C. U. SHAH UNIVERSITY
Winter Examination - 2022

Subject Name: Programming with Java - I

Subject Code: 4CS03BJV1 **Branch: BCA**

Semester: 3   **Date: 22/11/2022**   **Time: 11:00 To 02:00**   **Marks: 70**

Instructions:
(1) Use of Programmable calculator & any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

Q-1   **Attempt the following MCQ questions:**   **(14)**

1) Who is known as the father of Java?
A) James Gosling   B) Dennis Ritche
C) Rich Miner   D) Nick Sears

2) In JRE, R stands for _____.
A) Resource   B) React
C) Runtime   D) None of these

3) What is the extension of java source code file?
A) .class   B) .java
C) .jsource   D) .bin

4) Which of the following is not a java edition?
A) J2EE   B) J2ME
C) J2SE   D) J2ES

5) Which keyword is used to inherit an interface?
A) implements   B) derive
C) extends   D) super

6) Which of the following method of Applet class is called only once during its life cycle?
A) start()   B) paint()
C) stop()   D) destroy()

7) Which class contains all the methods of a thread life cycle?
A) Object   B) MainThread
C) Thread   D) ThreadClass

8) In AWT, A stands for _____.
A) Absolute   B) Abstract
C) Application   D) Applet

9) Which package contains major stream classes?
A) java.lang   B) java.awt

C) java.util   D) java.io

10) _____ is the default package in java.
  A) java.util   B) java.lang
  C) java.io   D) java.awt

11) _____ class object is passed as parameter in paint methods of applet.
  A) Applet   B) Graphics
  C) Object   D) Drawing

12) Which of the following is not a component in java?
  A) Button   B) RadioButton
  C) ToggleButton   D) TextField

13) When is the finalize() called?
  A) before garbage collection   B) after garbage collection
  C) when object goes out of scope   D) None

14) In JDK, D stands for _____.
  A) Design   B) Development
  C) Dedicated   D) Derived

Attempt any four questions from Q-2 to Q-8

Q-2	**Attempt all questions**	
a)	What is java? Write a note on java features.	**07**
b)	Discuss various data types available in java.	**07**
Q-3	**Attempt all questions**	
a)	Explain applet life cycle with various methods and diagram.	**07**
b)	Write a note on thread life cycle with diagram.	**07**
Q-4	**Attempt all questions**	
a)	What is class and object? Explain with simple example.	**05**
b)	What is constructor? Explain with example.	**05**
c)	Discuss method overloading.	**04**
Q-5	**Attempt all questions**	
a)	Define inheritance. Explain single and multi-level inheritance.	**05**
b)	Write a note on interface with example.	**05**
c)	Discuss abstract keyword.	**04**

Q-6   **Attempt all questions**

   a) Explain if…else and for loop statement with example.   **05**

   b) What is array? Explain one dimensional array.   **05**

   c) Explain break and continue statements.   **04**

Q-7   **Attempt all questions**

   a) Define exception. Explain try …. catch block in detail.   **05**

   b) Discuss event delegation model.   **05**

   c) Explain Button control in short.   **04**

Q-8   **Attempt all questions**

   a) Write a program to print following series on screen.   **07**

      1 2 4 7 11 16 22 29 37 46

   b) Write a program to print sum and average of a single dimensional array   **07**
      of size 10.