PRE- BOARD II 2025-26
CLASS X
COMPUTER APPLICATIONS
(Two Hours)
Maximum Marks:100

Answers to this paper must be written on the paper provided separately.
*You will **not** be allowed to write during the first **15** 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.
This paper is divided into two sections.
*Attempt **all** questions in **Section A** and **any four** questions from **Section B**.*
The intended marks for questions or parts of questions are given in brackets[].

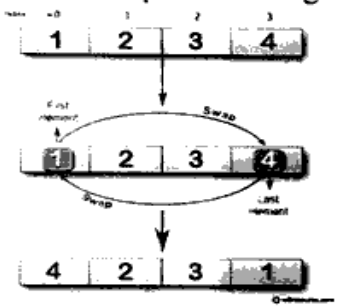
SECTION A [40 Marks]

(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.) ***[20]***

1.Name the technique of sorting depicted in the picture.



a. Binary b. Linear c. Bubble d. Selection

2. The Library function isWhiteSpace() belongs to which wrapper class?
a. String b. Char c. Character d. char

3. The output of java statement: System.out.print(Math.ceil(29.9)+Math.floor(30.5)) is:
a. 60.0 b. 60 c. 60.4 d. 0.0

4.The error in a program that causes it to operate incorrectly but does not terminate abnormally.
a. Syntax b. Run time c. Logical d. None of these

5. Which of the following statements is incorrect for the constructor?
a. They do not return any value. b. They are always public.
c. Same name as class name d. They can be invoked separately.

6. The value that is stored in variable **ch** after executing the following statement is ___.
char ch=(char)32;
a. '#' b. '9' c. 'F' d. ' '

7. Given: int arr[ ] = {14,27,49,56,84};
What technique can be used to search the specific element?
a. Binary b. Linear c. both binary & linear d. Bubble

8.The loop : for(char ch='f'; ch> 'b' ; ch- -) produces:
a.Letters from f to c b. Letter from f to b c. Letters from f to a d. Number from 102 to 98

9. The parameters used in the method header are called_____ parameters.
a. Actual b. Formal c. Global d. Local

10. int x=5; double m=89.9; c=x+m; This expression is an example of____.
a. Pure expression b. Mixed expression c. implicit expression d. Equality

11. Which of the following is the valid initialisation statement?
a. int a= '3'; b. int b=45.0/2; c. int c=(int) b; d. int d=true;

12. If the outer loop executes for 2 times and the inner loop for 3 times, and each time it print a

symbol '*' , then how many times '*' will be printed?
a. 5 b. 6 c. 9 d. 4

13. Write the output:
String s1= "abc"; String s2= "ABC"; System.out.println(s1.comapreTo(s2)) :
a. 0 b. -64 c. 32 d. -32

14. The entity that denotes a storage location in the memory used to store a data value is:
a. literal b. array c.variable d. keyword

15. In the array of x[10] , the 5th element is accessed using _____.
a. Num[6-1] b. Num[5] c. Num[5-1] d. 6=Num[]

16. Wrapper classes provide a different way to use the primitive data types as_____.
a. classes b. objects c. interfaces d. packages

17. Indexing values of array elements can be _____ integer value.
a. positive b. negative c. string d. double

18. Identify the correct array declaration statement.
a. int a[5]; b. int a[]=new a[5] ; c. int a[i] =5; d. int a[] =new int[5];

19. Assertion: In call by value, the actual parameters remain intact.
Reasoning: Any change made in formal parameters is reflected onto actual parameters.
a. Both Assertion(A) and Reason (R) are true,and Reason (R) is a correct explanation of Assertion(A).
b. Both Assertion(A) and Reason (R) are true,and Reason (R) is a not correct explanation of Assertion (A).
c. Assertion(A) is true and Reason (R) is false.
d. Assertion(A) is false and Reason(R) is true.

20. Assertion:Private access specifier allows access to class members from any subclass.
Reasoning: Private members are only accessible within the same class.
a. Both Assertion(A) and Reason (R) are true, and Reason (R) is a correct explanation of Assertion(A).
b. Both Assertion(A) and Reason (R) are true, and Reason (R) is not correct explanation of Assertion(A).
c. Assertion(A) is true and Reason (R) is false.
d. Assertion(A) is false and Reason (R) is true.

Question 2.

