

2024

Time : 3 hours

Full Marks : 70

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

The figures in the margin indicate full marks.

*Answer from **all** the Parts as directed.*

Part – A

1. Choose the correct answer of the following :

1×5 = 5

(a) The size of char data type in JAVA is :

- (i) One byte
- ☒ (ii) Two byte
- (iii) Four byte
- (iv) None of these

(b) Automatic type conversion is possible in which of the possible cases ?

- (i) Byte to int

- ~~(ii) int to long~~
- (iii) Long to int
- (iv) Short to int
- (c) Which of the following is not a JAVA feature ?
 - (i) Dynamic
 - ~~(ii) Use of Pointers~~
 - (iii) Architecture Neutral
 - (iv) Object Oriented
- (d) A Package in JAVA is a collection of :
 - (i) Classes
 - (ii) Interfaces
 - ~~(iii) Classes and interfaces~~
 - (iv) None of these
- (e) When is the object created with new keyword ?
 - (i) At run time
 - ~~(ii) At compile time~~
 - (iii) Both (i) and (ii)
 - (iv) None of these

2. State whether the following statements are True or False : $1 \times 5 = 5$
- (a) The wrapping of data and methods into a single unit is called inheritance.
 - ~~(b) Java compiler converts the Java source code into byte code.~~
 - (c) Finally block in exception handling is executed only when exception is handled.
 - (d) Constructor overloading is not possible in JAVA.
 - (e) Assignment operator is evaluated from left to right. ²

Part - B

Answer any **four** questions of the following :

$$5 \times 4 = 20$$

- ~~3. Write a program to check whether an inputted number prime or not.~~
- ~~4. Explain different access modifiers in JAVA.~~
- 5. Explain constructor with an example.
- ~~6. Demonstrate polymorphism in JAVA.~~

7. Define the following :

- (a) Public
- (b) Private
- (c) Protected

8. Write short note on Break Statement.

Part – C

Answer any **four** questions of the following :

10×4 = 40

9. Explain exception handling in JAVA with suitable example.

10. Explain properties of JAVA.

11. Explain different types of inheritance in JAVA.

12. Write a program in JAVA to explain overriding methods.

13. What is a Thread ? Describe the life cycle of a thread with the help of block diagram.

14. Explain various methods of applet class with examples.