FBISE PRACTICAL BASED ASSESMENT (PBA)

COMPUTER SCIENCE HSSC-II

(Curriculum 2009)

Guidelines/instructions for teachers/paper setters:

i. There will be two sections in PBA paper, Section-A and B. Each section has two questions (having parts).

ii. In Section-A, Question No. 1 and 2 will be based on C++ Language practicals taken from Part-I.

iii. In Section-B, Question No. 3 and 4 will be based on C++ practicals taken from Part-II.

iv. Weightage of Part-I practicals is 60% and while weightage of Part-II is 40% in the PBA paper.

v. In Practical Based Assessment (PBA), there will be no marks for practical notebooks and viva voce. However, students may record practical activities on any type of plain papers/ worksheets /practical folder for their future memory of all aspects of practical performance to attempt the PBA Examination amicably.

vi. It may be noted that performance of all the prescribed practical activities is mandatory in the Computer Lab during the whole academic year and only those students will be able to attempt the PBA who will have performed the practical activities in the Computer Lab as per requirement of each practical.

vii. MCQs will not be asked in PBA paper.

viii. The 0.5 mark questions will not be asked in any section of PBA paper.

Computer Science HSSC-II

List of Practical activities: Based on Curriculum 2009

C++ Language

PART-I
> Installation of C++ Compiler > Familiarization with IDE of C++ Compiler > Write some programs using: • Cin • Cout • Escape sequences • Setw > Write program for problems like: • Solving arithmetic problems to (calculate interest, percentage, average, ratio, grades etc.) • Calculating area / volume / perimeter of some basic geometrical shapes • Comparing numbers / strings • Solving quadratic equation • Finding out the GCD and LCM. • Reading a number and find out whether it is a prime or composite • Sorting a list of items (numeric / string) • Searching an item out of a list of items (numeric /string) • Generating random numbers for a dice using function • Finding addition and multiplication of a matrices (Maximum 3 x 3) • Finding the transpose of a matrix (3 x 3) • Generating and summing simple series • Reversing a given number / string
PART-II
> Write program for problems like: • Finding out a specific day of a week for a given data using function. > Write a programme to sum two and three numbers of different date types > Write a programme to display the address and the value of a variable using pointer > Writer a programme to create and display student object with data members as name, age and class > Write a programme to create and read a data file

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H-8/4, ISLAMABAD

Model Questions Paper Computer Science HSSC-II
Practical Based Assessment (PBA) (2025)

Total Marks: 25 **Time allowed: 1 Hour**

Roll Number						
0	0	0	0	0	0	0
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

Name of Examination: _____

Centre Code: _____

Date: _____

Sig. of Dy. Supdt. _____

Instructions for students:

1. Fill all the entries including roll number.
2. Carefully read all the questions and then answer them at their specified spaces.
3. Use black or blue ball point.
4. No additional material or calculator is required.
5. Marks are mentioned against all questions in the brackets [ ].
6. Students may use the last page for rough work (if required).
7. Answer the questions as per given instructions.

Section-A [Marks:15]

Question No. 1: **[8 marks]**

The principal amount is the initial sum of money that is invested. Profit refers to the financial gain or return on the principal amount.

Write a C++ program that can be used to calculate profit. Your program must input principal amount in rupees and tenure in years. Calculate and display the profit based on the following conditions:

i. If Principal amount is less than 25000 and Tenure is less than 10 years
   Profit = 5% of Principal Amount
ii. If Principal amount is equals to 25000 and Tenure is equals to 10 years
   Profit = 7% of Principal Amount
iii. If Principal amount is greater than 25000 and Tenure is greater than 10 years
   Profit = 10% of Principal Amount

Using and reading correct type of data: [2 marks]
Correct usage of selection structure: [3 marks]
Correct usage of operators and calculation: [2 marks]
Correct usage of output statement : [1 mark]

Question No. 2: **[7 marks]**

Write a C++ program that lets the user enter the total rainfall for each of 12 months into an array of doubles. The program should calculate and display the total rainfall for the year, the average monthly rainfall, and the months with the highest amount.

Using and reading correct type of data: [2 mark]
Correct usage of calculation: [3 marks]
Correct usage of output statement : [2 mark]

Section-B [Marks:10]

Question No. 3: Write a C++ program that have a class named "**triangle**" and calculate the area of triangle with following conditions: **[2+3 Marks]**

i. Two private data members base and height
ii. Member function **area( )**.

Question No. 4: What will be the output of the following program segments? **[2+3 marks]**

No.	Program Segment	Output

(i)	int x=100,*myptr;
	myptr=&x;
	cout<<myptr<<"\n"<<*myptr;	

(ii)	int power(int n)
	{
	return (n*n*n*n);
	}
	int main()
	{
	int n=163;
	int result=0;
	int remainder;
	while(n!=0)
	{
	remainder = n % 10;
	result = result + power(remainder);
	n = n / 10;
	cout<<"\n Result:"<<result;
	}
	return 0;
	}	