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V Semester B.C.A. Degree Examination, March/April - 2023

COMPUTER SCIENCE

Java Programming (CBCS Scheme)

Paper: BCA 503T

Time: 3 Hours

Maximum Marks: 70

Instructions to Candidates:

Answer all sections.

## **SECTION-A**

Answer any Ten questions. Each question carries 2 marks.

 $(10 \times 2 = 20)$ 

- 1. Define Java byte codes.
- 2. What is constructor? Write the different types.
- 3. Write the syntax to create an object in Java.
- 4. How are 'this' and 'super' keyword used in Java.
- 5. What is an abstract class?
- **6.** Define vector and array.
- 7. What are wrapper classes?
- 8. Write any two differences between applet and application.
- **9.** What is Java API?
- 10. What is checked and unchecked exception in Java?
- 11. Mention any two mathematical functions of Math. Class.
- 12. What are the stream classes types in Java?

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## SECTION-B

|     | Ans  | wer any Five questions. Each question carries 10 marks. (5×10                      | =50   |
|-----|------|--|-------|
| 13. | a)   | Explain the features of Java.  | (5    |
|     | b)   | Explain any five methods in string class.  | (5)   |
| 14. | a)   | What are control statements? Explain the selection statements with an example      | . (5) |
|     | b)   | What is constructor overloading? Write a program to demonstrate the same.          | (5)   |
| 15. | a)   | Define Inheritance. Explain the types of Inheritance in Java with example.         | (6)   |
|     | b)   | Define package. Explain the steps involved to create and access package.           | (4)   |
| 16. | a)   | What are access modifiers? Explain.  | (5)   |
|     | b)   | Explain Interface in Java with an example.   | (5)   |
| 17. | a)   | Define thread: Explain the method to create a thread in Java with an example.      | (5)   |
|     | b)   | Explain exception handling in Java.  | (5)   |
| 18. | a) . | Explain the types of stream classes in detail.                                     | (6)   |
|     | b)   | Write any five methods in graphics class.  | (4)   |
| 19. | a)   | Explain life cycle of an applet.   | (5)   |
|     | b)   | Write a program to calculate the areas of different geometrical figures using abst | ract  |
|     |      | class.   | (5)   |
| 20. | a)   | Write a program to display all prime numbers between two limits.                   | (5)   |
|     | b) 1 | Explain final variable, final method and final classes with suitable example.      | (5)   |



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## V Semester B.C.A. (CBCS) Degree Examination, March - 2021 COMPUTER SCIENCE Java Programming

Time: 3 Hours

instructions to Candidates:

Answer All Sections.

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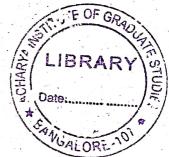
Maximum Marks: 70

**SECTION-A** 

Answer any **Ten** questions.

 $(10 \times 2 = 20)$ 

- 1. What is Java APÍ?
- 2. Why is Java called as a platform independent language?
- 3. What are static variables?
- 4. Illustrate the usage of this "Keyword and Super" keyword.
- 5. What is an abstract class?
- 6. Differentiate between vector and array.
- 7. What are wrapper classes?
- 8. State any two differences between Applet and Application.
- 9. What are checked and unchecked exceptions?
- 10. What are default constructors and parameterized constructor.
- 11. Mention any two mathematical functions of the Math class.
- 12. Define streams in Java



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## SECTION-B

Answe any Five questions.

 $(5 \times 10 = 50)$ 

- 13. a) Explain features of Java.
  - b) Explain each word in the statement.Public static void main (String args [])
- 14. a) Explain command line arguments with a program.
  - b) Illustrate the usage of break and continue statements with example.
- 15. a) Explain method overloading and method overriding.
  - b) Explain any four methods of string class with example.
- 16. a) What are access control modifiers? Explain.
  - b) Explain interface in java with an example.
- 17. a) Explain life cycle of a thread.
  - b) What is a package? How is a user defined package created.
- 18. a) Explain the types of inheritance with example.
  - b) Explain exception handling.
- 19. a) Write a program to display all prime numbers between two limits.
  - b) Explain any five methods of Graphics class.
- 20. a) Write a program to implement constructor overloading by passing different number of parameters of different types.
  - b) Write short notes on Byte stream and Character Stream.

