

**PARUL UNIVERSITY**  
**FACULTY OF IT & COMPUTER SCIENCE**  
**MCA, Winter 2019 – 20 Examination**

**Semester: 3**  
**Subject Code: 05201201**  
**Subject Name: Java Programming**

**Date: 26/11/2019**  
**Time: 10:30am to 1:00pm**  
**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 following:****A. Write short answers.**

1. What is the difference between class and interface?
2. Why Java is known as “platform independent” language?
3. What is the use of “this” keyword?
4. How we can create object in java?
5. Write use of “abstract” keyword in Java.

**[05]****B. Answer the following: (Each of 01 marks)**

1. Java supports multiple inheritance. True or False?
2. Java uses “super” keyword to access child class constructor. True or False?
3. Garbage collection is manual process. True or False?
4. Constructor overloading is possible in Java. True or False?
5. Java programming is statically-typed. True or False?
6. Which of these can not be used for a variable name in Java?  
a) identifier   b) keyword   c) identifier & keyword   d) None of the mentioned
7. Which of these is used to access member of class before object of that class is created?  
a) public   b) private   c) static   d) protected
8. Which of these class is related to all the exceptions that are explicitly thrown?  
a) Error   b) Exception   c) Throwable   d) Throw
9. Which of these keywords is used to define packages in Java?  
a) pkg   b) Pkg   c) package   d) create package
10. Which of these keywords is used to refer to member of base class from a sub class?  
a) upper   b) super   c) this   d) None of the mentioned

**[10]****Q.2 Answer the followings**

1. Explain any 3 features of Java. (03)
2. What is exception? Explain finally block. (03)
3. How multi-threading is important? Briefly explain. (03)
4. Write about structure of Java Program. (02)
5. What is AWT? List out AWT controls. (02)
6. Write about any 2 control statements in Java. (02)

**[15]****Q.3 Answer the following. (Any three) (Each of 05 marks)**

1. Explain life cycle of Applet with example.
2. How we can perform exception handling in java? Explain with example.
3. What is garbage collection? How java performs garbage collection?
4. Write about collections in java. Give examples.

**[15]****Q.4 Answer the following.**

- A. Write a java code to generate user defined exception if user enters negative value. (05)
- B. Explain method overriding and variable shadowing with example. (10)

**OR**

- B. Write a java code to create applet to display “MCA” in different color. (10)