

# C.U.SHAH UNIVERSITY

## Winter Examination-2018

Subject Name : Java Programming

Subject Code : 2TE05JVP1

Branch: Diploma (CE)

Semester : 5

Date : 05/12/2018

Time : 10:30 To 01:30

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 questions:**

**(14)**

- a) Java was first developed in \_\_\_\_\_  
i.1990                      ii.1991                      iii.1993                      iv.1996
- b) Full form of ADT is \_\_\_\_\_  
i. Abstract definition type                      ii. Abstract data type  
iii. Abstraction data type                      iv. Abstract data toolkit
- c) When the source file is successfully compiled \_\_\_\_\_ generated.  
i. output                      ii. bytecode                      iii. error                      iv. none of these
- d) Maximum value of byte is \_\_\_\_\_  
i.16                      ii.8                      iii.127                      iv.128
- e) The old name of Java was \_\_\_\_\_  
i. j language                      ii.oak  
iii. Java script                      iv. none of these
- f) The syntax of main() method of Java program is \_\_\_\_\_  
i. public void main(String args)  
ii. public static void main(String args)  
iii. static void main(String args[])  
iv. public static void main(String args[])
- g) The implicit type conversion of int data type can be done to \_\_\_\_\_ data type.  
i. byte                      ii. char                      iii. short                      iv. long
- h) if a=10,b=20,then a++ + --b= \_\_\_\_\_  
i.30                      ii.29                      iii.31                      iv.32
- i) Full form of JDK is \_\_\_\_\_  
i. Java development kit                      ii. Java definition kit  
iii. Java data kit                      iv. Java declaration kit
- j) To create an array of 5 integers which statement is correct?  
i. int a[]=int[5];  
ii. int a[5]=new a[];  
iii.int a[]=new a[5];  
iv. int a[]=new int[5];



- k) A recursion occurs when \_\_\_\_\_  
 i. a constructor calls a method  
 ii. a method calls itself  
 iii. a method calls another method  
 iv. a constructor calls another constructor
- l) To compile a Java program, \_\_\_\_\_ command is used.  
 i. javac                      ii. java                      iii. compile                      iv. debug
- m) Before doing garbage collection, \_\_\_\_\_ method is called.  
 i. main()                      ii. finalize()                      iii. final()                      iv. collect()
- n) To inherit from a class \_\_\_\_\_ keyword is used.  
 i. inherits                      ii. extends                      iii. uses                      iv. implements

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

- Q-2                      Attempt all questions                      (14)**  
 (a) Explain JVM with proper diagram.  
 (b) Explain different OOP concepts in Java in detail.
- Q-3                      Attempt all questions                      (14)**  
 (a) What is an interface? How to declare an interface in Java? Explain interface with proper example.  
 (b) What is Java? Explain buzzwords of Java.
- Q-4                      Attempt all questions                      (14)**  
 (a) Explain Wrapper class in detail.  
 (b) What is constructor? Explain parameterized constructor with suitable example.
- Q-5                      Attempt all questions                      (14)**  
 (a) What is inheritance? Explain multiple inheritance with suitable example.  
 (b) What is thread? Explain Java thread class with its methods.
- Q-6                      Attempt all questions                      (14)**  
 (a) Explain final class in Java with suitable example.  
 (b) What is method overloading in Java? Write a Java application that implements method overloading.
- Q-7                      Attempt all questions                      (14)**  
 (a) Explain different types of Java Exceptions,  
 (b) Write a short note on Super keyword of Java.
- Q-8                      Attempt all questions                      (14)**  
 (a) Write a short note on stream in Java.  
 (b) Write a Java application to make a simple calculator using switch case.





- m) ગાબ્જેજ કલેકશન પહેલાં, \_\_\_\_\_ પદ્ધતિ કહેવામાં આવે છે.  
 i. મેઈન ()                      ii. ફાઈનલાઈઝ ()                      iii. ફાઈનલ ()                      iv. કલેક્ટ ()
- n) ક્લાસમાંથી ઈન્હેરીટ કરવા \_\_\_\_\_ કીવર્ડનો ઉપયોગ કરવામાં આવે છે.  
 i. ઈન્હેરીટ્સ                      ii. એક્સટેન્ડ્સ                      iii. યુસિસ                      iv. ઈમ્પલેમેન્ટ્સ

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

- Q-2                      Attempt all questions                      (14)**  
 (a) JVM ને આકૃતિ સાથે સમજાવો  
 (b) જાવામાં વિવિધ OOP કન્સેપ્ટ સમજાવો.
- Q-3                      Attempt all questions                      (14)**  
 (a) ઇન્ટરફેસ શું છે? ઇન્ટરફેસ કેવી રીતે જાહેર કરવું? યોગ્ય ઉદાહરણ સાથે ઇન્ટરફેસ સમજાવો.  
 (b) જાવા શું છે? જાવાના બૂઝવર્ડ્સ સમજાવો.
- Q-4                      Attempt all questions                      (14)**  
 (a) રેપર વર્ગ વિગતવાર સમજાવો.  
 (b) કન્સ્ટ્રક્ટર શું છે? યોગ્ય ઉદાહરણ સાથે પેરામિટરીઝ્ડ કન્સ્ટ્રક્ટર સમજાવો..
- Q-5                      Attempt all questions                      (14)**  
 (a) ઈન્હેરિટન્સ શું છે? ઉદાહરણ સાથે મલ્ટિપલ ઈન્હેરિટન્સ સમજાવો.  
 (b) થ્રેડ શું છે? જાવા થ્રેડ ક્લાસ તેમની પદ્ધતિ સાથે સમજાવો.
- Q-6                      Attempt all questions                      (14)**  
 (a) યોગ્ય ઉદાહરણ સાથે જાવા માં અંતિમ વર્ગ સમજાવો.  
 (b) જાવામાં મેથડ ઓવરલોડિંગ શું છે? જાવા એપ્લિકેશન લખો જે મેથડ ઓવરલોડિંગ લાગુ કરે છે.
- Q-7                      Attempt all questions                      (14)**  
 (a) જુદા જુદા પ્રકારના જાવા અપવાદોને સમજાવો.  
 (b) જાવામાં સુપર કીવર્ડ પર ટ્રેકનોંધ લખો.
- Q-8                      Attempt all questions                      (14)**  
 (a) જાવામાં સ્ટ્રીમ પર ટ્રેકનોંધ લખો.  
 (b) સ્વીચ કેસનો ઉપયોગ કરીને સરળ કેલ્ક્યુલેટર બનાવવા માટે જાવા એપ્લિકેશન લખો.

