

# END TERM EXAMINATION

FOURTH SEMESTER [BCA] JUNE- 2024

Paper Code: BCA-202

Subject: Java Programming

Time: 3 Hours

Maximum Marks: 75

Note: Attempt five questions in all including Q.no. 1 which is compulsory. Select one question from each unit.

(2.5 x 10=25)

Q1 Answer the following:

- (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. (6)  
(b) Write a program to show 5 string methods. What is a StringBuffer class? (6.5)
- Q3 Explain Java architecture in brief. What are the types of applications in Java? (12.5)

### Unit -II

- Q4 (a) What is inheritance? Write a program to show multilevel inheritance. (6)  
(b) Explain the usage of interface in Java? Give an example of a class which implements interface. (6.5)
- Q5 (a) What is package? How to use two different packages in a Java class? Give example. (6)  
(b) Explain exception handling with suitable example. Differentiate between throw and throws? (6.5)

### Unit -III

- Q6 (a) What are the byte and character streams in file handling? (6)  
(b) Write a program to read and write the content of a file in text mode. (6.5)
- Q7 Explain the life cycle of Thread and methods to implement thread with suitable code. (12.5)

### Unit -IV

- Q8 (a) Create a login form using Swing Controls. (6)  
(b) What are the different types of Layout Managers? (6.5)
- Q9 Explain the JDBC Architecture. What is JDBC Driver and Connection statement? (12.5)

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