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| **ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27** |
| **B.Sc –III SEMESTER** |
| **SEMESTER EXAMINATION: OCTOBER 2022****(Examination conducted in December 2022)** |
| **CS322- Object Oriented Programming Concepts with Java** |
|  |  |  |  |  |  |
| **Time- 2 1/2 hrs** |  |  **Max Marks-60** |
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| **This paper contains three printed pages and three parts****PART A****Answer All the Questions. 10 \* 1=10**1. Which of these literals can be contained in float data type variable?a) -1.7e+308b) -3.4e+038c) +1.7e+308d) -3.4e+050
2. Which of these is an incorrect Statement?a) It is necessary to use new operator to initialize an arrayb) Array can be initialized using comma separated expressions surrounded by curly bracesc) Array can be initialized when they are declaredd) None of the mentioned
3. Which of these are selection statements in Java?a) if()b) for()c) continued) break
4. When Overloading does not occur?a) More than one method with same name but different method signature and different number or type of parametersb) More than one method with same name, same signature but different number of signaturec) More than one method with same name, same signature, same number of parameters but different typed) More than one method with same name, same number of parameters and type but different signature
5. Which of the following is a valid declaration of an object of class Box?a) Box obj = new Box();b) Box obj = new Box;c) obj = new Box();d) new Box obj;
6. What is true about constructor?a) It can contain return typeb) It can take any number of parametersc) It can have any non access modifiersd) Constructor cannot throw an exception
7. Which of the following statements are incorrect?a) String is a classb) Strings in java are mutablec) Every string is an object of class Stringd) Java defines a peer class of String, called StringBuffer, which allows string to be altered
8. Which of these is correct way of inheriting class A by class B?a) class B + class A {}b) class B inherits class A {}c) class B extends A {}d) class B extends class A {}
9. If a class inheriting an abstract class does not define all of its function then it will be known as?a) Abstractb) A simple classc) Static classd) None of the mentioned
10. Which of these class can generate an array which can increase and decrease in size automatically?a) ArrayList()b) DynamicList()c) LinkedList()d) MallocList()

**PART B****Answer any FIVE. 5\*6=30**1. Write programs to demonstrate the difference between method overloading and method overriding in Java. (3 +3 marks)
2. Explain different string handling functions and their syntax in java language.
3. Write a program in java to do the following: a) To swap the two numbers without using the third variable b) Factorial of a number. (3 +3 marks)
4. Explain about interfaces. How they are different from the abstract classes?

 (3 +3 marks)1. Develop a GUI application which displays a welcome message when the button named ok is clicked.
2. Write a short note on : a) Finalize b) Multiple catch with single try statement.

 (3 +3 marks)1. Explain I/O Streams with suitable examples.

**PART C****Answer any TWO. 2\*10=20**1. a) What is class? How to create object for the class? (4 marks)

 b) Define super. Explain the use of super with suitable example. (6 marks) 19.a) How to create and import package in Java? Explain with an example. (6 marks) b) List out the four main differences between Procedure Oriented and Object  Oriented Programming. (4 marks) 20.a) Explain the following jump statements with suitable example  (i)continue (ii)break (5 marks) b) Create a class called Vehicle and a class called Car which extends Vehicle. Illustrate overloading and overriding using the relationship between the classes. (5 marks)   |