

K-9/2110

MS-212
Java Programming
SEM-III

7439/N

Time Allowed: 3 Hours

Maximum Marks: 70

Note: The Candidates are required to attempt two questions each from Sections A and B carrying 10.5 each and the entire Section C consisting of 7 short answer type questions carrying 4 marks each.

SECTION-A

1. What is object oriented programming approach? Why java is called pure object oriented language.
2. What is the role of constructor in a class? Explain different types of constructors in detail.
3. What is the concept of nested classes in java? Can outer class access inner class members?
4. What are the different types of inheritance in Java? Which type of inheritance is not supported by Java? Discuss in detail.

SECTION-B

5. What is an interface? Discuss java code for define and implement interface.
6. What is exceptional handling? Explain built in exception handling objects with example.
7. What is the life cycle of Thread? Discuss steps to create a Thread by implementing a runnable interface and by extending a thread class.
8. What is AWT? Discuss in detail how AWT can be used to create GUI application in java.

SECTION-C

9. Write short note on the following
 - i. Discuss why java is a Portable language.
 - ii. Explain the meaning and importance of each and every word of the following statement

```
public static void main(String args[])
```
 - iii. Discuss difference among local variables, instance variables and class variables.
 - iv. How garbage collection is implemented in java?
 - v. What is a race condition?
 - vi. Compare throw and throws with reference to exceptional handling in java.
 - vii. What is an applet in java? How it can be used for web programming.