**BCA (Sem.–5)**
# PROGRAMMING IN JAVA
**Subject Code : UGCA-1932**
**M.Code : 90315**
**Date of Examintion : 21-12-2022**

Time : 3 Hrs.                                            Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.**

## SECTION-A

1. **Write briefly :**

   (a) Distinguish between binary and text files.

   (b) What are the implications of public, protected and private visibility modes?

   (c) What is Java virtual machine?

   (d) Why Java is a compiled and interpreted language?

   (e) What are the advantages of inheritance?

   (f) Why is object-oriented paradigm so called?

   (g) What is data hiding and how is it related to data abstraction?

   (h) How do we pass parameters to an applet? Give one example.

   (i) Explain an abstract class.

   (j) What do you understand by inheritance in Java?

## SECTION-B

2. Differentiate between the following with example Java code segments:

(a) Abstract and Concrete Class

(b) Method overloading and Method overriding

(c) Final and Finally keywords

(d) Class and Object

3. (a) What is the typical structure of a Java Program? Explain with example.

(b) Explain the different visibility controls and also compare with each of them.

4. Explain the implementation of multiple inheritance through interfaces, in detail.

5. What are Java packages? How are they defined and imported?

6. (a) What is Encapsulation? Explain how encapsulation provides modularity and information.

(b) Differentiate among Try and Catch, Throw and Finally methods.

7. (a) Explain the purpose of InputStream, Reader, OutputStream and Writer classes.

(b) What are the different states of a Thread?

**NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student**.