

Code No: MC1621/R16**MCA II Semester Regular Examinations, May-2017****OOPS THROUGH JAVA****Time: 3 Hours****Max. Marks: 60**

*Answer Any FIVE Questions
All Questions Carry Equal Marks*

1. a Differentiate functional programming and object oriented programming. [6]
b What is an object in OOP? Write a short note on Constant Objects with suitable example. [6]
2. a Discuss clearly on various control statements (along with their syntax) available with Java. [6]
b Explain the following concepts with suitable examples. [6]
i) Data Encapsulation ii) Method Overriding iii) Portable
3. a Write about various ways of parameter passing mechanisms in Java with examples. [8]
b What is garbage collection? Explain how java performs garbage collection. [4]
4. a Write an abstract class called Shape consists of area and perimeter methods? Define subclasses named Circle, Triangle, and Rectangle to Shape class. Define a class Square to Rectangle. Write a test program that create an object of Circle, Triangle, Rectangle and Square and print the corresponding area and perimeters of the objects? [6]
b "Java indirectly supports multiple inheritance". Justify it and also give suitable Java program. [6]
5. a Discuss the following: [7]
i) difference between string and string buffer ii) member access rules
iii) daemon threads
b What is user defined packages? Explain various steps involved in creating a package with an example. [5]
6. a Write a program that creates a thread forces preemptive scheduling for lower priority threads. [6]
b Illustrate the creation of user defined exception with an example program. [6]
7. a Design an applet to display three buttons "Blue", "Black" and "White". The color of the background changes according to the button pressed by the user. Also, write the HTML code to display the applet. [5]
b Discuss about border and card layout managers with suitable Java programs. [7]
8. a Write a note on Java's delegation event model? [4]
b Write a java program using the following i) JTable ii) Checkboxes iii) JTabbedPane [8]