1. Evaluate : ans=(y<x)? (x- -* ++y + 10) : x+ z; if x, y, z is 15,4,10 respectively. **[2]**

2. Write a Java statement to store the sum of m raise to n and cube root of p in a double type of variable. **[2]**

3. Convert the following for loop into exit controlled loop. **[2]**

```
for(a=10;a>=1;a - -)
System.out.println(a*2);
System.out.println(a+5);
```

4. Give the output of the following: **[2]**

```
int x[]={12,-13, 8,-11};
System.out.println(x.length-1*x[3]);
System.out.println(x[1+2]+2);
```

5. Harry executes the following program segment to check the equality of strings and gets some errors. Find the errors in the given program and rewrite the correct program. *[2]*

```
String s="Character";
boolean s1=s.compareto("characater");
```

6. Give the output of the following,also state the java concept implemented in the given code. *[2]*

```
public class find{
public static void main()
{ int p= -121;
 Double p1=new Double(a);
 System.out.println(Math.sqrt(Math.abs(p1)); }}
```

7. Write a java statement for method signature of function surface() which has one boolean value and one char value. [2]

8. Determine the error in the following statements of java and correct them. [2]

```
char c[5] ={4,6,7,8,9};
```

9. Write the output of the following: [2]

```
String p= "peacock",q= "peahen";
```

a. System.out.println(p.charAt(1)= =q.charAt(4));

b. System.out.println(p.equalsIgnoreCase(q));

10. Correct the following code and answer the question that follow: [2]

```
class format
{       char c;
        double a;
        format()
        { c= ' ';
          a=0; }
        format(double m, char ch)
        {  m=a;  ch=c;} }
```

Write the statements that are used for parameterized constructor and default constructor?

SECTION B (60 Marks)

*Attempt **any four** questions from this section.*

*The answer in this Section should consist of the **programs in either Blue J environment** or any **program environment with Java as the base.***

*Each program should be written using **Variable descriptions/Mnemonic Codes** so that the logic of the program is clearly depicted.*

*Flow-charts and Algorithms **are not required.***

Question 3. [15]

A private Cab service company provides service with in the city at the following rates:

DISTANCE COVERED	AC CAR	NON AC CAR
Up to 7km	Rs 150/- per km	Rs.120/-per km
Next 7 km or more	Rs. 10/- per km	Rs.08/-per km

Design a class **CabService** with the following description:

Member Variables:

String car_type	-	To store the type of car(AC or NON AC).
double km	-	To store the kilometer travelled.
double bill	-	To calculate and store the bill amount.

Member Methods:

CabService()	-	Default constructor to initialize data members. String data member to " " and double data member to 0.0
void accept()	-	To accept car_type and km using Scanner class.
void calculate()	-	To calculate the bill as per rules given above.
void display()	-	To display the bill as per following format.

CAR TYPE: _____
KILOMETER TRAVELED: _____
TOTAL BILL. _____

Write a main method to create an object and invoke the above member methods

Question 4. **[15]**

Write a program to accept a number from the user. Check and print if it is an OddPal or not.(A number is said to be OddPal when the number is a palindrome number(a number is a palindrome if it is equal to reverse) and the sum of its digits is an odd number).
Example: 171 = is a palindrome number.
Sum of digits - 1+7+1=9 Which is an odd number.

Question 5 **[15]**

Write a program to input (single digit or two digits number) and store them in a double dimensional array of size 3 x 3. Find the product of one-digit numbers and the sum of two-digit numbers entered. Display them separately.

Sample Input :

50	2	8
4	12	3
15	7	10

Sample output: Product of one digit numbers: 2*8*4*3*7 = 1344
Sum of two digits numbers: 50+12+15+10 = 87

Question 6 **[15]**

Write a program to accept a String.Make a new string after removing all the spaces. and print the number of digits, alphabets, and special characters in the new string.
Sample Input: !Single @ Double @ 2026
Sample Output: Number of digits=4
Number of Alphabets=12
Number of Special =3

Question7 **[15]**

Define a class to overload the method display as follows:

(i) void display():To print the following pattern

3 3 3 3
5 5 5 5
7 7 7 7

(ii) void display(char x, char y)–with two character arguments. It prints all the characters between the given range of characters along their ASCII value.

Question 8 **[15]**

Write a program to accept years and population in two different single dimensional arrays of integer type of size 10. On the bases of population , arrange both the arrays in ascending order using bubble sort technique. Display the sorted arrays.