

DECEMBER 2014

P/ID 37460/PMAK

Time : Three hours

Maximum : 60 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

1. Java is free from language – Comment.
2. Write any four symbolic constants.
3. Write Java statement to evaluate the equation
Side = $\sqrt{a^2 + b^2 - 2ab \cos(x)}$.
4. One if can have more than one else class – True or False.
5. How do we invoke a constructor?
6. State the uses of arrays.
7. What is a thread?
8. Give example for exceptions in Java.
9. Define applet.
10. What is applet tag?

PART B — (5 × 3 = 15 marks)

Answer ALL questions.

11. (a) Why do we need the important statement?

Or

(b) What is type casting? Why is it required in programming?

12. (a) Write a Java program to find the sum of all integers greater than 100 and less than 200.

Or

(b) What is an empty statement? Explain its usefulness.

13. (a) What are objects? How are they created from a class?

Or

(b) How does string class differ from the string buffer class?

14. (a) What is synchronization? When do we use it?

Or

(b) How many catch blocks can we use with one try block?

15. (a) Write a Java program to explain how parameters are passed in an applet program.

Or

- (b) State the different stages in the life cycle of an applet.

PART C — (5 × 7 = 35 marks)

Answer ALL questions.

16. (a) Describe the structure of a typical Java program.

Or

- (b) List the eight basic data types used in Java. Give example.

17. (a) Explain any two decision making statements with examples.

Or

- (b) Write a program using a do ... while loop to calculate and print the first m Fibonacci numbers.

18. (a) Describe different forms of inheritance with examples.

Or

- (b) Write a program for fitting a straight line equation $y = mx + c$.

19. (a) Write a Java program to handle different types of exceptions using try, catch and finally statements.

Or

- (b) What is the difference between suspending and stopping a thread?

20. (a) Discuss the steps involved in including and running a local applet.

Or

- (b) Write an applet to draw the following shapes :

- (i) Cone
- (ii) Cylinder
- (iii) Square.
