

Scheme - I

Sample Question Paper

Program Name : Computer Engineering Program Group
Program Code : CO/CM/IF/CW
Semester : Fourth
Course Title : Java Programming
Marks : 70

22412

Time: 3 Hrs.

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) Attempt any FIVE of the following.

10 Marks

- a) Give syntax and example of following math functions.
 - i) `sqrt ()`
 - ii) `pow ()`
- b) Enlist access specifiers in Java.
- c) Name the methods from wrapper class for following task
 - i) To convert string objects to primitive int.
 - ii) To convert integer object to string object.
- d) State the use of static keyword
- e) Enlist any 4 keywords used for exception handling in Java.
- f) Give syntax of `<param>` tag to pass parameters to an Applet.
- g) Give any two methods from File class with their usage.

Q.2) Attempt any THREE of the following.

12 Marks

- a) Write a program to find largest between two numbers using `'?:'` operator.
- b) Define class Student with suitable data members create two objects using two different constructors of the class.
- c) Describe life cycle of thread with suitable diagram.
- d) Write a program to copy content of one file into another file.

Q.3) Attempt any THREE of the following.

12 Marks

- a) Write a program to divide any positive even integer by 2 using bitwise shift operator.
- b) State need of interface with suitable examples.

- c) Give usage of following methods :
- i) drawOval()
 - ii) getFont()
 - iii) drawArc()
 - iv) getFamily()
- d) Enlist types of stream classes and describe methods for reading and writing data for each type.

Q.4) Attempt any THREE of the following.

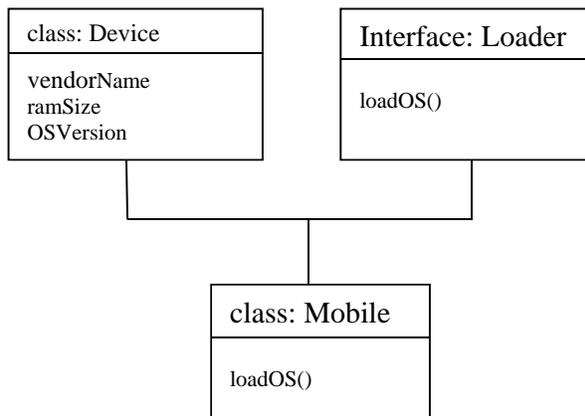
12 Marks

- a) Describe types of variables in Java with their scope.
- b) Write a program to initialize object of a class student using parameterized constructor.
- c) Write a program to create package *Math_s* having two classes as addition and subtraction. Use suitable methods in each class to perform basic operations.
- d) Differentiate between Java Application and Java Applet (any 4 points)
- e) Write a program to count number of words from a text file using stream classes.

Q.5) Attempt any TWO of the following.

12 Marks

- a) Write a step to declare and define two and three dimensional arrays of a class.
- b) Implement following inheritance:



Display details of devices from loadOS() method of class Mobile.

- c) Write a program to define two threads for displaying even and odd numbers respectively with a delay of 500 ms after each number.

Q.6) Attempt any TWO of the following.

12 Marks

- a) Write a program to define class Employee with members as id and salary. Accept data for five employees and display details of employees getting highest salary.
- b) Describe types of Errors and Exceptions in details.
- c) Design an Applet to pass username and password as parameters and check if password contains more than 8 characters.

Scheme – I

Sample Test Paper - I

Program Name : Computer Engineering Program Group
Program Code : CO/CM/IF/CW
Semester : Fourth
Course Title : Java Programming
Marks : 20

22412

Time: 1 Hour

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 Attempt any FOUR.

08 Marks

- a) List relational operators in Java.
- b) Give use of 'this' keyword in Java with suitable example.
- c) Give features of members and methods in an interface.
- d) Give syntax to create an object of a class with suitable example.
- e) Write any two differences between method overloading and method overriding.

Q.2 Attempt any THREE.

12 Marks

- a) Describe any four features of Java.
- b) Differentiate between String and StringBuffer class (Any 4 Points).
- c) Write a program to add 2 integer and 2 float objects to a vector and display them.
- d) Describe steps to create and access user defined packages.

Scheme - I

Sample Test Paper - II

Program Name : Computer Engineering Program Group
Program Code : CO/CM/IF/CW
Semester : Fourth
Course Title : Java Programming
Marks : 20

22412

Time: 1 Hour.

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 Attempt any FOUR.

08 Marks

- a) Gives features of abstract class.
- b) Name any four built in Exceptions in Java.
- c) Write syntax and usage of following methods:
 - i) paint()
 - ii) getParameter()
- d) Describe any 4 attributes of <applet> tag.
- e) Write any two methods from Character Stream classes.

Q.2 Attempt any THREE.

12 Marks

- a) Describe methods of creating a thread with example.
- b) Describe Applet life cycle with diagram.
- c) Write a program to implement single level inheritance assuming suitable data.
- d) Write a program to design an Applet showing three concentric circles filled with three different colors.