COMPUTER APPLICATIONS

Semester-2   (2022)

Maximum Marks: 50

Time allowed: One and a half hours

Answers to this Paper must he written on the paper provided separately.

You will not be allowed to write during the first 10 minutes.

This time is to be spent in reading the question paper.

The time given at the head of this Paper is the time allowed for writing the answers.

Attempt all questions from **Section- A** and any three questions from **Section- B.**

The marks intended for questions are given in brackets [ ]

Section A

(Attempt all questions)

Question 1.

Choose the correct answers to the questions from the given options. (Do not copy the question. Write the correct answer only.)   **[10]**

(i)   Return data type of isLetter(char) is...

(a)   Boolean   (b)   boolean

(c)   bool   (d)   char

(ii)   Method that converts a character to uppercase is.......

(a)   toUpper()

(b)   ToUpperCase()

(c)   toUppercase()

(d)   toUpperCase(char)

(iii) Give output of the following String methods:

"SUCESS".indexOf('S')+"SUCCESS". last IndexOft'S')

(a)   0   (b)   5

(c)   6   (d)   -5

(iv) Corresponding wrapper class of float data type is.......

(a)   FLOAT   (b)   float

(c)   Float   (d)   Floating

(v) …....class is used to convert a primitive data type to its corresponding object.

(a)   String   (b)   Wrapper

(c)   System   (d)   Math

(vi) Give the output of the following code: System.out.println("Good".Concat("Day"));

(a)   GoodDay   (b)   Good Day

(c)   Goodday   (d)   goodDay

(vii) A single dimensional array contains N elements. What will be the last subscript?

(a)   N   (b) N-1

(c)   N -2   (d) N+1

(viii) The access modifier that gives least accessibility is:

(a)   private   (b)   public

(c)   protected   (d) package

(ix)   Give the output of the following code :

String A ="56.0", B = "94.0";

double C = Double.parseDouble(A);

double D = Double.parseDouble(B);

System.out.println((C+D));

(a)   100   (b)   150.0

(c)   100.0   (d)   150

(x) What will be the output of the following code?

System, out. println("Lucknow". substring (0,4));

(a)   Lucknow   (b) Luckn

(c)   Luck   (d) luck

Section-B

(Attempt any four questions from this Section.)

Question 2.

Define a class to perform **binary search** on a list of integers given below, to search for an element input by the user, if it is found display the element along with is position, otherwise display the message "Search element not found".   **[10]**

    2, 5, 7,10,15, 20, 29, 30, 46, 50

Question 3.

Define a class to declare a character array of size ten. accept the characters into the array and display the characters with highest and lowest ASCII (American Standard Code for Information Interchange) value.   **[10]**

EXAMPLE :

INPUT:

'R', 'z', 'q', 'A', 'N', 'p', 'm', 'U', 'Q', 'F'

OUTPUT :

Character with highest ASCII value = z

Character with lowest ASCII value = A

Question 4.

Define a class to declare an array of size twenty of double datatype, accept the elements into the array and perform the following :   **[10]**

•   Calculate and print the product of all the elements.

•   Print the square of each element of the array.

Question 5.

Define a class to accept a string, and print the characters with the uppercase and lowercase reversed, but all the other characters should remain the same as before.   **[10]**

EXAMPLE: INPUT :   WelCoMe_2022

            OUTPUT :   wELcOmE_2022

Question 6.

Define a class to declare an array to accept and store ten words. Display only those words which begin with the letter 'A' or 'a' and also end with the letter 'A' or 'a'.

EXAMPLE :

Input : Hari, Anita, Akash, Amrita, Alina, Devi Rishab, John, Farha, AMITHA

Output: Anita

        Amrita

        Alina

        AMITHA

Question 7.

Define a class to accept two strings of same length and form a new word in such a way that, the first character of the first word is followed by the first character of the second word and so on. **[10]**

Example :   Input string 1 – BALL

             Input string 2 – WORD

OUTPUT :   BWAOLRLD