



**POORNIMA UNIVERSITY, JAIPUR**  
**END SEMESTER EXAMINATION, 2023-2024 EVEN SEMESTER**

Write Roll No Below: \_\_\_\_\_

**MCA (ALL) I ( ) - II sem (Main/Back) End Semester Examination,**  
**MCACCA2103: OOPs with Java**

**Time:** 3 Hours

**Total Marks:** 60

**Min. Passing Marks:** 21/24/27

**Question Paper ID:** 001350

**Instructions:** Attempt all five questions. There is an internal choice either (a or b) in Q1 to Q5. Marks of each question or its parts are indicated against each question/part. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

**Bloom Level(BL):** 1-Remembering, 2-Understanding, 3-Appling, 4-Analysing, 5-Evaluating, 6-Creating

Use of following supporting material is permitted during examination for this subject: Nil

- |            |            |                                                                                                                                                                |              |           |           |
|------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------|-----------|
| <b>Q1.</b> | <b>(a)</b> | (i) List the primitive data types available in Java? Explain it. <b>(Marks 6)</b>                                                                              | <b>Marks</b> | <b>BL</b> | <b>CO</b> |
|            |            | (ii) What is an interface? What are the similarities between interfaces and classes? <b>(Marks 6)</b>                                                          | 12           | 1         | 1         |
|            |            | <b>(OR)</b>                                                                                                                                                    |              |           |           |
|            | <b>(b)</b> | (i) Why Java is called machine independent language. Explain the functionality of JVM? <b>(Marks 6)</b>                                                        |              |           |           |
|            |            | (ii) Explain the significance of public, protected and private access specifiers in inheritance? <b>(Marks 6)</b>                                              |              |           |           |
| <b>Q2.</b> | <b>(a)</b> | (i) What is inheritance and how does it help to create new classes quickly? <b>(Marks 6)</b>                                                                   | <b>Marks</b> | <b>BL</b> | <b>CO</b> |
|            |            | (ii) Explain all the decision making and control statements available in Java? <b>(Marks 6)</b>                                                                | 12           | 1         | 2         |
|            |            | <b>(OR)</b>                                                                                                                                                    |              |           |           |
|            | <b>(b)</b> | (i) What are the various looping statements available in Java? Discuss with suitable examples. <b>(Marks 6)</b>                                                |              |           |           |
|            |            | (ii) Write a program in Java, which will read a text and count all occurrences of a particular word. <b>(Marks 6)</b>                                          |              |           |           |
| <b>Q3.</b> | <b>(a)</b> | (i) Explain the process of defining and creating a package with suitable examples. <b>(Marks 6)</b>                                                            | <b>Marks</b> | <b>BL</b> | <b>CO</b> |
|            |            | (ii) Differentiate between Checked and UnChecked Exceptions with examples. <b>(Marks 6)</b>                                                                    | 12           | 1         | 3         |
|            |            | <b>(OR)</b>                                                                                                                                                    |              |           |           |
|            | <b>(b)</b> | (i) What are the different ways to handle exceptions? Explain. <b>(Marks 6)</b>                                                                                |              |           |           |
|            |            | (ii) Describe the process of importing and accessing a package with suitable examples. <b>(Marks 6)</b>                                                        |              |           |           |
| <b>Q4.</b> | <b>(a)</b> | (i) What do you mean by Multithreading in Java? What are the different ways to create a thread in Java? Explain with the help of any example? <b>(Marks 6)</b> | <b>Marks</b> | <b>BL</b> | <b>CO</b> |
|            |            | (ii) What is an applet? Explain the life cycle of Applet with a neat sketch. <b>(Marks 6)</b>                                                                  | 12           | 1         | 4         |
|            |            | <b>(OR)</b>                                                                                                                                                    |              |           |           |
|            | <b>(b)</b> | (i) Write AWT program in Java to find sum, multiplication and average of three numbers. <b>(Marks 6)</b>                                                       |              |           |           |
|            |            | (ii) Write a simple java program to create threads. Also explain the use of Synchronization. <b>(Marks 6)</b>                                                  |              |           |           |
| <b>Q5.</b> | <b>(a)</b> | (i) Write the steps to connect Java Application with any database to fetch the data from any table of that database. <b>(Marks 6)</b>                          | <b>Marks</b> | <b>BL</b> | <b>CO</b> |
|            |            | (ii) How we can executing the queries in JDBC applications? Give a suitable example. <b>(Marks 6)</b>                                                          | 12           | 1         | 5         |
|            |            | <b>(OR)</b>                                                                                                                                                    |              |           |           |
|            | <b>(b)</b> | (i) What is JDBC Driver? And what is the processor to load a JDBC drivers. <b>(Marks 6)</b>                                                                    |              |           |           |
|            |            | (ii) What are the commonly used methods of Result Set interface? Explain in detail. <b>(Marks 6)</b>                                                           |              |           |           |

\*\*\*End of Question Paper\*\*\*