Total No. of Questions : 5]

SEAT No.:

P6017

[Total No. of Pages : 2

[6144]-503 T.Y.B.B.A. (C.A.) CA 503: CORE JAVA (2019 Pattern) (Semester -V)

Time: 21/2 Hours]

[Max. Marks: 70

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Figures to the right indicates full marks.
- 3) Neat diagrams must be drawn Wherever necessary.
- Q1) Answer any Eight:

 $[8 \times 2 = 16]$ 

- a) What is a java program structure?
- b) Define this Keyword.
- c) Explain in detail the data types in java?
- d) What is an Interface?
- e) What is the use of Reader and Writer class?
- f) Which method is used to specify containers layout with syntax.
- g) What is the default layout for Frame and Panel?
- h) Explain Modifiers and Access Controls used in java.
- i) List and explain any 2 in-built exceptions.
- j) Explain the purpose of getContentPane().
- Q2) Attempt any four.

[4×4=16]

- a) Explain in detail the features of Java.
- b) What are the rules for method overloading and method overriding? Explain it with example.
- c) Differentiate between interface and abstract class.
- d) Explain the concept of exception and exception handling.
- e) What are the different types of streams? Explain in details.

## Q3) Attempt any four.

 $[4 \times 4 = 16]$ 

- a) Write a java program to display alternate character from a given string.
- b) Write a Java program to calculate area of Circle, Triangle & Rectangle. (Use Method Overloading).
- c) Write a java program to search given name into the array, if it is found then display its index otherwise display appropriate message.
- d) Write a java program to display ASCII values of the characters from a file.
- e) Write a java program to display multiplication table of a given number into the List box by clicking on button.

## Q4) Attempt any four:

 $[4 \times 4 = 16]$ 

- a) What is collection? Explain Collection framework in details.
- b) Difference between Swing and AWT.
- c) Create a package named Series having three different classes to print series:
  - i) Fibonacci series
  - ii) Cube of numbers
  - iii) Square of numbers

Write a java program to generate 'n' terms of the above series

- d) Write a 'java' program to check whether given number is Armstrong or not. (Use static keyword)
- e) Write a 'java' program to copy only non-numeric data from one file to another file.

## Q5) Write short note any two:

 $[2 \times 3 = 6]$ 

- a) Define new operator.
- b) Define term finalize () method.
- c) Define package with all the steps for package creation.

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