

**B.TECH. DEGREE EXAMINATION, MAY 2015****Sixth Semester**

Branch : Computer Science and Engineering

CS 010 602—INTERNET COMPUTING

(New Scheme—2010 Admission onwards)

[Regular/Improvement/Supplementary]

Time : Three Hours

Maximum : 100 Marks

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

1. What is the difference between Boolean & operator and the && operator
2. State whether each of the following is true or false.
  - (a) IP addresses from 224.0.0.0 to 239.255.255.255 are reserved for multicast.
  - (b) For security reasons , many web browsers allow java applets to do file processing only on machine on which they execute.
  - (c) Datagram packet transmission over a network is reliable-packets are guaranteed to arrive in sequence.
3. Which is the default layout manager for an applet ? List the different layout managers.
4. How this( ) and super ( ) clauses differ ?
5. What is JDBC-ODBC bridge driven.

(5 × 3 = 15 marks)

**Part B***Answer all questions.**Each question carries 5 marks*

6. Define encapsulation and Information hiding in OOP.
7. How overloading is different from overriding. Illustrate with examples.
8. How Swing components are different from AWT components. Write advantages of Swing components.
9. Write uses of wait( ), notify( ), and notify All( ) methods.
10. Write a java program to read the contents of text file and display it on the screen.

(5 × 5 = 25 marks)

**Turn over**

## Part C

Answer all questions.

Each question carries 12 marks.

11. (a) How unsigned right shift (>>>) is different from right shift (>>) operator (4 marks)  
(b) What is a constructor ? What do you meant by overloading a constructor ? Explain with suitable example

(8 marks)

Or

12. Write a Java program to find biggest element among the set of elements stored in a two dimensional array.  
13. What is a thread ? Explain with an example how to define, instantiate, and run multiple threads.

Or

14. Create a class called *Complex* for performing arithmetic on complex numbers. Complex numbers have the form

$a + bi$  where  $a$  is real part and  $b$  is imaginary part and  $i = \sqrt{-1}$ .

Write a program to test your class. Use floating point variables to represent the private data of the class. Provide constructor that enable an object to be initialized when it is declared. Provide no argument constructor with default values in case no initializers are provided. Provide public methods for addition, subtraction, multiplication of complex numbers. Pass objects of *Complex* as parameters of the method.

15. Write an applet so that wherever you click in the applet, display 'Hello' message there.

Or

16. Write a program to reads in text file and print the entire content in capital letters.  
17. Write a program to establish socket connection between a client and server. Let the client sends two numbers to the server. The server adds the numbers and send back the sum to the client.

Or

18. Define RMI. Explain stub-skeleton model for RMI in Java  
19. Write a program read in name, roll number and GPA of N students in a class. Extend the program so that the read data is stored in a database table.

Or

20. Define a Servlet. Explain Servlet life cycle.

(5 × 12 = 60 marks)