

Roll No. \_\_\_\_\_

**PGIIS - N 1554 B - 14**  
**M.Sc. IIIrd Semester Degree Examination**  
**Computer Science**  
**(Programming in JAVA)**  
**Paper : HCT - 3.1**  
*(New Syllabus Under CBCS w.e.f. 2012 - 2013)*

Time : 3 Hours

Maximum Marks : 80

**Instructions to Candidates:**

- 1) Question 1 in Section - A is **compulsory**
- 2) Answer any **Five** questions from Section - B

**Section - A**

1. a) List any **Five** features of Java (2×10=20)  
b) What is Java Virtual machine? How it is considered in context with Java's platform independent feature?  
c) What is Polymorphism? List its advantages  
d) How does arrays defined and used in Java?  
e) What is an applet? Give example  
f) Differentiate between overloading and overriding  
g) Describe the life cycle of a thread  
h) Explain how CGI is different from Servlet?  
i) Does the applets communicate with each other?  
j) List the steps involved in JDBC connection

**Section - B**

2. a) Describe the different data types available in Java with examples. (6)  
b) What do you mean by exception handling in Java? Explain the general structure of an exception handling blocks (6)
3. a) What is an Applet? Discuss the different stages of the life cycle of an Applet (6)  
b) Define a thread. Develop a program to create Multi threaded with different priority (6)
4. a) Write a Java program to demonstrate the Mouse Event handler (6)  
b) With an example describe swing buttons (6)

5. a) List the advantages of using Java servelets (6)  
b) State any four similarities between Interfaces and classes (6)
  6. a) Explain the syntax of exception handling code with example (6)  
b) Why swing components are called light weight component? Explain in detail. (6)
  7. a) Does the Java directly supports the multiple inheritance? Illustrate your answer with an example (6)  
b) List and discuss the role of various butter classes used in Java programming. (6)
  8. Write short note on any **two** of the following : (6+6)
    - 1) Wrapper classes
    - 2) Java security
    - 3) AWT programming
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