PG – 669

I Semester M.C.A. (Two Years Course) Examination, May/June 2026
(CBCS Scheme) (2020 – 2021 and Onwards)
COMPUTER SCIENCE
1MCA5 : Object Oriented Programming

Time : 3 Hours Max. Marks : 70

Instructions : *1) Answer **any five** questions from Section – **A**.*
*2) Answer **any four** questions from Section – **B**.*

SECTION – A

Answer **any five** of the following. **Each** question carries **six** marks. **(5×6=30)**

1. Explain the structure of Java program.
2. What are constructors ? Explain with a suitable example.
3. Explain different looping structures in Java.
4. Write a Java program to demonstrate dynamic method dispatch.
5. What is the use of super keyword in java ? Explain with an example.
6. What is an interface ? Explain with an example how multiple inheritance is implemented in Java.
7. Explain the difference between string class and StringBuffer classes with example.
8. Explain the different stages in the life cycle of a thread with a neat diagram.

SECTION – B

Answer **any four** of the following. **Each** question carries **ten** marks. **(4×10=40)**

9. Explain principles of OOP in detail. **10**
10. Write a short note on :
    A) Method overloading and method overriding.
    B) Arrays and types of arrays. **(5+5)**

P.T.O.

11. A) What are the different methods to create thread ? And give examples.

    B) Write a Java program to demonstrate static member data and static member methods. **(5+5)**

12. Define inheritance. Explain different types of inheritance with suitable example. **10**

13. A) Explain the exception handling mechanism in Java.

    B) Explain final variable, final method and final class with an example. **(5+5)**

14. A) Write a note on applet life cycle with methods.

    B) Explain character stream and byte stream classes. **(5+5)**