

Course Code: CS405PC

**II B. Tech II Semester Regular (2019-20)**  
**JAVA PROGRAMMING**  
**Common for all departments**

Time: 3 hours

Max. Marks: 75

Answer **ALL** the question in **Part-A** and **Part-B**  
**Part A**

**(25 Marks)**

1. a) Java is platform-independent and portable. - Justify (2)
- b) Differences between print() and println() in java. (2)
- c) How can you use ternary operator? Given an example. (2)
- d) List the primitive and non-primitive data types used in Java. (2)
- e) Define constructor. How do we invoke constructor in java? Give an example. (3)
- f) Define Inheritance. How it is implemented in java? (3)
- g) What is abstract class? Give an example. (3)
- h) Explain for-each statement with an example (3)
- i) What are the conditions for using super() method? (2)
- j) Explain about JVM (Java Virtual Machine)? (3)

**Part B**

**(50 Marks)**

2. a) What are the features of object-oriented programming language? (5)
- b) What is meant by byte code? Briefly explain how java is platform independent? (5)
  
3. a) Explain the significance of public, private, and protected access specifiers in inheritance. (5)
  
- b) Explain different parts of a java program with an appropriate example. (5)
  
4. What is polymorphism and how java implements it? Explain in detail. (10)
  
5. Explain different forms of inheritance. Illustrate with an example each type with an example. (10)
  
6. a) What is an array? How do you declare an array in java? Give examples. (5)
- b) Write a recursive program for finding the GCD between two numbers. (5)