Seat No.

Total No. of Pages : 2

MAR_APR 2026 SUMMER EXAMINATION

11731 Bachelor of Technology (NEP-2.0)

Sub. Name: Object Oriented Programming using Java

Sub. Code: 119720/116047

Day and Date: Saturday ,23-05-2026 **Total Marks: 60**

Time: 10:30 AM To 01:00 PM

Instructions:

Special Inst.:
1. **Question No. 1 and Question No. 5 are compulsory.**
2. **Solve any two questions from Question No. 2 to Question No. 4.**
3. **Assume suitable data wherever necessary**
4. **Figures to the right indicate full mark**

Q1) Solve any three questions from following. **[15]**

a. List and Explain Java Buzzwords in detail. **[5]**

b. Explain Inheritance in Java. Describe superclass, subclass, and inheritance hierarchy with example. **[5]**

c. What is a Package in Java? Explain creating a package, naming a package, and importing a package with examples. **[5]**

d. Explain inner classes. Describe different types of inner classes with examples. **[5]**

Q2) Solve the following questions. **[15]**

a. Explain exception handling in Java, and also explain try, catch, throw, throws, and finally with suitable examples. **[8]**

b. Discuss the classification of exceptions in Java. Explain checked exceptions, unchecked exceptions with examples. **[7]**

Q3) Solve the following questions. **[15]**

a. Explain how to write and read character data into a file using streams classes. Write a program for the same using FileWriter and FileReader classes. **[8]**

b. Draw hierarchy of output stream classes. Explain file output stream and data output stream classes in detail. **[7]**

Q4) Solve the following questions. **[15]**

a. Explain the Java Collections Framework in detail. Discuss Collection interfaces and concrete collection classes such as List, Queue with suitable examples. **[8]**

21587

b. Explain multithreading in Java. Draw and explain the lifecycle (states) of a thread. **[7]**

Q5) Solve the following questions **[15]**

a. Differentiate between Errors and Exceptions. **[5]**

b. Explain Character Streams in Java with examples. **[5]**

c. Differentiate between processes and threads. **[5]**

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -
This Question Paper may be distributed for following Subjects as common code.
सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

1] (1154) B.Tech. CBCS (119720) Object Oriented Programming using Java Part 2 SEM 4

2] (11731) Bachelor of Technology (NEP-2.0) (116047) Object Oriented Programming using Java Part 2 SEM 4

317587