10





Third Semester MCA Degree Examination, June/July 2018 JAVA Programming

Max. Marks: 80 Time: 3 hrs. Note: Answer FIVE full questions, choosing one full question from each module. Module-1 List and explain key attributes of object oriented principles in JAVA. (08 Marks) 1 a. (08 Marks) Explain string Buffer and String Builder. b. Write a JAVA program for matrix multiplication. (08 Marks) 2 a. With example explain: i) Methods ii) Constructors. (08 Marks) b. Module-2 What is inheritance? With example list the types of inheritance supported in JAVA. 3 a. (08 Marks) (08 Marks) ii) Abstract classes. Write notes on: i) Polymorphism OR Explain method overloading and constructor overloading with suitable example. (08 Marks) What are super class constructors? How does super class members are used in JAVA? b. (08 Marks) Module-3 What is interface? How does JAVA support multiple interfaces? Explain with example. 5 a. (10 Marks) What are exceptions? Explain exception handling mechanism with example. (06 Marks) Define package. Explain how packages are created in Java. Explain with syntax. (08 Marks) 6 a. Briefly explain built-in exceptions in JAVA. (08 Marks) Module-4 What is multi threading? Explain the benefits of multi threaded program. (10 Marks) (06 Marks) ii) valueof() Explain: i) values() OR Explain the following: 8 ii) notifyall() iii) wait() (09 Marks) i) notify() (07 Marks) Explain autoboxing and autounboxing with example. b. Module-5 What are URL classes? Explain URL connections with syntaxes. (08 Marks) 9 a. How does parameters passed in applets? Explain with example. (08 Marks)



(08 Marks)

(08 Marks)

What are applets? Explain complete skeleton of applet.

Write notes on: (i) InetAddress class, ii) Socket class.