

ANSWER KEY

FIRST YEAR HIGHER SECONDARY EXAMINATIONS, MARCH 2025

PART III

SUBJECT: COMPUTER SCIENCE

CODE NO: FY 330

VERSION:D

60 SCORE

2 HOURS

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
1		AND Gate		1
2		Source Code		1
3		Assignment statement / <i>initialization / error</i>		1
4		6		1
5		0 (Zero)		1
6		MAC address		1
7		a. Electronic Numerical Integrator and Calculator b. Very Large Scale Integration	1 1	2
8				2
9		$(101011) = 101\ 011$ $= 5\ 3$ $= (53)_{10}$ $(101011) = 0010\ 1011$ $= 2\ 11(B)$ $= (2B)_{16}$	1 1	2
10		Process management, Memory management, File management, Device management, <i>Command interpreter</i> <i>(Any four)</i>	½ score each	2

11	(proper examples can also be considered) Syntax Error - It occurs when rules/syntax of programming language are not followed. Logical Error - It occurs due to improper planning of the program's logic.	1 1	2
12	Step 1 : Start Step 2 : N=100 Step 3 : Repeat steps 4 and 5 While((N>0) Step 4 : Print N Step 5 : N=N-1 Step 6 : Stop (Any other looping construct with proper logic can also be considered using if, etc)	1/2 (initialization) 1/2 1/2 1/2 (update)	2
13	signed, unsigned, long, short	1/2 score Each	2
14	Traversal, Sorting, searching, Insertion, Deletion (Any four)	1/2 score each	2
15	strcmp() - This function is used to compare two strings. (examples with illustration -1+1) strcmp() - This function is used to compare two strings ignoring cases	1 1	2
16	a. Call by value (Pass by value) method In this method, a copy of the actual argument is passed to the function. Hence, if the formal argument is modified within the function, the change is not reflected in the actual argument at the calling place. (Any two distinguishing points) b. Call by reference (Pass by reference) method When an argument is passed by reference, the reference of the actual argument is passed to the function. So, if the formal argument is modified within the function, the change will be reflected in the actual argument	1 1	2
17	URL is divided into three parts. a) Network protocol b) Domain name c) File name Example : Consider the URL http://www.dhsekerala.gov.in/index.html protocol - http domain name - www.dhsekerala.gov.in file name - index.html	1 1 1	2
18	Bring people together, Plan and organise events, Business promotion, Social skills. (Any other valid points can be considered)	1/2 score each	2

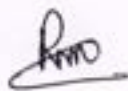
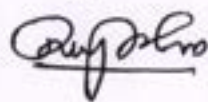
h/b

23	b) a@b - Special character is used d) 4ac - first character is digit ~~Unknown~~ (identification - 1/2, Reason -)	1 1/2 1 1/2 0	3
24	Type Casting It is the type conversion done by the programmer. It is also known as Explicit type conversion Type Promotion It is the type conversion done by the C++ compiler. It is also known as Implicit type conversion. (Example with explanation can be considered)	1 1/2 1 1/2	3
25	While loop <pre>int main() { int i; i=1; while(i<=10) { cout<<i; i++; } return 0; }</pre> } — 1 1/2 do.....while loop <pre>int main() { int i; i=1; do { cout<<i; i++; } while(i<=10); return 0; }</pre> } — 1 1/2	1 1/2 1 1/2	3
26	Step 1 : Start Step 2 : Accept N as the number of elements of the array Step 3 : Accept N elements into the array AR Step 4 : Repeat Steps 5 to 7, (N - 1) times Step 5 : Repeat Step 6 until the second last element of the list Step 6 : Starting from the first position, compare two adjacent elements in the list. If they are not in proper order, swap the elements. Step 7 : Revise the list by excluding the last element in the current list. Step 8 : Print the sorted array AR Step 9 : Stop example with illustration — 1 1/2 score or correct program — give full score.		3

27		a. <code>get()</code> - This function is used to accept ~~single character or multiple characters~~ strings through the keyboard. b. <code>getline()</code> - This function is used to accept a string ~~through the keyboard~~ having delimiter character or specified number of characters. c. <code>write()</code> - This function displays the string contained in the argument.	1 1 1	3
28		a. <code>strcpy()</code> - This function is used to copy one string into another. b. <code>pow()</code> - This function is used to find the power of a number. c. <code>islower()</code> - This function is used to check whether a character is in lower case (small letter) or not.	1 1 1	3
29		Speed - An e-mail is delivered instantly to any location across the globe. Easy to use - We can send, receive, organise and save e-mail easily on our computer. Provision of attachments - This feature allows to send pictures, files, documents, etc along with e-mail. Environment friendly - e-mails do not use paper, thus save a lot of trees. Cost-effective - When compared to fax or conventional mail, e-mail is less expensive (Any Three)	1+1+1	3
30		e-Waste refers to electronic products nearing the end of their "useful life". (or discarded electronic products) Reuse - It refers to second hand use or usage after modification or upgradation. Recycling - It is the process of manufacturing new products from e-waste. Incineration - E-Waste is burned in incinerators at a high temperature Land filling - Burying under soil (Name only - ½ score each)	1 1 1 1 1	5
31		<pre>#include <iostream> using namespace std; int main() { int num, copy, digit, rev=0; cout<<"Enter the number: "; cin>>num; copy=num; while(num != 0) { digit = num % 10; rev = (rev * 10) + digit; num = num/10; } }</pre>		5

(Correct example with explanation - 1 each) (Syntax only - ½ each)

		<pre> cout<<"The reverse of the number is: "<<rev; if (rev == copy) cout<<"\nThe given number is a palindrome."; else cout<<"\nThe given number is not a palindrome."; return 0; } </pre> Correct program structure (1 score) Usage of loop (1 score) Correct logic. (3 scores)		
32		The way in which the nodes are physically interconnected to form a network is called a Topology. Major topologies are bus, star, ring and mesh. (Name only - ½ score each) (Name with explanation - 1 score each) (Figure only - ½ score each)	1 4	5

1. Joy John  St. Joseph's HSS, Thrm. 9447890992
2. BOBBY PUDUKADEN  ST THOMAS HSS THROPE THRISSUR
mob: 9846079118
3. Rajamohan.c.  NMHSS. Thirunavaya 9447618880
4. Ummer Farook K.P  MES HSS Ponnani, 9496839886
5. Shaju. Y  SMHSS Pathanam, 9447558369
6. ROY JOHN  ST. ALOYSIUS HSS, 8444357734 ELTHURUTHI
7. Bijukumar.T.V  Mambaram H. SS. 9446025
Mambaram, Kannur