Model Paper – 2
Hi-Tech Institute of Engineering & Technology
B.C.A. Examination
(Semester- 5th) Odd Semester
Java Programming and Dynamic Webpage Design
(BCA-502)

Time: 3 Hours   **Maximum Marks: 75**
Faculty Name: Mr. Pawan Kumar
Note: Attempt questions from all sections as per instructions.

Section – A

Note: Attempt any five questions.   **[3x5=15]**

1. What are interfaces? How are they useful?
2. What is difference between process and thread?
3. Write a short note on Layout Manager?
4. What is servlet? What are the advantages of using servlet?
5. What is the difference between JSP and servlets.

Section-B
Note: Attempt two out of three questions.   [7.5x2=15]

6. Write a program to count the number of objects created in a program
7. What are the advantages of exception handling in java? Write a program in java to handle arithmetic error 'Divide by Zero' using exception handling.
8. Explain all the types of JDBC driver in java.

Section-C

Note: Attempt three out of five questions.   [15x3=45]

9. (a) What do you mean by constructor? Differentiate between default and parameterized constructors with example.
   (b) What do you mean by a thread and multithreading? Explain various methods to create thread in java?

10. (a) Describe the life-cycle methods of servlet. What is the difference in request handling in generic and HTTP servlet.
    (b) What do you mean by datagram socket in java? How to create a TCP and UDP connections using socket programming in JAVA? Explain.

11. (a) How many types of forms available in html? Design an order-entry form that contains all the form controls and elements.
    (b) Write a HTML page for user registration, user should fill his name, date if birth, e-mail ID, a login and password to get registered.

12. Define the following:
    (a) Packages in java.
    (b) Throw and throws in java.
    (c) Inheritance in java.

13. (a) How can you establish JDBC connection with database?
    (b) Explain the life-cycle of JSP and briefly explain JSTL.