

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Question Paper Code : 91564

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Fifth Semester

Information Technology

IT 2301/IT 51/10144 IT 501 — JAVA PROGRAMMING

(Regulation 2008/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is an object? Give example.
2. Define an access specifier? Give example.
3. What is a package?
4. What is a class hierarchy? Give example.
5. State the uses of reflection.
6. What is object cloning?
7. With an example define an adapter class.
8. State the difference between an exception and an error.
9. With an example define a generic class.
10. Define a thread.

PART B — (5 × 16 = 80 marks)

11. (a) (i) What is a method? How is a method defined? Give example. (5)
- (ii) What is the difference between an argument and a parameter? Discuss with an example. (5)
- (iii) What is the difference between a constructor and a method? Discuss with an example. (6)

Or

- (b) (i) With relevant examples explain abstraction and encapsulation. Write a java program that uses abstraction and encapsulation. Give self explanatory comments in your program. (5)
- (ii) What is polymorphism? Write a java program that uses polymorphism. Give self explanatory comments in your program. (6)
- (iii) State the purpose of finalize () method in java? With an example explain how finalize () method can be used in a Java program. (5)
12. (a) Write a Java program using classes to perform linear search on an array of 'N' numbers. Give self explanatory comments in your program. (16)

Or

- (b) What is inheritance? With diagrammatic illustrations and Java Program(s) illustrate the different types of inheritance. Give self explanatory comments in your program. (16)
13. (a) (i) What is an interface? Write a Java program to illustrate the use of an interface. Give self explanatory comments in your program. (8)
- (ii) What is a frame? Write a java program to illustrate the use of frames. Give self explanatory comments in your program. (8)

Or

- (b) With a java program illustrate the use of I/O streams. Give self explanatory comments in your program. (16)
14. (a) List and briefly discuss the swing components in Java. (16)

Or

- (b) With relevant examples discuss exception handling in java. (16)
15. (a) (i) Develop a java program that will illustrate the use of generic classes. Give self explanatory comments in your program. (8)
- (ii) What is thread synchronization? Discuss with an example. (8)

Or

- (b) Write Java application program for generating four threads to perform the following operations:
- (i) Getting 'N' numbers as input (4)
- (ii) Printing the even numbers (4)
- (iii) Printing the odd numbers (4)
- (iv) Computing the average. (4)