378 / p3-ksl-upq-FH March KL2

C.P-11,

Con. 2874-10.

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(3 Hours)

[Total Marks: 100

- N. B.: (1) Question No. 1 is compulsory.
  - (2) Solve any four questions from 2 to 7.
- 1. (a) Explain the working of JVM. Also explain how java is architectural neutral.
  - (b) Explain data types in Java. Also explain the role of wrapper class.
- 2. (a) Write a java program to find factorial of a given number. The number will be 10 provided by user at run time.
  - (b) Create a class employee with data members empid, empname, designation and salary. Write methods get employee ( ) To Take user input, show Grade ( ) - to display grade of employee based on salary. Show employee ( ) to display emp details.
- (a) Write a program to find out number of upper case, lower case, blank spaces, number of digits from the string.
  - (b) Write a program to accept five integers from user and arrange in acending order.
- 4. (a) What types of Inharitance provided by java explain with proper example? Also discuss about inability of multiple inharitance in java and the alternative way to achieve it.
  - (b) Explain the difference between abstract class, interface and final class. Write a abstract class program to calculate area of circle, rectangle and trangle.
- (a) Explain the difference between single threaded application and multithreaded 10 application? What is the benefit of multithreading? Explain how java provided multithreading.
  - (b) What is package? How it is useful demostrate with example?
- 6. (a) Explain the exception handling feature of java with any suitable example. 10
  - (b) What is Java applet? Write a java applet to display "Hello java". Also write the relation between applet and HTML.
- Short notes on any four :—
  - (a) Difference between C++ \$ Java
  - (b) System.arrayCopy ( ) method
  - (c) Static members
  - (d) Access specifiers
  - (e) Thread synchronization.

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