Java Programming, Marks: 1, Type: Single Choice, Difficulty: Medium</p> <p>a. Assembler language</p>	1	2,4	C

	b. Byte code c. Bit code d. Machine code			
18	In Java, a character constant's value is its integer value in thecharacter set. a. EBCDIC b. Unicode c. ASCII d. Binary	1	3	R
19	In Java, a try block should immediately be followed by one or more blocks. a. Throw b. Run c. Exit d. Catch	1	1	A
20	An abstract data type typically comprises a and a set of respectively. a. Data representation, classes b. Database, operations c. Control structure, operations d. Data representation, operations.	1	6	A

Section : 2

Sr. No	Questions	Marks	CO	BL
1	What is the difference between Method overloading and Method overriding with suitable example.	7	1	R
2	Explain packages with example.	7	1,4	C
3	Explain Exception Handling with Exception Types.	7	3,5	N
4	Define a class Box as described below: Data members: length, width, height Method: calculateVolume(float, float, float) to calculate and display volume of a Box. Create class Box with suitable constructors and test it.	7	6	A
5	Write an interactive program that identifies duplicate elements in a one-dimensional array. The program asks for the size of the array, and the elements of the array. Duplicate, which are the elements having the same value as another element in the array, are removed. The remaining elements of the array are then display on the output screen.	7	2	C
6	Write a program for Matrix Multiplication using Thread.	7	3	N

7	What is Garbage Collection?	4	4	A
8	Explain the life cycle of the thread.	4	5	C

Note:

CO – Course Outcomes

BL – Bloom's Taxonomy Level

Best of Luck