| **RR** |

OBJECT ORIENTED PROGRAMMING THROUGH JAVA
(Common to Computer Science & Engineering, Information Technology and Computer Science & Systems Engineering)

Time: 3 hours   Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks
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1. Describe Java as an Object Oriented Programming language. [16]

2. (a) What is a constructor? Contrast: default constructor Vs. parameterized constructor.
   (b) What are the restrictions on static methods?
   (c) What are the two uses of final that apply to final to inheritance? [6+5+5]

3. (a) Which of these are necessary for runtime polymorphism? Justify.
      i. method overriding
      ii. method overriding
      iii. inheritance
      iv. method signature match in the base and derived classes for the polymorphic methods.
      v. late binding
   (b) What is abstract super class? What is abstract method? What is interface inheritance? What for, implements and extends keywords are used?
   (c) Distinguish between interface inheritance and class inheritance in Java. [10+3+3]

4. Explain the concepts of applets in Java language. [16]

5. (a) Write a java program that demostrates the order of exception handler is important.
   (b) If we try to catch a super class exception type before a sub class type, compiler generates exception errors. Explain why this error occurs with an example?

   [8+8]

6. (a) How can characters be read in java?
   (b) What is the strategy to read sentences in java? [8+8]

7. Describe the various methods in HTTP Servlet request interface and HTTP Servlet response interface. [16]

8. Explain connection less client-server interaction with data gram in detail.

   [16]

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