

CS-504D

OBJECT ORIENTED PROGRAMMING

Time Allotted: 3 Hours

Full Marks: 70

The questions are of equal value.

The figures in the margin indicate full marks.

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

GROUP A

(Multiple Choice Type Questions)

1. Answer any *ten* questions.

10×1 = 10

- (i) Byte code of java is
(A) platform dependent
(B) platform independent
(C) no specific rule
(D) depend upon OS
- (ii) In System.out.println(); out is
(A) a class
(B) output stream object
(C) method
(D) none of these
- (iii) Constructor can be overloaded
(A) never
(B) always
(C) partially
(D) either (B) or (C)
- (iv) Runtime binding occurs
(A) when method overloaded
(B) method overridden
(C) object is created
(D) none of these
- (v) A package may contain
(A) class only
(B) interface only
(C) class and interface
(D) only subpackage

- (vi) Stack overrun is an
(A) error
(B) exception
(C) virus
(D) worm
- (vii) Java virtual machine is
(A) platform dependent totally
(B) independent
(C) depends on machine architecture only
(D) depends on OS only
- (viii) Scanner class resides in
(A) java.io
(B) java.applet
(C) java.util
(D) java.net
- (ix) Applet can be used for generating
(A) static web page
(B) dynamic webpage
(C) active webpage
(D) none of these
- (x) Java is robust because
(A) it is object oriented
(B) garbage collection is present
(C) platform independent
(D) exception handling
- (xi) Abstract class is used for
(A) inheritance only
(B) instantiation only
(C) both (A) and (B)
(D) useless

garbage collection can also be a correct option.

GROUP B

(Short Answer Type Questions)

Answer any *three* questions.

3×5 = 15

2. What is JVM? Explain the process of compilation and interpretation in Java.

2+3

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| 3. | What are literals in Java? What is the difference between Java and C++ in respect of language functions? | 2+3 |
| 4. | What is parametric and non-parametric constructor? Explain both with a suitable program. | 2+3 |
| 5. | Create three buttons of colour red, green and blue. Then write an applet program to change the background colour of screen according to the button colour. | 5 |
| 6. | What is String-buffer class? Explain with a suitable program. | 1+4 |

GROUP C
(Long Answer Type Questions)

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| | Answer any <i>three</i> questions. | 3×15 = 45 |
| 7. | What do you mean by parameter passing? What is call by value and call by reference? Write a down two programs to define call by value and call by reference. | 3+4+8 |
| 8. | Write the different characteristics of final keyword. What are the different characteristics of abstract keyword? Explain abstract class through a program. | 5+5+5 |
| 9. | How command line argument is written? Explain through a program. How an array is declared in Java? Write a program to ascending sort an array and display it. | 2+5+2+6 |
| 10. | What do you mean by exception? Write program to handle user defined exception. What do you mean by thread? What is runnable interface? Explain it through a program. | 2+5+2+6 |
| 11. | Write short notes on any <i>three</i> of the following:
(a) Interface.
(b) Abstraction.
(c) Inheritance.
(d) Encapsulation.
(e) Virtual Method Table. | 3×5 |