

2021

B.C.A

[HONOURS]

Paper : BCA-305

(Programming in JAVA)

Full Marks : 80

Time : 4 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.*Answer **Q. No. 1** and any **four** from the rest.

1. Answer any **eight** questions: $2 \times 8 = 16$
- What do you mean by data abstraction?
 - What is the utility of Buffered Reader class in Java?
 - What is daemon thread?
 - What is method overloading?
 - Define applet.
 - Where we should use parse Int ()?
 - What is local inner class?
 - In what situation we use interface?

- Define THIS keyword in Java.
 - How extends Key-word is used?
 - How packages are included in a program?
 - What is the function of finalize () method?
2.
 - Give an example of recursive program in Java.
 - Write the difference between public and private keyword in Java.
 - What is the relationship between a class and an object in an object oriented system?
 - What is the difference between JDK, JRE and JVM? $6+4+4+2=16$
3.
 - Write the utility of 'lang' package in Java.
 - How we can add a class to an existing package?
 - What are the differences between class and interface in Java.
 - Write a Java program to accept a string and count upper case letters in that string. $2+4+4+6$
4.
 - Write a simple Java program for sorting.
 - Write a short note on life cycle of thread.
 - What is synchronization? $8+6+2=16$

[Turn over]

5. a) Explain runtime polymorphism with suitable example.
b) Differentiate between abstract class and interface.
c) How will you start and stop a thread?
8+4+4
6. a) What is meant by initialization a file stream object? Give example.
b) Distinguish between InputStream and Reader classes.
c) Write the use of <PARAM> tag in Java.
d) Write a simple Java program to create a file named BCA-TXT. 4+3+3+6=16
7. Short notes on any **four**: 4×4=16
- a) Program structure of Java
 - b) Feature of Java language
 - c) Inheritance in Java
 - d) Access specifier in Java
 - e) Thread priority in Java
 - f) JDK, JRE, JVM.
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