Scheme – E  

Sample Question Paper

Course Name : Computer Engineering Group
Course Code : CO/CM/IF/CD
Semester : Fifth for CO/CM/IF and Sixth for CD
Subject Title : Java Programming
Marks : 100  Time: 3 Hours

Instructions:
1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

Q.1 A) Attempt any THREE of the following  12 Marks

a) State four features of java.

b) What is a thread? Describe the complete life cycle of thread.

c) Describe left shift and right shift operators with examples

d) How to create a package? Explain with example.

Q.1B) Attempt any ONE of the following  06 Marks

a) Describe the following methods related to String
   i) replace()
   ii) compareTo()
   iii) charAt()

b) Write a program to implement the Fibonacci series using for loop control structure.

Q.2 Attempt any TWO of the following  16 Marks

a) Describe dynamic dispatch method with example.

b) Explain the following terms with respect to exception handling.
   i) try ii) catch iii) throw iv) finally

c) Write a program to create two threads, one thread will print odd numbers and second thread will print even numbers between 1 to 20 numbers.
Q.3 Attempt any FOUR of the following

16 Marks

a) What is garbage collection in java?
b) What are the Labeled Break and Continue statements?
c) State four similarities between Interfaces and Classes.
d) How to add class or interface to a package?
e) Explain the functionality of a FILE class.

Q.4 A) Attempt any THREE of the following

12 Marks

a) How do applets differ from application programs explain with example?
b) Distinguish between
   i) InputStream and Reader classes
   ii) OutputStream and Writer classes
c) Write a program to accept number from user and convert into binary by using wrapper class methods.
d) Write a program to find out whether the given number is palindrome or not.

Q.4 B) Attempt any ONE of the following

06 Marks

a) Describe the uses of final and super keywords with respect to inheritance.
b) Write a program to create a vector with seven elements, first 2 are integers, next 2 are strings and remaining are float. Remove element at 3rd position and insert new element at 5th location. Display the updated vector.

Q.5 Attempt any TWO of the following

16 Marks

a) Describe the levels of access protection available for packages.
b) Write an applet for each of following graphics methods.
   drawoval() , drawrect() , drawline() , filloval()
c) Write an applet program that accepts two input string using <param> tag and concatenate the strings and display it in status window.

Q.6 Attempt any FOUR of the following

16 Marks

a) Explain the following methods related to thread
   i) wait()
   ii) sleep()
b) Define the term static method with example.
c) Give the attributes of applet tag.
d) Write a program to search a number in an array.
e) Write a program to demonstrate the following
   i) to convert lower case string to upper case.
   ii) to compare two strings.