

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

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## **MCA-405 (A)**

### **M.C.A. IV Semester**

Examination, December 2020

### **Java Programming and Technologies**

(Elective-I)

*Time : Three Hours*

*Maximum Marks : 70*

- Note:** i) Attempt any five questions.  
ii) All questions carry equal marks.

1. a) Explain the steps involved in implementation of a Java program. 7  
b) Write short notes on java buzzwords. 7
2. a) Explain the importance of CLASSPATH with an example. 7  
b) Write the difference between interfaces and abstract classes. 7
3. a) Explain the exception handling mechanism with an example. 7  
b) Explain thread synchronization with an example program. 7
4. a) What is an applet? How do applets differ from an application programs? 7  
b) Write a method to display a message “Computer Programming” at position (50, 20) inside a square. 7

[2]

5. a) What is AWT? What are the various components in AWT? 7  
b) What is JDBC? Explain the role and responsibility of JDBC API. 7
6. a) What is Driver Manager Class? Explain the types JDBC Driver with suitable diagram. 7  
b) Discuss the Java Database Connectivity. 7
7. a) What is RMI? Explain the architecture of RMI with suitable diagram. 7  
b) Write short note on TCP and UDP sockets. 7
8. Explain the following: 14  
i) Collection framework  
ii) Collection interfaces  
iii) Collection Classes

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