

Exam. Code : 206703

Subject Code : 5198

M.Sc. Computer Science 3rd Semester

MCS-304 : CONCEPTS OF CORE & ADVANCED JAVA

Time Allowed—3 Hours] [Maximum Marks—100

Note :— Attempt any *five* questions. All questions carry equal marks.

1. Write a program to perform the following operations by using Applets :
 - (a) Draw a line, rectangle
 - (b) Draw an oval and fill it.
2. Explain break and continue statements in detail with examples. Implement FTP server using Java. Write steps.
3. What is inheritance and purpose of using inheritance ? What is the use of keyword super in inheritance ? Explain with an example.
4. What is an interface in Java ? Differentiate between interface and abstract classes.
5. What is difference between multithreading and multitasking ? Explain life cycle of a thread in Java.
6. What is web hosting and types of web hosting services ? How does HTTP work ?

7. Write short notes on :

- (a) Explain three main concepts of Object Oriented Programming.
- (b) Exception handling in Java
- (c) Java Virtual Machine
- (d) Polymorphism.

8. Describe the Life Cycle of Thread. Explain with an example how Java performs Thread Synchronization ?