PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
MCA, Winter 2017 – 18 Examination

Semester: 3	**Date: 22-12-2017**
Subject Code: 05201201	**Time: 10:30AM to 01:00PM**
Subject Name: Java Programming	**Total Marks: 60**

Instructions:
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 **Answer the followings.**

   A. **Write short notes.** (05)
     1. Define Polymorphism.
     2. What is garbage collection?
     3. What is the use of Super keyword?
     4. Why Java is important to Internet?
     5. Explain File class.

   B. **Multiple choice type questions/ Give the sentence true or false. (Each of 01 marks)** (10)
     1. The Class is not user defined data type. (**True or False)**

     2. Exception generated in try block is caught in .... block.
       a) catch   b) throw   c) throws   d) finally
     3. Which exception is thrown when divide by zero statement executes?
       a)   Numberformat Exception   c) Arithmetic Exception
       b)   Nullpointer Exception   d) None of these
     4. Java is a_____language.
       a) weakly typed   b) strongly typed
       c) moderate typed   d) none of these
     5. How many primitive data types are there in java?
       a) 6   b) 7   c) 8   d) 9
     6. In java a thread can be created by –
       a)   Extending the thread class.   c) Implementing runnable interface
       b)   Both of above   d) None of these
     7. Which is a valid keyword in java?
       a)   Interface   b) string   c) float   d) unsigned
     8. What is the name of the method used to start a thread execution?
       a) init();   b) start();   c) run();   d) resume();
     9. which of the following will directly stop the execution of a thread?
       a) wait()   b) notify()   c) notifyall()   d) exits synchronized code
     10. System class is defined in _____.
       a) java.util package   c) java.io package
       b) java.lang package   d) java.awt package

Q.2 **Answer the followings.** (15)
    1. What are checked exceptions? (02)
    2. What are the type of inheritance? (02)
    3. Explain Flow Layout and GridLayout. (02)
    4. Compare "interface" and "abstract class". (03)
    5. What is Daemon thread? Which method is used to create the daemon thread? (03)
    6. Differentiate overloading and overriding. (03)

Q.3 **Answer the following. (Any three)** (15)
    1. Explain Variable shadowing with example.
    2. List Features of java.
    3. Explain Concept of Multithreading.
    4. Write a program for creating an ArrayList, add the elements in array list and then obtain an array
    from ArrayList and display the contents

Q.4 **Answer the following.**
   A. Differentiate AWT and Swing. (05)
   B. Explain try-catch-finally blocks. (10)
<div align="center">**OR**</div>
   B. Explain applet life cycle. (10)