(83 & A-39)

Exam No. _____

No. of printed pages: 2

**SARDAR PATEL UNIVERSITY**
**BCA Semester – IV (CBCS) Examination (April-2018)**
**US04CBCA02 Object Oriented Programming through Java**

Date of Exam: 6/4/18 , Friday

Total Marks: 70

Time: 2 pm to 5 pm

**Q. 1   Select most appropriate single answer:**                                   **[10]**

(1)   Java compiler translates source code into _____.
(A) machine code                          (B) byte code
(C) assembly code                         (D) executable code

(2)   _____ operator is used to construct conditional expression.
(A) Dot (.)                               (B) instanceof
(C) Ternary (? : )                        (D) None of these

(3)   Which statement is use to skip the loop and continue with the next iteration?
(A) break                                 (B) continue
(C) skip                                  (D) next

(4)   We cannot create a subclass of _____ class.
(A) abstract                              (B) final
(C) static                                (D) public

(5)   _____ variables and methods can be accessed without using objects.
(A) private                               (B) protected
(C) static                                (D) final

(6)   _____is caused by bad array index.
(A) ArithmeticException                   (B) IOException
(C) ArrayIndexOutOfBoundsException        (D) NullPointerException

(7)   Character streams can be used to read and write _____Unicode characters.
(A) 4-bit                                 (B) 8-bit
(C) 16-bit                                (D) 32-bit

(8)   Which of the following block is always executed irrespective of whether an exception has occured.
(A) try                                   (B) catch
(C) finally                               (D) all of these

(9)   JDBC application must import _____ package.
(A) java.io                               (B) java.sql
(C) java.applet                           (D) java.util

(10)  If we implement ActionListener in our program, then we must override _____ method.
(A) ActionPerformed                       (B) actionPerformed
(C) ActionEvent                           (D) addActionListener

(1)

(P.T.O.)

**Q. 2 Answer ANY TEN of the following questions briefly:** [20]
(1) Java is platform-independent and portable. - Justify
(2) Write rules for naming variables.
(3) Write syntax of do...while loop.
(4) Differentiate between class and interface.
(5) Define method overriding.
(6) List the conditions for using super() in a method.
(7) Discuss syntax and use of the following String methods with example: length( ), charAt( )
(8) What is package? What are the benefits of package?
(9) List any four java API packages.
(10) What is Event Delegation?
(11) List any four methods of MouseListener interface.
(12) List life-cycle methods of an applet.

**Q. 3 Answer the following questions:** [10]
(A) What is Java? Explain features of Java. [06]
(B) Explain the following data types available in Java: int, float, char, boolean [04]

**OR**

(A) Explain the structure of Java program. [06]
(B) Describe the Java environment. [04]

**Q. 4 Answer the following questions:** [10]
(A) Define class. Explain structure of a class with example. [05]
(B) Explain method overloading and overriding with suitable example. [05]

**OR**

(A) Explain super and final keyword with example. [05]
(B) What is a constructor? What are its special properties? [05]

**Q. 5 Answer the following questions:** [10]
(A) Describe the try and catch statements in detail. [05]
(B) Explain Reader stream class and Writer stream class. [05]

**OR**

(A) Describe concept of stream. [05]
(B) Write a short note on Character Stream classes. [05]

**Q. 6 Answer the following question:** [10]
What is an applet? How it differs from Java applications? Discuss life-cycle methods of applet in detail.

**OR**

Write short note on following components: Choice, List, Button, Checkbox

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