

CS/B.tech/CSE/odd/Sem-5th/CS-504D/2014-15

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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

**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: | 3×5 |
| | (a) Interface. | |
| | (b) Abstraction. | |
| | (c) Inheritance. | |
| | (d) Encapsulation. | |
| | (e) Virtual Method Table. | |