

2019

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Answer five questions in which

Q. No. 1 is compulsory.

1. Choose the correct alternative of the following :
 - (a) To prevent any method from overriding, we declare the method as :
 - (i) Abstracts
 - (ii) Final
 - (iii) Static
 - (iv) None of these
 - (b) Which one of the following is not true ?
 - (i) A class containing abstract methods is called an abstract class.

- (ii) Abstract methods should be implemented in the derived class.
 - (iii) An abstract class cannot have non-abstract methods
 - (iv) A class must be qualified as 'abstract' class. If it contains one abstract method.
- (c) The fields in an interface are implicitly specified as :
- (i) Static only
 - (ii) Protected
 - (iii) Private
 - (iv) Both static and final
- (d) In Java, objects are passed as :
- (i) Copy of that object
 - (ii) Method called call by value
 - (iii) Memory address
 - (iv) Constructor
- (e) Which of these operators is used to allocate memory to array variable in Java ?
- (i) Malloc

- (ii) Alloc
 - (iii) New
 - (iv) None of these
- (f) Which of these keywords is not a part of exception handling ?
- (i) Try
 - (ii) Finally
 - (iii) Throw
 - (iv) Catch
- (g) Which of these keywords is used by a class to use an interface defined previously ?
- (i) Import
 - (ii) Imports
 - (iii) Implements
 - (iv) Implemented
- (h) Which of these methods is used to find out that a thread is still running or not ?
- (i) Run ()

- (ii) Alive ()
 - (iii) IsAlive ()
 - (iv) Check Run ()
2. Create a Date class in java having day, month and year data members. Create constructors for initializing data members, functions for validating date, getting values of data members and displaying the date.
 3. What are various techniques to handle Exceptions in Java ? Explain with example.
 4. What is method overloading ? How it is different from method overriding ? Explain with an example.
 5. What do you know about multithreading ? How it is implemented in Java ? Explain life cycle of a thread ?
 6. What is Inheritance ? Explain its different types. Also write a java program to implement multiple inheritance.

7. Write a java program to sort the elements of an array in ascending order.
8. Differentiate any **two** of the following :
 - (a) Constructor and finalizer
 - (b) Data abstraction and Data Encapsulation
 - (c) If and switch statement
9. Write short notes on any **two** the following :
 - (a) Interfaces
 - (b) Packages
 - (c) Garbage collection
 - (d) Finalizer

