**ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE-27**
**M.Sc COMPUTER SCIENCE -I SEMESTER**
**SEMESTER EXAMINATION: OCTOBER 2018**
**CS7118 - Object Oriented Programming using Java**

**Time- 2 1/2 hrs**             **Max Marks-70**

### This paper contains 2 printed pages and three parts

**Answer any 7 questions**             **(10x7=70)**

1. a) Explain abstract class with suitable example. Give differences between abstract class and interface.      (7 marks)
   b) What are the different types of type casting in java with example?      (3 marks)

2. a) Write the effects of access specifiers in package.      (3marks)
   b) Explain how java is architecture neutral.      (2 marks)
   c) Discuss three Object Oriented Programming principles.      (4 marks)

3. a) What is constructor overloading?      (3 marks)
   b) Explain multilevel inheritance with a program example.      (7 marks)

4. a) What is an exception ? Give example for the following terms
   i) throws     ii)try and catch.      (4 marks)
   b) Describe the following methods related to String class
   i) replace()   ii) compareTo()  iii) charAt()      (6 marks)

5. a) Explain the differences between static and dynamic binding.      (5 marks)
   b) Explain the use of BufferedReader object to read characters from the console using a program.      (5 marks)

6. a) What do you mean by thread? Mention the two ways of creating threads in java.      (5marks)
   b) Write a java program to create two threads ,one displays "Msc" and another one displays "Computer Science" five times.      (5 marks)

7. Explain JDBC architecture in detail.

8. a) Write a jdbc program that accepts a subject name as command line argument and displays the student name and marks scored in that subject(Make suitable assumptions for table details).      (5marks)
   b) Write short notes on i) Socket Programming ii) Remote Method Invocation. (5marks)

9. a) How do we design create and access a package in java? Discuss with a suitable example.      (7 marks)

   b) Write the various uses of static keyword.      (3 marks)

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