END TERM EXAMINATION

FOURTH SEMESTER [BCA] MAY-JUNE, 2025

Paper Code: BCA-202

Time: 3 Hours

(2021 Onwards)

Subject: Java Programming

Maximum Marks: 60

Note: Attempt five questions in all including Q.No1 which is compulsory.
Select one question from each unit.

Q1 Answer the following: (2x10=20)
   (a) What are the key differences between Java and C++?
   (b) Explain different types of access specifiers available in Java?
   (c) Explain the features of Java.
   (d) How Garbage Collection is achieved in Java?
   (e) State the purpose of Static block.
   (f) Explain checked and unchecked exceptions.
   (g) Explain Adapter Class.
   (h) What is the use of Super and final keyword?
   (i) Differentiate abstract class and interface.
   (j) What is the difference between int and integer.

Unit -I

Q2 (a) What is a constructor? Write a program to show constructor overloading. (5)
   (b) Write a program to show 5 string methods. What is a String Buffer class? (5)

Q3 Explain Java architecture in brief. What are the types of applications in Java? (10)

Unit -II

Q4 (a) What is inheritance? Write a program to show multilevel inheritance. (5)
   (b) Explain the usage of interface in Java? Give an example of a class which implements interface. (5)

Q5 (a) What is package? How to use two different packages in a Java class? Give example. (5)
   (b) Explain exception handling with suitable example. Differentiate between throw and throws? (5)

Unit -III

Q6 (a) What are the byte and character streams in file handling? (5)
   (b) Write a program to read and write the content of a file in text mode. (5)

Q7 Explain the life cycle of Thread and methods to implement thread with suitable code. (10)

Unit -IV

Q8 (a) Create a login form using Swing Controls. (5)
   (b) What are the different types of Layout Managers? (5)

Q9 Explain the JDBC Architecture. What is JDBC Driver and Connection statement? (10)

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