

Q.1 Attempt any Four.

[20]

- Write a short note on JVM and JIT.
- What is a class? How does it accomplish data hiding?
- Write a program to sort given array elements.
- What do you mean by method overloading? Illustrate with example.
- What is the difference between instance members and static members?
- Compare in terms of their functions, the following pair of statements.
 - while and do...while
 - while and for
- Explain ternary operator. Write a program to illustrate the concept of same.
- Explain Entry-controlled loop and Exit-controlled loop.

Q.2 Attempt any Four.

[20]

- What is finally block? When and how is it used? Give suitable example.
- Describe various forms of implementing interfaces. Give examples of java code for any one.
- How Java prevents overriding of the superclass method in subclass?
- How to achieve Run time polymorphism in Java?
- Compare and contrast overloading and overriding methods.
- What is a package? How do we design a package? Explain with example.
- What is an exception? Explain exception handling mechanism in java.
- What are input and output stream? List two methods of each class.

Q.3 Attempt any Four.

[20]

- Write an applet code to display a messages "GOOD MORNING" on the screen with size 50. The message should display in Green color with Italic Font Style.
- Explain following AWT controls :
 - Label
 - TextArea
 - List
- Explain FlowLayout and BorderLayout.
- Write a short note on Delegation event model
- Write a short note on following:
 - Component
 - Container
 - Panel
 - Window
 - Frame
- Describe the different stages in the life cycle of an applet.

f) Explain following event listener interface :

i) ActionListener

ii) ItemListener

h) What are the different Color methods used in Java?

[15]

Q. 4 Attempt any three.

a) What do you mean by method overriding? Illustrate with example.

b) Explain constructor overloading with proper example.

c) Explain public, private, protected, friendly, private protected access used in Java.

d) Create a try block that is likely to generate three types of exception and then incorporate necessary catch blocks to catch and handle them appropriately.

e) What is the difference between an applet and application?

f) Write an applet code to draw the following shapes:

