

END SEMESTER EXAMINATION, JUNE - 2019**BCA FOURTH SEMESTER****COURSE CODE:BCA209****COURSE TITLE: PROGRAMMING IN JAVA****[Time allotted: Three hours]****[Max. Marks: 100]****Note:** Attempt all Sections.**Section (A)****Q.1. Attempt all questions.****(2 x 10 = 20)**

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| a.
b. What is the use of javac?
c. What is final class in Java?
d. Why is Java portable?
e. Explain the role of package in java?
f. Differentiate class and object. | g. How JSP is different from Servlet?
h. Differentiate between Thread and process.
i. Explain the types of an applet.
j. What is data abstraction?
k. What is JVM? |
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Section (B)**Q.2. Attempt any 5 questions.****(7 x 5 = 35)**

- a.** Differentiate String and StringBuffer class.
- b.** Write a program of single inheritance using constructors in java.
- c.** What is constructor? Write a program of constructor overloading in java.
- d.** Explain thread life cycle with a suitable diagram.
- e.** Explain decision making statements used in java.
- f.** Explain JSP processing with a suitable diagram.
- g.** Explain the difference between application and applet.

Section (C)**Attempt any 3 questions.****(15 x 3 = 45)**

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| Q.3. | a. What is multithreading? Write a program of creating a thread by extending Thread class. | 8 |
| | b. What is exception handling? Differentiate throw and throws keywords. | 7 |
| Q.4. | a. What is event handling? Explain it with a suitable program. | 8 |
| | b. What is layout management? Explain all the layouts used in java with proper syntax. | 7 |
| Q.5. | a. What are access specifiers? Explain all the types. | 8 |
| | b. What is JDBC? Compare it with ODBC with suitable diagrams. | 7 |
| Q.6. | a. Explain the following: <ul style="list-style-type: none">• Java API• Features of java | 4
3.5 |
| | b. Define the following terms: <ul style="list-style-type: none">• Static• Final• Abstract | 2.5
2.5
2.5 |
| Q.7. | a. What is method overloading and method overriding? Explain with suitable programs. | 8 |
| | b. Explain all the properties of Object Oriented Programming. | 7 |
