Reg. No. : Name :

Second Semester M.C.A. Degree (C.B.S.S. – Reg./Supple./Imp.) Examination, May 2025 (2021 Admission Onwards)

MCA2C02: PROGRAMMING IN JAVA

Time: 3 Hours

Max. Marks: 60

SECTION - A

Answer all questions. Each question carries two marks.

- 1. What are abstract classes and abstract methods?
- 2. Explain various data types in Java.
- 3. What do you mean by exception handling?
- 4. What is a runnable interface ?
- 5. What is an applet ?
- 6. What is a panel?
- 7. What is stub in RMI?
- 8. Explain a factory class in RMI.
- 9. What do you mean by an HTTP servlet?
- 10. Why thread safety matters in servlets?

 $(10 \times 2 = 20)$

SECTION - B

Answer all questions. Each question carries eight marks.

a) Discuss method overloading with an example.

OR

b) Using class and object, find the area and perimeter of a rectangle.

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12. a) Explain synchronization in multithreading with an example.

OR

- Using FileInputStream and FileOutputStream classes, copy the contents of a file to another.
- a) Illustrate Frames in AWT with an example. Mention the commonly used methods associated with frames.

OR

- b) Explain the GridLayout Manager and BorderLayout Manager.
- 14. a) Explain with example code to create a server in Remote Method Invocation.

OR

- b) Using JDBC, Provide the code for fetching the records from a table.
- a) Illustrate the use of forward() method in RequestDispatcher interface of Java Servlets with an example program.

OF

b) Explain the architecture of CORBA with a diagram.

 $(5 \times 8 = 40)$