CDOE
BACHELOR OF COMPUTER APPLICATIONS (CBCS-2018 COURSE)
B.C.A. Sem-IV : WINTER :- 2021
SUBJECT: JAVA PROGRAMMING

Day : Thursday   Time : 10:00 AM-01:00 PM
Date 17-02-2022   **W-19008-2021**   Max. Marks: 70

N.B.:

1) Solve **ANY FOUR** from section-I and **ANY TWO** from section-II.
2) Figures to the **RIGHT** indicate **FULL** marks.
3) Both the section should be written in **SAME** answer book.

SECTION-I

Q.1   What is an array in *JAVA*? Explain one dimensional array with example.   **(10)**

Q.2   What is *constructor*? What are its special properties? Also list types of   **(10)**
constructors.

Q.3   **a)**   Discuss the different level of access modifiers available in *JAVA*.   **(05)**

b)   What is package and why is it required in *JAVA*?   **(05)**

Q.4   What is inheritance? Explain single inheritance with suitable example.   **(10)**

Q.5   **a)**   Differentiate between an *interface* and a *class*   **(05)**

b)   Explain exception handling in *JAVA*.   **(05)**

Q.6   Write short notes **(ANY TWO)** :   **(10)**

a)   Branching statements
b)   Features of *JAVA*
c)   *final* keyword

SECTION-II

Q.7   What is a *thread*? Describe the complete life cycle of a *thread*.   **(15)**

Q.8   **a)**   Write a *JAVA* program to calculate Fibonacci series up to n numbers.   **(08)**

b)   Write a *JAVA* program to find factorial of a number.   **(07)**

Q.9   Design a *class* to represent a bank account. Create appropriate data   **(15)**
members and write methods to perform following task.
     i)   To initialize data members.
     ii)   To deposit an amount.
     iii)   To withdraw an amount after checking balance
     iv)   To display the data members.

By making use of array of objects, hold data of 5 customers.

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