

QP SUBMITTED BY SOMNATH PAULCHOUDHURY

CLASS XI SC (2021-22)

SUB: Computer Science(083)
(Theory: Term 1)

Time -90 minutes

M. Marks- 35

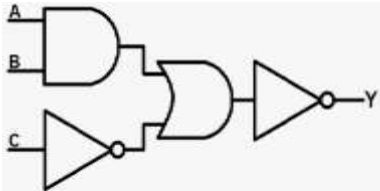
General Instructions:

- This question paper is divided into 3 sections A, B and C.
 - Section A has 25 Questions (1-25). Attempt any 20 .
 - Section B has 24 Questions (26-49). Attempt any 20 .
 - Section C has 6 case-based Questions (50-55). Attempt any 5.
 - Programming language is Python. All question carry equal marks **0.77**
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Q No	Section A answer any 20 out of 25	Marks
	Only one correct solution to be selected	
1	Identify the one not any type of memory A. Cache B. CD-R C. AX, BX, CX, DX registers D. Compiler	0.77
2	IaaS as a cloud service is an ideal solution for A. Very small companies as they can avoid the expenditure B. Very large companies as they can avoid unnecessary expenditure C. Companies that are rapidly expanding as there is a scalability issues D. All of the above	0.77
3	Find the incorrect Boolean statement from below A. $X + X' = 1$ B. $X + X' = 0$ C. $0 + 1 = 0$ D. Both B and C are incorrect	0.77
4	If S is a Boolean variable determine the incorrect Boolean statement for AND laws A. $S \cdot 1 = S$ B. $S \cdot 0 = 0$ C. $S \cdot 0 = S$ D. $S \cdot S = S$	0.77
5	Find the correct equivalent of the Boolean statement a.(a+b) A. 0 B. 1 C. b D. a	0.77
6	In OR logic gate if the inputs a and b are both 0 then A. output is 0 B. output is 1 C. in switching circuitry it means both the switches are closed D. both A and C are correct	0.77
7	The number 5 is not a component of which number system? A. Hexadecimal B. Decimal	0.77

	C. Octal D. Binary	
8	The hexadecimal equivalent of octal 55 is A. 101101 B. 45 C. 2D D. 3C	0.77
9	The hexadecimal number C7 is written in binary as A. 11000011 B. 11000101 C. 11000110 D. 11000111	0.77
10	If 37 is a hexadecimal number, we can A. add a subscript 8 to it B. to convert it to a octal number we convert each digit to 4 bits binary first C. to convert it to a octal number we convert each digit to 3 bits binary first D. both A and C are correct	0.77
11	If t=t=(10,20,30,{2:10,4:50},40,50) , then t.count(10) is equal to A. 1 B. 0 C. 2 D. 3	0.77
12	Look at the code below and find the output >>> mystr="India is a great country" >>> vowels='AEIOUaeiou' >>> for i in mystr: if i in vowels: print(i, end=" ") A. AEIOUaeiou B. I i a i a e a o u C. Error message D. Nothing will be printed	0.77
13	If...elif...else statements in Python are examples of A. Selection B. Sequence C. Iteration D. None of the above	0.77
14	While statements in Python are examples of A. Selection B. Sequence C. Iteration D. None of the above	0.77
15	Indentation in Python is given by A. A newline B. Leading white space C. Comma separator D. None of the above	0.77
16	In the statement print(10 + int(12.0)) A. output will be 22 B. output will be 22.0 C. 10 + int(12.0) is an Integral expression D. Both A and C are correct	0.77
17	Which of the below is a valid variable name? A. return B. python	0.77

