

## 32422/D 220

Reg. No.				

# IV Semester B.C.A.3 Examination, May/June 2017 (2014-2015 Onwards) (Regular) PROGRAMMING USING JAVA

Time: 3 Hours Max. Marks: 80

Instruction: All Sections are compulsory.

#### SECTION - A

1. Answer any ten of the following:

 $(10 \times 2 = 20)$ 

- a) Expand JVM and AWT.
- b) State any four features of Java.
- c) What is command line argument? Give an example.
- d) Define Applet.
- e) What are abstract methods and classes?
- f) How do you create an object in Java? Give syntax.
- g) How destructors are defined in Java?
- h) Give the difference between jump and continue statement.
- i) Explain final class.
- j) Define Vector.
- k) Define thread priority in JAVA.
- I) What is an applet tag?

#### SECTION - B

Answer any four of the following:

 $(4 \times 5 = 20)$ 

- 2. Write the differences between Java and C++.
- 3. Explain various branching statements in Java.
- 4. Write a Java Program to implement any two string operations.

P.T.O.

### 32422/D 220



- 5. Explain life cycle of thread with neat diagram.
- 6. Write a Java applet program to demonstrate drawing objects.
- 7. Write a note on stream classes.

## SECTION - C

## Answer any four of the following:

 $(4 \times 10 = 40)$ 

10

10

- 8. What is Constructor? Explain constructor overloading with an example.
- 9. Define interface. How can we achieve multiple inheritance in Java?
- 10. a) Write a note on packages.
  - b) Write a program to illustrate packages.

(5+5=10)

- 11. a) Explain applet life cycle with transition diagram.
  - b) Write a Java program to illustrate the use of try, catch, throw, finally to demonstrate exception handling. (5+5=10)
- 12. a) Explain byte stream class and character stream class.
  - b) Differentiate between applets and applications.

(5+5=10)

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## 22422/D 220

## IV Semester B.C.A.2 Examination, May/June 2017 (2011 – 2012 Onwards) (Repeater) PROGRAMMING USING JAVA

Time: 3 Hours

Max. Marks: 80

*Instructions*: 1) All Sections are compulsory.

- 2) Write the syntax and example **wherever** necessary.
- 3) Draw diagrams wherever necessary.

#### SECTION - A

Answer any ten of the following.

 $(2 \times 10 = 20)$ 

- 1. State any four features of Java.
- 2. What is the significance of final variables and final methods?
- 3. What is JVM?
- 4. How does an applet differs from Java Standalone application?
- 5. What is the difference between Mutable and Immutable strings?
- 6. What is an object? Write the syntax to create an object in Java.
- 7. Define constructor. Mention any 2 characteristics of constructor.
- 8. What is the significance of 'super' keyword in Java?
- 9. What is package? Mention any 2 advantages of using package.
- 10. What is garbage collection? How it is handled in Java?
- 11. What is the use of 'finally' statement?
- 12. How to draw circle in Java? Give the syntax.

P.T.O.



#### SECTION - B

## Answer any six of the following.

 $(6 \times 5 = 30)$ 

- 13. Explain briefly how multiple inheritance is achieved in Java, with programming example.
- 14. Write a note on Java operators. Give examples each.
- 15. Write a Java program to illustrate the use of type casting and type promotion in Java.
- 16. Explain the various uses of the 'final' keyword with examples each.
- 17. Explain exception handling mechanism in Java with the help of an example.
- 18. Differentiate between Method Overloading and Method Overriding in Java.
- 19. Write a Java program to handle primitive data types in Java.
- 20. Write the differences between Java and C++.

## SECTION - C

## Answer any three of the following.

 $(3\times10=30)$ 

- 21. a) Explain the life cycle of thread with the help of a neat diagram.
  - b) Discuss the different ways of implementing threads in Java.

(5+5=10)

- 22. a) What are vectors? Write a Java program to illustrate the use of vectors.
  - b) Write a Java program to implement any 5 string operations.

(5+5=10)

- 23. Write a Java program to create a student report using applet, read the input as 5 subject marks using text boxes and generate the grades. 10
- 24. Write short note on the following:

 $(2 \times 5 = 10)$ 

- a) Wait () and sleep ().
- b) Byte stream classes.
- c) 'final' keyword.
- d) Method overloading.
- e) Visibility control in Java.
- 25. a) What is the use of multiple catch statements in Java? Explain briefly with example.
  - b) Write a Java program to illustrate the use of try, catch and finally to show exception handling mechanism. (5+5=10)

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