Winter Vacation Assignment for BCA III (2022-25) Semester

BCA-301   **Subject: Object Oriented Programming using C++**

1. What is the difference between seekg and tellg functions ?
2. What is the difference between setw() and setfill().
3. What is the difference between ios:: ate and ios::out?
4. Discuss virtual functions and dynamic binding with examples.
5. Discuss the method overloading with a proper example.

BCA- 302   **Subject : Internet & Web Designing**

1. Explain the linked window. Design an attractive form in HTML.
2. What is meant by look back address?
3. Describe various kinds of list used in HTML.
4. Write a Java script program to find the factorial of given number.

BCA-303   **Subject: Java Programming**

1. What is Java and why is it considered a platform-independent programming language?

2. Explain the difference between JDK, JRE, and JVM in the context of Java.

3. How does Java support multi-threading, and why is it important in programming?

4. What is the significance of the "public static void main(String[] args)" method in Java?

5. Differentiate between primitive data types and objects in Java. Provide examples.

6. Explain the concept of inheritance in Java with an example.

7. What is the purpose of the "super" keyword in Java and how is it used?

8. What is the difference between the "equals" and "==" operators in Java?

9. Describe the purpose and use of the "this" keyword in Java.

10. How is polymorphism achieved in Java, and provide an example of method overloading.

12. Explain the role of the "final" keyword in Java, and how it can be applied to variables,

methods, and classes.

13. Explain the concept of object-oriented programming in Java.

14. What is the role of the main method in Java?

15. How is Java platform-independent?

16.How Java differ from c and c++

17. What are Memory storages available with JVM?

18. What are Packages in Java?

19. Explain different data types in Java.

20. What is a Class Variable?

21. Explain the difference between instance variable and a class variable.

22. Explain public static void main(String args[]) in Java.

23. List the features of Java Programming language.

24. What is classloader?

25. What is the purpose of static methods and variables?

BCA-304   **Subject: Software Engineering**

Q1. Using the Internet, prepare the chart of different programming language on the basis of LOC/FP (Function Point) metrics.

Q2. Prepare the list of top 25 software developers world wide with application field, establishment year and CEO of the company.