	C. Python D. Both B and C	
18	Look at the code and find the output <pre>>>> for i in str(90): if i in '01230': print("Hello")</pre> A. Nothing is printed B. Shows error C. Hello D. HelloHello	0.77
19	Find the correct output <pre>>>> 2**64**0.5==513//2</pre> A. True B. False C. Error D. None of the above	0.77
20	L is a data type in Python is having a built in function count(), L is A. List B. Tuple C. String D. All of the above is a possibility	0.77
21	The append() built in function is associated with A. List B. Tuple C. String D. None of the above	0.77
22	What is non-essential for declaring a function in Python? A. Name B. Parameters C. Function statement(s) D. All of the above	0.77
23	The [] meta character A. Will find a match of any characters placed in [] B. Will find a match of any characters other than that is placed in [] C. It can be used in search() function D. Both A and C are correct	0.77
24	Look at the sequence and determine the output <pre>>>> str="Python" >>> str[:-2]</pre> A. 'nohtyP' B. 'nhy' C. 'nhyP' D. 'Pyth'	0.77
25	The second last character in a String str can be accessed by A. str[-3] B. str[-2] C. str[2] D. str[3]	0.77
Q No	Section B answer any 20 out of 24	
	Only one correct solution to be selected	
26	Which is not a Comparison operator? A. <= B. >= C. %=	0.77

	D. >	
27	<p>If A, B and C takes the values 1, 1 and 0 then the output will be</p>  <p>A. 0 B. 1 C. 2 D. None of the above</p>	0.77
28	<p>Find the output</p> <pre>>>> L=[i for i in range(3,13,3)] >>> L</pre> <p>A. Error B. [3, 6, 9, 12] C. [1, 2, 3, 4, 5, 6, 7, 8, 9,10,11,12] D. [0, 3, 6, 9, 12]</p>	0.77
29	<p>Look at the code and determine the output</p> <pre>>>> y=-10 >>> while(y<10): print('\$', end='') y += 5</pre> <p>A. \$\$\$\$\$\$\$\$\$\$ B. \$\$\$\$ C. \$ D. Nothing will be printed</p>	0.77
30	<p>Look at the code and determine the output</p> <pre>>>> z=-1 >>> while(z): print("P", end='') z -= 1</pre> <p>A. P B. PP C. Prints P continuously D. Nothing will be printed</p>	0.77
31	<p>The output of the following expression is</p> <pre>>>> 2**3**2</pre> <p>A. 64 B. 512 C. 2417851639229258349412352 D. Error</p>	0.77
32	<p>Look at the code sequence and select the impossible option for value of F</p> <pre>>>> import random >>> F=[i for i in range(random.randint(5,15))] >>> F</pre> <p>A. [0, 1, 2, 3, 4, 5, 6, 7] B. [6,7,8,9,10,11,12,13,14] C. [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] D. Both A and C</p>	0.77
33	<p>Look at the code sequence and select the correct output</p> <pre>>>> str="Python using Colab" >>> for i in str:</pre>	0.77

	<pre> if(i.isupper()==True): print(i.lower(), end="") if(i.islower()==True): print(i.lower(), end="") </pre> <p>A. pYTHONUSINGcOLAB B. PYTHONUSINGCOLAB C. Error D. pythonusingcolab</p>	
34	<p>Find the correct output of the following considering module re is imported</p> <pre> >>> str="Python using Colab" >>> re.search('colab\$',str) </pre> <p>A. Nothing is printed B. Error as in Colab the alphabet c is in lowercase C. Finds a match D. <re.Match object; span=(13, 18), match='Colab'></p>	0.77
35	<p>What is the output of the following</p> <pre> >>> import string >>> string.octdigits </pre> <p>A. '0123456789abcdefABCDEF' B. '0123456789abcdef' C. Error D. '01234567'</p>	0.77
36	<p>What value is stored in j?</p> <pre> >>> def test(a,b=5, c=6): a += b b -= c return a+2*b+3*c >>> j=test(5,6) >>> j </pre> <p>A. 27 B. 29 C. 31 D. 33</p>	0.77
37	<p>Look at the sequence of commands and determine the final output</p> <pre> >>> import math >>> s=math.ceil(-67.33) >>> print(s, s+100) </pre> <p>A. -67 133 B. -67 33 C. -67 32 D. -68 32</p>	0.77
38	<p>Look at the sequence of commands and determine the impossible result from options</p> <pre> >>> for i in range(50): print(random.randrange(2,35,6), end=" ") </pre> <p>A. 35 B. 26 C. 8 D. 14</p>	0.77
39	<p>Determine the output of the following</p> <pre> >>> r=('apple','pineapple','mango','strawberry') >>> print('HaHaHa'*r.count('apple')) </pre> <p>A. HaHaHa B. appleHa C. HaHaHaapple D. apple</p>	0.77

