

K20P 1262

Reg. No. : .....

Name : .....

**III Semester Master of Computer Application (M.C.A.)/M.C.A.(Lateral Entry)  
Degree (CBSS – Reg./Suppl.(Including Mercy Chance)/Imp.)**

**Examination, November 2020**

**(2014 Admission Onwards)**

**MCA3C14 : PROGRAMMING IN JAVA**

Time : 3 Hours

Max. Marks : 80

**SECTION – A**

Answer **any ten** questions. **Each** question carries **three** marks.

1. How to create object in a Java ?
2. What are 4-pillars of object oriented programming ?
3. Mention the applications of Java applets.
4. What are the uses of Serialization ?
5. Explain the features of Java.
6. List out the static fields & static methods.
7. What does the keyword 'Synchronize' mean in Java ? What are the disadvantages of synchronization ?
8. How can a subclass call a method or a constructor defined in a superclass ?
9. Write a program to pick out the second biggest number in an array of 'n' integers.
10. Mention the differences are between notify and notify all methods.
11. What is the advantage of the event-delegation model over the earlier event-inheritance model ?
12. How to establish the database connectivity using JDBC ? (10×3=30)

P.T.O.



## SECTION – B

Answer **all** questions. **Each** questions carries **ten** marks.

13. a) What are the features of JDK ? What are the tools provided by JDK for developing and running java program ? Explain their functionalities. 10

OR

b) Define applet. Explain the life cycle of applets, briefly. 10

14. a) What is inheritance ? Explain how you can inherit a class in to another class in java using suitable program. 10

OR

b) What are different types of inner classes ? Explain with an examples. 10

15. a) Explain multithreading concept in java. Write a program showing multiple threads working upon single object using synchronized keyword. 10

OR

b) Discuss an example how java performs thread synchronization. 10

16. a) What is an exception ? What are the various keywords used in Exception handling. Explain briefly. 10

OR

b) Explain the working of graphics with suitable applet methods. 10

17. a) What is delegation event model ? Describe the significance of adapter class with an example. 10

OR

b) Explain the JDBC architecture and various devices of JDBC. 10

(5×10=50)