Roll No……..….. **Total No. of Printed Pages: 1**
Total No. of Questions: [11]

MCA (Semester – 2nd)
PROGRAMMING IN JAVA
Subject Code: MCAPD1221
Paper ID: [20270112]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It carries 16 marks. It consists of 4 questions of 4 marks each.
2. Section B consist of 4 questions of 8 marks each. The student has to attempt any 3 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(4 marks each)**

Q1. State four features of java.

Q2. How to create a package? Explain with example

Q3. Write an applet for each of following graphics method drawoval()

Q4. What is a thread? Describe the complete life cycle of thread

Section – B **(8 marks each)**

Q5. Write down the features of OOPs. Explain each using a suitable example in brief.

Q6. Write a program to implement the Fibonacci series using for loop control structure

Q7. Write a short note on

a) Wrapper Class b) Garbage Collection

Q8. Explain the following terms with respect to exception handling.

i) try ii) catch iii) throw iv) finally

Section – C **(10 marks each)**

Q9. How do applets differ from application programs explain with example?

Q10. Write a program to define class Employee with members as id and salary. Accept data for five employees and display details of employees getting highest salary.

Q11. What is the main purpose of Java Servlets. Explain the life cycle of Java Servlets in details.