

**B.C.A. (Part—III) Semester—V Examination**

**5ST1 : CORE JAVA**

Time : Three Hours]

[Maximum Marks : 60

- Note :—** (1) All questions are compulsory.  
(2) All questions carry equal marks.  
(3) Assume suitable data wherever necessary.

1. (a) What are the primitive data types of Java ? Explain with example. 6
- (b) Write a program to count vowels in string. 6

**OR**

2. (a) Explain :
  - (i) Types casting
  - (ii) Java literals. 6
- (b) Explain types of operators with example. 6
3. (a) How constructor calling is done in an Inheritance ? Explain. 6
- (b) Explain the difference between simple class and abstract class. 6

**OR**

4. (a) Explain the concept of constructor overloading with suitable example. 6
- (b) Explain :
  - (i) Sub class
  - (ii) Super class. 6
5. (a) Write procedure to create user defined package. 6
- (b) Explain variable declaration in interfaces with example. 6

**OR**

6. (a) State and explain the difference between a class and interface. 6
- (b) Explain any six Java packages. 6
7. (a) Explain try and catch blocks to handle an exception. 6
- (b) What is Multithreading ? Write its advantages and disadvantages. 6

**OR**

8. (a) State and explain the life cycle of thread. 6
- (b) Explain :
  - (i) Nested Try Statement
  - (ii) Multiple Catch Blocks. 6
9. (a) What is Layout Manager ? Explain any three Layout Managers. 6
- (b) Explain Mouse Listener Interface and Mouse Motion Listener Interface. 6

**OR**

10. (a) Explain how GUI objects are placed in Applet with suitable example. 6
- (b) Explain Event class with example. 6