ANSWER KEY

FIRST YEAR HIGHER SECONDARY MARCH 2026

PART III

SUBJECT: COMPUTER APPLICATION(COMMERCE)

CODE NO: FY 146 **VERSION:** -

60 SCORE **2 HOURS**

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
1		16	1	1
2		Accumulator	1	1
3		Keywords	1	1
4		0	1	1
5		Gateway	1	1
6		Google	1	1
7		A is 76 B is 3E	1 x 2	2
8		ASCII code is 8 bit code / 7 bit code ASCII code can represent only 256 characters. (Any two valid points) Unicode can represent 2^{16} characters. Unicode is 16 bit code (Any two valid points)	1/2x 2 1/2x 2	2
9		• Reuse • Recycle • Incineration • Land filling	1/2 x 4	2
10		Yes, Documentation	1 x 2	2
11		•Keyword •Identifier •Literal / Constant •Operator •Punctuator	2	2
12		x = 10 is value 10 assign to x / Assignment operator	1	2

		x==10 is comparing x with 10 for equal Relational operator	1	
13		L - Value : Memory address In the normal situation, the address is given implicitly by the compiler. R - Value : Content of the memory location. Type and size of the content depends on the data type of the variable.	1 1	2

14		x= x-1;
		x--;
		- - x ;
		x - = 1;
		(Any two statements)
			1 x 2	2

15		switch(expression)
		{
		case value1: statement(s);
		break;
		case value1: statement(s);
		break;
		, , ,
		, , ,
		default: statement(s);
		}
		or
		Partially correct syntax or Example
			2
			
			(or)
			1
				2

16		* Scalability • Resource sharing • Price performance ratio • communication • Reliability (Any four)	1/2 x 4	2
17		Http :// --> Protocol www . dhsekerala . gov .in -->Domain Name / index .html ----> File Name (Any two)	1 x 2	2
18		• Electronic B ook R eader (E - B ook • Reader) • e - Text • e - Content • Online Chat • Educational TV channels (Any Four Tools)	1/2 x 4	2
19		Binary equivalent of 119 = $(1110111)_2$	1	3

		In 8 bit format : 01110111 it's 1's complement is : 10001000 2's complement: ie (10001000 +1) = **10001001**	1 1	
20		<table><tr><th>RAM (Random Access Memory)</th><th>ROM (Read Only Memory)</th></tr><tr><td>It is faster than ROM</td><td>It is a slower memory .</td></tr><tr><td>it stores the operating system , application programs and data temporarily .</td><td>It stores the program required to boot the computer .</td></tr><tr><td>It allows reading and writing .</td><td>Allows reading only .</td></tr><tr><td>It is volatile , i . e . it will lose its data if the power is turned off .</td><td>It is non - volatile , i . e . it keeps its data even if the power is turned off .</td></tr></table> (Any three comparison)	1x3	3
21		(Correct flowchart to check given number is even or odd).(or) Partially correct flowchart/symbols	3 (or) 2	3
22	a b c	a.Syntax errors occur when the rules / syntax of the language are not followed /Example b. Logical errors occur due to improper planning of the program logic ./Example c. Run time errors occur during program execution ./Example	1 1 1	3
23	a b	a. Literals are the tokens used in C++ to represent data items that never change their value during the program run /Constants . b. 1) Integer literal eg : 10 2) Floating point literal eg : 10.75	1 2	3

			3) Character literal eg : ' a ' 4) String literal eg :" a " (Any valid example can be given)		
24			**Valid :** Stud_Name , N3, n1 → **Invalid:** else : keyword if : keyword Reg No : ~~special character~~ white space in the identifier. 2b : stating character is number.	1 2 (½×4)	3

25			#include < iostream >
			using namespace std ;
			int main ()
			{
			int a,b,L ;
			cout <<" Enter Two Numbers ";
			cin >> a >>b;
			if(a>b)
			L=a;
			else
			L=b;
			cout <<L ; return 0;
			}
			(input operator >> carries 1, output operator carries 1 and assigned statements carries ½ mark, declaration statement ½ mark)
				3	3

26			**Entry controlled loop:** The test expression is evaluated before executing the loop body . Execution of the loop body is not guaranteed . Eg : for / while **Exit controlled loop:** The test expression is evaluated only after executing the loop body once . The loop body will execute at least once . Eg : do ... while	11/2 x2	3
27			• Bring people together • Plan and organize events		3

		• Business promotion • Social skills (any three)	1 x 3	
28		a. **Hacking:** technical attempt to manipulate normal behaviour of a network or device. (Any ~~three~~ valid points) b. **Phishing:** an attempt to acquire information such as usernames , passwords and credit card details by posing as the original website . (Any ~~three~~ valid points)	11/2 x 2	3
29		1. State Data Centre / SDC 2. State Wide Area Network (SWAN)/ Kerala State Wide Area Network / KSWAN 3. Common Service Centre / CSC / Akshaya centre	1 1 1	3
30	a b	• Memory Management . • Process Management . • Device Management . • File Management . Freedom 0: The freedom to run the program. Freedom 1: The freedom to study how the program works . Freedom 2: The freedom to distribute Freedom 3: The freedom to modify and release to the public (Any three Freedom)	1/2 x 4 1x3 (or)	5
31	a b	10 (or) Names only (½ x 3) → 1½ Initialisation : x=1; Test expression: x<5 Update expression: x++; Body of the loop: Sum=Sum+x; (or) Components only →	2 3 (or) 2	5
32	a b	. Network protocol : Special set of rules to be followed in a network , when devices in the network exchange data with each. / Rules to be followed in a network. **Star topology :** In star topology , each node is directly connected to a hub / switch . (Any ~~four~~ valid points, diagram included) **Mesh topology :** In mesh topology , every node is connected to other nodes . There will be more than one path between two nodes . (Any ~~four~~ valid points, diagram included)	1 ½x2	5

	c	. High bandwidth for voice, video and data applications • Carries data over a very long distance at a stretch. • Not susceptible to electromagnetic fields, as it uses light for data transmission. • The most expensive and the most efficient communication media available for computer networks. • Installation and maintenance are difficult and complex. (Any two advantages)	1 × 2	

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