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# K24P 1402

Reg. No. : .....

Name : .....

Second Semester M.C.A. Degree (C.B.S.S. – Reg./Supple./Imp.) Examination, May 2024 (2020 Admission Onwards) MCA2C02 : PROGRAMMING IN JAVA

Time : 3 Hours

Max. Marks: 60

Answer all questions. Each question carries two marks.

- 1. What makes Java platform independent?
- 2. Illustrate with example the narrowing and widening in data type conversions.

SECTION .

- 3. What is synchronization ?
- 4. Explain the FileoutputStream class.
- 5. Explain the constructors of Button in AWT.
- Mention the situations where the objects of ActionEvent and ItemEvent is generated.
- 7. Explain the DriverManager class.
- 8. Explain Stub object in RMI.
- 9. What is RequestDispatcher in servlets ?
- 10. Explain HttpSessionBindingListener.

 $(10 \times 2 = 20)$ 

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### SECTION - B

Answer all questions. Each question carries eight marks.

11. a) Explain the concept of nested and inner classes in Java.

OR

b) Explain the concept of abstract classes and abstract methods in Java.

12. a) Briefly explain exception handling mechanisms in Java.

OR

b) Explain various states of a thread in multithreading.

13. a) Illustrate with example program to handle all mouse events.

### OR

- b) With a neat diagram, explain the life-cycle of an applet.
- 14. a) Explain the steps in establishing a successful JDBC connection. Illustrate with an example program to fetch and display the details stored in EMP table.

OR

b) Explain the working of Remote Method Invocation.

15. a) Explain session tracking in servlets with example code.

OR

b) Explain the steps involved in CORBA development.

 $(5 \times 8 = 40)$