

B.Sc. - III (CBCS Pattern) Semester-VI  
**USCST11.1 - Elective-I : Computer Science-I : Core Java**

P. Pages : 2

Time : Three Hours



**GUG/S/25/13345**

Max. Marks : 50

- 
- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram wherever necessary.
  3. Avoid vague answer and write specific answers related to questions.

**Either:**

1. a) Write a note on: 5
- i) JRE
- ii) JVM
- b) Write a detailed note on for loop in java with example. 5

**OR**

- c) Write a java program to calculate Factorial of a given number. 5
- d) Explain primitive data types in Java. 5

**Either:**

2. a) What is data hiding? Explain in detail. 5
- b) Write a note on: 5
- i) Static data
- ii) Static method

**OR**

- c) What is abstract class? Explain it. 5
- d) Write a program in java to demonstrate constructor. 5

**Either:**

3. a) Write a java program to illustrate throws keywords. 5
- b) Discuss in detail about thread synchronization. 5

**OR**

- c) Explain the different types of errors. 5
- d) Differentiate between Multiprocessing and Multithreading. 5

**Either:**

4. a) Write a note on: 5
- i) Container
  - ii) Listeners
- b) Explain in detail event delegation model. 5

**OR**

- c) Write a java program to create frame that has three buttons red, blue, green that response by changing background color of an applet to that color. 5
- d) Explain following: 5
- i) Flow layout
  - ii) Grid layout
5. All are compulsory.
- a) Explain Garbage collection. 2½
  - b) Write a note on “pass by value”. 2½
  - c) Write a note on catch block. 2½
  - d) Explain ‘Graphics’ class of AWT. 2½

\*\*\*\*\*