B. Tech Degree Examination, December 2013
Sixth Semester
Branch: Computer Science and Engineering
CS010 602: Internet Computing
(Regular -2010 Admissions)

Time: Three Hours   Maximum: 100 Marks

Answer **all** *questions*
Part A
Each question carries 3 marks

1. What do you meant by JVM? What are its main roles?

2. What are the different types of access modifiers?

3. What is the difference between Swing and AWT components?

4. What do you meant by Datagram?

5. What is JSF (or Java Server Faces)? What are the advantages of JSF?

(5 x 3 = 15 marks)

Part B
Each question carries 5 marks

6. Explain the reason for each keyword of public static void main (String args[ ])?

7. Explain the meaning of the following terms.
(a) Method overloading
(b) Method overriding
(c) Abstract Class

8. What do you meant by event handling? List the different event listeners in java.

9. Differentiate between Socket class and ServerSocket class in java?

10. Explain Image Filter class with examples.

(5 x 5 = 25 marks)

Part C
Answer any **one** *full question from each module.*
Each full question carries 12 marks

11. a) Explain in detail object-oriented programming features supported in Java.

Turn over

b) Write a Java application that determines and prints the number of odd, even and zero digits from the array of 20 integers.

OR

12. Write a program that will read the value of x and evaluate the following function

y = { 1 for x > 0
    { 0 for x = 0
    { -1 for x < 0   Using
    (a) nested if statements
    (b) else if statements, and
    (c) Conditional operator.

13. How are multithreads created in Java? How is inter-threading communication and thread synchronization possible?

OR

14. a) Give the Class hierarchy in Java related to exception handling. Briefly explain each class.
    (b) What is the necessity of exception handling? Explain exception handling taking "divide-by-zero" as an example.

15. How will you pass parameters to an applet? Create an applet that lets the user adjust its background color. Provide 3 scrollbars in the applet one for each of the three base colors red, green, blue.

OR

16. Give the advantages of swings? Write short notes on swing components. Explain swing package.

17. Explain the structure and working of RMI program.

OR

18. Briefly explain the classes in java.net package.

19. Explain the java servlet life cycle and the model view controller design pattern with neat diagrams.

OR

20. Briefly explain the different drivers in JDBC. Explain the steps for database connectivity using JDBC with an example.

(5 x 12 = 60 marks)