Seat No. _____

H-003-2014010

B. Sc. (Sem. IV) (W.E.F. 2019) Examination

April - 2023

CA-401 : Programming with JAVA

Faculty Code : 003
Subject Code : 2014010

Time : **2½** Hours / Total Marks : **70**

1 (a) Answer in **one** word or sentence :   4
     (1) What is full form of JVM ?
     (2) Which method is used to obtain a length of String object?
     (3) What is full form of API ?
     (4) Which operator is used to concatenate strings ?

1 (b) Answer the following : (**One**)   2
     (1) Define the term OOP.
     (2) Explain Java Bytecode.

1 (c) Answer in brief : (**One**)   3
     (1) What is a class and object in Java ?
     (2) Give the full form of JDK, JRE, JVM.

1 (d) Write in detail : (**One**)   5
     (1) List out the Operators in Java.
     (2) Explain the default access specifier.

2 (a) Answer in **one or two** sentence :   4
     (1) _____keyword is used to instantiate constructor of class.
     (2) _____method has no return type, neither void.
     (3) To inherit one class to another class_____keyword is used.
     (4) Java does support _____, _____ inheritance.

2 (b) Attempt any **One** :   **2**

    (1) Explain main Three characteristic of Java.

    (2) Write about inheritance concept in Java.

2 (c) Answer the following : (Any **One**)   **3**

    (1) Explain any example of multi-level inheritance.

    (2) Define the term constructor.

2 (d) Answer any **One** :   **5**

    (1) Explain overloading concept with a suitable example.

    (2) Write about method overriding concept.

3 (a) Attempt in **one or two** sentences :   **4**

    (1) Which packages are imported by default ?

    (2) Suspend thread can be revived by using_____method.

    (3) Thread can be created by inheriting_____class.

    (4) All classes under_____class are unchecked exception.

3 (b) Attempt any **One** :   **2**

    (1) Define the term Portable.

    (2) What is an Exception ?

3 (c) Answer the following : (Any **One**)   **3**

    (1) How we can use the command line arguments in Java ?

    (2) Give the use of finally in exception handling in Java.

3 (d) Answer any **One** :   **5**

    (1) What is an Exception ? Explain user defined Exception handling in Java ?

    (2) Write use about throws and throw command.

4 (a) Write the use of following methods with its meaning in **one** : **4** **or two** lines.

    (1) drawRect()

    (2) fillRoundRect()

    (3) drawArc()

    (4) drawOval()

4 (b) Answer in brief : (**One**) 2

(1) Define the term AWT.

(2) What is an applet ?

4 (c) Answer in detail : (Any **One**) 3

(1) Explain the Event delegation model in Java.

(2) What is a layout manager ? Explain application of layout managers with example.

4 (d) Attempt any **One** : 5

(1) Explain the Applet life cycle with a suitable example.

(2) Explain two methods from Graphics class.

5 (a) Write use of following methods with its meaning in **one or** : 4

two lines :

(1) Applet classes implements the_____interface for action event.

(2) _____interface components is for key press event.

(3) Which method is from applet used to color the background of applet ?

(4) Use of setColor() is for...?

5 (b) Answer in brief **One** : 2

(1) Differentiate applet and application program.

(2) Which Java class library includes a class for clickable buttons ?

5 (c) Answer in detail : (Any **One**) 3

(1) What is a Thread ? Write note on Thread life cycle with its states diagram.

(2) What is AWT ? Explain its different components with example.

5 (d) Attempt any **One** : 5

(1) Explain the Flowlayout with its constructor.

(2) Write in brief about Button and TextField.

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