

BOARD OF SECONDARY EDUCATION, KARACHI

Secondary School Certificate (S.S.C.) Annual Examination

Class X (Science Group)	Computer Studies	2023	English Medium
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Max. Marks: 60 | Time: 3 Hours | (Regular/Private)

SECTION "A" — MULTIPLE CHOICE QUESTIONS (M.C.Qs) (Marks: 12)

NOTE: (i) Attempt all the Questions of this section. (ii) Do not copy down the part questions. Write only the answer against the proper number of the questions and its part according to the question paper. (iii) Each question carries 1 mark.

Q.1 Choose the correct answer for each from the given options:

(1)	The BASIC language developed in the: ☆ Mid-40s ☆ Mid-50s ☆ Mid-60s ☆ Mid-70s
(2)	It deletes the program currently in memory and clears all variables: ☆ CLS ☆ KILL ☆ NEW ☆ DELETE
(3)	Errors detected by the use, are called: ☆ Syntax errors ☆ Logical errors ☆ Runtime errors ☆ None of these
(4)	AND, OR and NOT operators are known as: ☆ Arithmetic operators ☆ Relational operators ☆ Logical operators ☆ All of these
(5)	The functions, defined by the program, are called: ☆ Built-in-function ☆ User-defined function ☆ Sub-functions ☆ None of these
(6)	If we are to write more than one statement in a line we use a: ☆ Colon (:) ☆ Semi colon (;) ☆ Comma (,) ☆ Bar (-)
(7)	The computer language has its own set of words, that is called: ☆ Command ☆ Statement ☆ Function ☆ Reserved words
(8)	This command is used to exit from BASIC and to return to operating system: ☆ CLEAR ☆ KILL ☆ SYSTEM ☆ NEW
(9)	The process of finding and removing the errors in a computer program, is called: ☆ Deleting ☆ Debugging ☆ Coding ☆ None of these
(10)	The computer receives the numerical and string data during program execution with the help of: ☆ LET statement ☆ REM statement ☆ INPUT statement ☆ PRINT statement
(11)	The screen output is called: ☆ Softcopy ☆ Software ☆ Hardcopy ☆ Hardware
(12)	A statement that assigns a value to a variable is: ☆ REM statement ☆ PRINT statement ☆ LET statement ☆ LOCATE statement

SECTION "B" — SHORT QUESTION ANSWER (Marks: 24)**NOTE:** Attempt any **EIGHT** questions from this section. Each question carries equal marks.

Q.2	How do comma(,) and semicolon (;) affect the output of PRINT statement?							
Q.3	Define computer programming language.							
Q.4	What will be the output of the following program? Program listing not printed on the source sheet —							
Q.5	Rewrite the following statements after removing the errors: 105 FOR A\$ = A TO Z 2.4 IF I = 30 THEN END -12 RAM practical-1							
Q.6	What is the difference between Direct mode and Indirect mode?							
Q.7	Convert the following algebraic expression into GWBASIC formulae" <table><tr><td>(i)</td><td>$a^2 + 2ab + b^2$</td></tr><tr><td>(ii)</td><td>$\frac{(\frac{1}{2}) + x^2}{x^2(\frac{1}{2})}$</td></tr><tr><td>(iii)</td><td>$\frac{-b\sqrt{b^2 - 4ac}}{2a}$</td></tr></table>	(i)	$a^2 + 2ab + b^2$	(ii)	$\frac{(\frac{1}{2}) + x^2}{x^2(\frac{1}{2})}$	(iii)	$\frac{-b\sqrt{b^2 - 4ac}}{2a}$	
(i)	$a^2 + 2ab + b^2$							
(ii)	$\frac{(\frac{1}{2}) + x^2}{x^2(\frac{1}{2})}$							
(iii)	$\frac{-b\sqrt{b^2 - 4ac}}{2a}$							
Q.8	Write the purpose of the following: LIST, AUTO, LOCATE							
Q.9	What is the difference between Counter loop and Controlled loop?							
Q.10	READ-DATA statement is used to assign values to the variables. Explain it with example.							
Q.11	What is the difference between KILL and NEW commands in the BASIC language?							
Q.12	Define Array.							
Q.13	Define language translator.							

SECTION "C" — DETAILED ANSWER QUESTION (Marks: 24)**NOTE:** Attempt any **FOUR** questions from this Section. All questions carry equal marks.

Q.14	What is the difference between High Level Languages and Low Level Languages?	
Q.15	Explain operators and its types.	
Q.16	Write a program to display even numbers from 2 to 20, also draw a flowchart.	
Q.17	Define variable and describe its types.	
Q.18	Define function and describe its types.	
Q.19	Write all forms of the following abbreviations: (any six)	
	(i) GUI (ii) BIT (iii) RAM (iv) BIOS (v) CGA (vi) BASIC (vii) DBMS (viii) CPU (ix) IBM	

Notes on this reproduction

- Typeset by Tayarri from the printed question paper; no answer key is reproduced. The source sheet is pre-ticked by the publisher, so options are given unmarked.
- Source sheet is a guide reprint: no board monogram and no paper code are printed.
- **Incomplete question.** Section B question 4 asks for the output of "the following program", but no program listing is printed anywhere on the source sheet — the next line is question 5. The gap is marked rather than filled in.
- This paper is set on GW-BASIC throughout, unlike the 2022 and 2025 papers, which are set on C++ and Scratch. The 2023 sheet also carries a *(Regular/Private)* line under its heading and gives no per-question marks, stating only that questions carry equal marks.
- Board spellings kept verbatim: "Errors detected by the use" (user), "more than one s tatement" (broken word), and "albegraic" with the stray closing quote in Section B question 7.
- Only an English-medium printing was available. If you supply the Urdu-medium sheet it will be published as a separate file.