

**COMPUTER SCIENCE**

## Paper 2: Java and Data Structures

Time: 3 hours

Max. Marks: 80

## SECTION-A

Answer ALL questions.

4x15 = 60

1. a) What are the basic concepts of Object Oriented Programming?

Or

b) Explain the various types of Operators.

2. a) What is inheritance? Explain various types of inheritance.

Or

b) What is an interface? What is the difference between interface and class.

3. a) What is package? How to create a package in Java?

Or

b) Explain the life cycle of Thread with neat diagram.

4. a) Write a Program to implement the Stack operations?

Or

b) Write a Procedure for Binary Tree Traversing Techniques.

## SECTION - B

Answer any FOUR questions

4 x 5 =20

5. What are benefits of Object Oriented Programming?

6. Explain JVM?

7. Write program for Method Overriding?

8. What is Wrapper Class? Explain the different wrapper classes.

9. What is an exception? How to handle the exception in Java?

10. What is an Applet? What are the various steps required to run an Applet.

11. Write a program for Binary Search.

12. What is Graph? Explain the different types of graphs.