

U.G. 4th Semester Examination - 2021**BCA****Course Code : BBCACCHC403****Course Title: Object Oriented Programming using JAVA**

Full Marks : 30

Time : 2 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any **ten** questions: 1×10=10
- a) Can main () in Java return any data?
 - b) What is local inner class?
 - c) Define data abstraction.
 - d) What is garbage collection?
 - e) What is the major difference between array and vector in Java?
 - f) What do you mean by narrowing conversion?
 - g) When garbage collection is done in Java?
 - h) What is byte code?
 - i) When super keyword is used?

- j) What is wrapper class?
- k) Define exception.
- l) Java does not use pointer. – why?
- m) What is recursion?
- n) What is demon thread?
- o) Why thread synchronization important for multithreading process?

2. Answer any **five** questions: 2×5=10

- a) Write a java program to print the following :
- A
 - A B
 - A B C
 - A B C D
- b) What is the use of 'this' keyword in Java?
- c) Write a very short note on Multiple inheritance in Java.
- d) Differentiate between equals() method and '==' operator.
- e) How encapsulation and datahiding is interrelated?

- f) Why constructor overloading is compile time polymorphism ?
- g) Write major differences between C and Java.
- h) When do we use 'final' keyword?

3. Answer any **two** questions: $5 \times 2 = 10$

a) How overloading and overriding is differ from each other? Provide programming code also.
What is 'finally' in Java? $4 + 1 = 5$

b) i) Discuss applet life cycle.

ii) How objects are created in Java?

$$4 + 1 = 5$$

c) Differentiate between throw and throws.
Mention the maximum priority of a thread.
What are the access specifiers in Java?

$$2 + 1 + 2 = 5$$
