SEMESTER 2

THE SECOND PRE-BOARD EXAMINATION 2021-22

Class X (ICSE) COMPUTER APPLICATIONS

Time: One and a half hours Instructions:

Maximum marks: 50

- Answers to this paper must be written on the answer script 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 the paper is the time allowed for writing the answers.
- All subsections of each question must be answered in the correct order.
- All working including rough work should be done on the same sheet as the rest of the answer.
- Please do not write anything on your question paper except your name and roll number.
- The intended marks for questions or parts of questions are given in the brackets [].
- Do not copy the questions on your answer scripts. Copy the correct question number.
- Answer all questions from Section A and any four questions from Section B.

SECTION A

(Attempt all questions)

Question 1

Choose the correct answer to the questions from the given options. (Do not copy the questions. Write the correct answer only.)

[10]

- (i) When Primitive data type is converted to the corresponding object of its class, it is known as:
 - (a) Boxing

(b) Explicit Type Conversion

(c) Unboxing

- (d) Implicit Type Conversion
- (ii) The value returned by Integer.parseInt("- 682") will be:
 - (a) 682

(b) 682.0

(c) "- 682"

- (d) 682
- (iii) The package that contains wrapper classes is:
 - (a) java.util

(b) java.lang

(c) java.io

- (d) java.java
- (iv) Identify the correct array declaration statement:
 - (a) int arr[10];

(b) int arr[] = new int[10];

(c) int arr[i] = 10;

(d) int arr[10] = new int[];

<pre>static String name int age;</pre>	;				
	;				
int age;					
public void main ((int cls)				
{					
char result;					
}					
}	. 1 C	riable			
			cls	(d) re	sult
(a) name	(b) age	(0)	CIS		
Output of the following	ng set of statements will be:				
String str = "LUCKNO	OW";				
		th("OV	V"));		
			6 false	(d) 7	true
(a) office	(0) / 141100				
Output of the following	ng program snippet will be:				
String abc = "EXAMI	INATION";				
String str1 = abc.subs	tring (5,11);				
String str2 = abc.subs	tring (5);				
System.out.println(str	cl.length() + str2.length());				
(a) 66	(b) 6+6	(c)	12	(d) 7	
) What will be the outp	out of the following set of Jav	a state	ements?		
int a[] = $\{2, 3, 4, 5, 6\}$	5};				
System.out.println (a	[1+2] + a[1] + a[2]);				
(a) 3 4 3 4	(b) 34 3 4	(c)	534	(d) 1	2
A linear search in arr	ay				
(a) can be used only	with sorted arrays				
(b) can be used only	with unsorted arrays				
(c) can be used with	both sorted as well as unsor	ted an	rays		
(d) cannot be used v	with the arrays.				
	From the above class (a) name Output of the following String str = "LUCKNown System.out.println(string abc = "EXAM" String abc = "EXAM" String str1 = abc.subs String str2 = abc.subs System.out.println(string abc = "EXAM" (a) 66 What will be the output int a[] = {2, 3, 4, 5, 6 System.out.println(arm (a) 3 4 3 4 A linear search in arm (a) can be used only (b) can be used only (c) can be used with	From the above class structure, identify instance variation (a) name (b) age Output of the following set of statements will be: String str = "LUCKNOW"; System.out.println(str.length() + " " + str.endsWind (a) 6 true (b) 7 false Output of the following program snippet will be: String abc = "EXAMINATION"; String str1 = abc.substring (5,11); String str2 = abc.substring (5); System.out.println(strl.length() + str2.length()); (a) 66 (b) 6 + 6 What will be the output of the following set of Javint a[] = {2, 3, 4, 5, 6}; System.out.println (a[1 + 2] + a[1] + a[2]); (a) 3 4 3 4 (b) 34 3 4 A linear search in array (a) can be used only with sorted arrays (b) can be used only with unsorted arrays	From the above class structure, identify instance variables (a) name (b) age (c) Output of the following set of statements will be: String str = "LUCKNOW"; System.out.println(str.length() + " " + str.endsWith("OV (a) 6 true (b) 7 false (c) Output of the following program snippet will be: String abc = "EXAMINATION"; String str1 = abc.substring (5,11); String str2 = abc.substring (5); System.out.println(strl.length() + str2.length()); (a) 66 (b) 6+6 (c) What will be the output of the following set of Java states int a[] = {2, 3, 4, 5, 6}; System.out.println (a[1 + 2] + a[1] + a[2]); (a) 3 4 3 4 (b) 34 3 4 (c) A linear search in array (a) can be used only with sorted arrays (b) can be used only with unsorted arrays (c) can be used with both sorted as well as unsorted arrays	From the above class structure, identify instance variable. (a) name (b) age (c) cls Output of the following set of statements will be: String str = "LUCKNOW"; System.out.println(str.length() + " " + str.endsWith("OW")); (a) 6 true (b) 7 false (c) 6 false Output of the following program snippet will be: String abc = "EXAMINATION"; String str1 = abc.substring (5,11); String str2 = abc.substring (5); System.out.println(strl.length() + str2.length()); (a) 66 (b) 6+6 (c) 12 What will be the output of the following set of Java statements? int a[] = {2, 3, 4, 5, 6}; System.out.println (a[1 + 2] + a[1] + a[2]); (a) 3 4 3 4 A linear search in array (a) can be used only with sorted arrays (b) can be used with both sorted as well as unsorted arrays (c) can be used with both sorted as well as unsorted arrays	From the above class structure, identify instance variable. (a) name (b) age (c) cls (d) recompleted following set of statements will be: String str = "LUCKNOW"; System.out.println(str.length() + " " + str.endsWith("OW")); (a) 6 true (b) 7 false (c) 6 false (d) 7 Output of the following program snippet will be: String abc = "EXAMINATION"; String str1 = abc.substring (5,11); String str2 = abc.substring (5,11); String str2 = abc.substring (5); System.out.println(strl.length() + str2.length()); (a) 66 (b) 6 + 6 (c) 12 (d) 7 What will be the output of the following set of Java statements? int a[] = {2, 3, 4, 5, 6}; System.out.println (a[1 + 2] + a[1] + a[2]); (a) 3 4 3 4 (b) 34 3 4 (c) 534 (d) 1 A linear search in array

