FEDERAL BOARD OF INTERMEDIATE AND SECONDARY EDUCATION H-8/4, ISLAMABAD

COMPUTER SCIENCE HSSC
(National Curriculum 2009)
PRACTICAL EXAMINATION 2024

S #	List of Practicals
Recognition and Steps	Recognize Internal or external components of system unit.
	Steps of task related to computer system.
Database	Create two tables with at least five fields having different data types, also specify appropriate primary keys.
	Create relationship between them Enter at least five records using forms
	Design a query or report depending on specific criteria
C++	Program using: cin, cout, escape sequences, setw
	Solving arithmetic problems to calculate interest, percentage, average, ratio, grades etc.
	Calculate area / volume / perimeter of some basic geometrical shapes
	Comparing numbers
	Solving quadratic equation
	Finding out the GCD and LCM
	Reading a number and find out whether it is prime or composite
	Generating and summing simple series
	Sorting a list of items (numeric / string)
	Searching an item out of a list of items (numeric /string)
	Finding addition and multiplication of matrices (Maximum 3 x 3)
	Finding the transpose of a matrix (Maximum 3 x 3)
	Reversing a given number / string
	Generating random numbers for a dice using function
	Finding out a specific day of a week for a given data using function
	Sum two and/or three numbers of different data types
	Display the address and the value of a variable using pointer
	Create and display student object with data members as name, age, and class etc.
	Create and read a data file

Questions to be asked in place of Practical notebook and viva voce.   (Total Marks 10)
Write answers of any five (05) of the following questions on your answer sheet.

Q.NO	Questions	Marks

1.	Convert the following while loop to a for loop such that the output remains same.
	
	int i = 20;
	while (i > 0)
	{
	    cout << i << "\t";
	    i = i - 2;
	}
		(2)

2.	Rewrite the following using **if-else** statement: cout << ((marks >= 50) ? "Pass" : "Fail") ;	**(2)**

3.	What does the following program segment display?
	        int values [ ] = {3, 16, 22, 7, 36};
	        cout << **values [2]** << "\n";
	        cout << **values [1]**++ <<"\n";
		(2)

4.	What will be the output of following program segment?
	        {
	            float x = 46, y;
	            float *Px;
	            Px = &x;
	            y = *Px
	            cout << "*Px = "<< *Px << endl;
	            cout << "y = "<< y << endl;
	        }
		(2)

5.	What will be the value of **'y'** after executing the following code?
	            int x = 5, y = 5;
	            (x > y) ? y++ : y - -;
	            cout<<"y = "<< y;
		(2)

6.	What is wrong with the following switch statement?
	        switch (temp)
	        {
	            case temp < 0 : cout << "Temp is negative.\n";
	                        break;
	            case temp = = 0: cout << "Temp is zero.\n";
	                         break;
	            case temp > 0 : cout << "Temp is positive.\n";
	                        break;
	        }
		(2)

7.	Correct the following code segment:
	        void area (int length = 30, int width)
	        {
	            return length * width;
	        }
		(2)

Note: The above questions will be asked from students as replacement of the marks of Practical Notebook and Viva Voce. The rest of the conduct/format of practical examination will continue as per practice in vogue.