- (x) Which of the following methods will return true if the character argument passed to it is a space?
 - (a) Character.IsSpace()

- (b) Character.isBlank()
- (c) Character.isWhitespace()
- (d) Character.isBlankspace()

SECTION B

(Attempt any four questions)

Question 2 [10]

Define a class in Java to declare an integer array of size n and accept a sorted list of integers in ascending order into the array.

Input a number and search for it in the array using binary search technique.

Display the index of the element if it is found otherwise display the message "VALUE NOT FOUND".

Question 3 [10]

A company does quality testing of electronic goods and provides ratings to them in the form of A, B, C, D and E. Define a class in Java to accept ratings of 50 electronic goods in an array.

From the array count and print the number of goods which have got rating as 'A' and also print the count of those which have got rating as 'E'.

Question 4 [10]

Define a class in Java to accept daily temperatures of Lucknow for the month of December in an array and perform the following:

- Find and print the hottest day and coldest day of December.
- Calculate and print the average temperature of the month.

Question 5

Define a class in Java to accept two strings, convert them into uppercase. Find and print whether string2 is a part of string1 or not. If string2 is a part of string1 then print the index of string1 from where string2 begins.

Example 1:

string1 = 'acknowledge"

string2 = "Now"

Output: NOW IS A PART OF ACKNOWLEDGE.

It begins at index 3.

Example 2:

sring1 = "acknowledge"

string2 = "Won"

Output: NO, WON IS NOT A PART OF ACKNOWLEDGE.

[10] Question 6

Define a class in Java to accept a string and convert it into uppercase. Find and print whether in the string any letter is repeated in sequence (double letter) or not.

Example 1 string = RABBIT

Yes letters are repeated in sequence Output:

Example 2 string = PORCUPINE

Output: No letters are not repeated in sequence

Question 7 [10]

Define a class in Java to accept and store the list of 10 names in an array. Print the names with even number of characters