40	<p>Find the outputs</p> <pre>def testify(a, b=35, a1=8): a=a+100 b=b+a print(a) return b</pre> <p>>>> c=2*testify(12,13)</p> <p>>>> c</p> <p>A. 112, 250 B. 112. 13 C. 113, 125 D. 12, 13</p>	0.77
41	<p>Find the output</p> <pre>>>> mystr="Darjeeling Tea" >>> for i in mystr: if i in 'aeiou': print('\$',end="") else: print(i,end="")</pre> <p>A. Darjeeling Tea B. D\$rj\$\$I\$ngT\$\$ C. D\$rj\$\$I\$ng T\$\$ D. \$rj\$\$I\$ng T\$\$</p>	0.77
42	<p>Find the correct option</p> <pre>>>> mystr="Darjeeling Tea has a strong flavour" >>> ctr=0 >>> while(not ctr): print(mystr) ctr=random.randint(0,1)</pre> <p>A. It will not print anything B. Error message C. Loop endlessly D. Will terminate after few steps</p>	0.77
43	<p>Look at the code and select the correct option</p> <pre>>>> mystr="Darjeeling Tea has a strong flavour" >>> L=[i for i in mystr]</pre> <p>A. L is a list and stores the individual alphabets of mystr B. L is a list and stores the words C. Length of L is 35 D. Both A and C is correct</p>	0.77
44	<p>Find the appropriate command to get rid of the extra white spaces in the string mystr</p> <pre>>>> mystr=" Darjeeling Tea has a strong flavour"</pre> <p>A. mystr.replace(' ','') B. mystr.rstrip() C. mystr.lstrip() D. mystr.isspace()</p>	0.77
45	<p>Find the correct option from below</p> <pre>>>> for i in range(5): for j in range(5): if(i==j): print('\$',end=" ") else: print(' * ',end=" ") print()</pre>	0.77

	<p>A. It will print a 6 by 6 square matrix</p> <p>B. It will print a 5 by 5 square matrix having * except for the two diagonals having \$</p> <p>C. It will print a 5 by 5 square matrix having * except for the main diagonal having \$</p> <p>D. It will print a 6 by 6 square matrix having * except for the main diagonal having \$</p>	
46	<p>Find the output of the following</p> <pre>>>> import string >>> >>> mylist=[i for i in string.ascii_letters] >>> len(mylist)</pre> <p>A. 52</p> <p>B. 26</p> <p>C. 25</p> <p>D. 1</p>	0.77
47	<p>What is the content of the lists L1 and L2 at the end of the execution of this code?</p> <pre>>>> L1=[1,2,3] >>> L2=[4,5,6] >>> for i in L1: L2.extend(L1)</pre> <p>A. L1=[4, 5, 6, 1, 2, 3, 1, 2, 3, 1, 2, 3] and L2=[1, 2, 3]</p> <p>B. L1=[1, 2, 3] and L2=[4, 5, 6, 1, 2, 3, 1, 2, 3, 1, 2, 3]</p> <p>C. L1=[] and L2=[]</p> <p>D. L1=[1,2,3] and L2=[]</p>	0.77
48	<p>Find the correct output</p> <pre>>>> H=[10, 20, 30, 40, 50 ,20, 40, 60, 80, 100] >>> print(H.index(20) // H.count(20))</pre> <p>A. 1</p> <p>B. 2</p> <p>C. 0</p> <p>D. 1.5</p>	0.77
49	<p>Find the output</p> <pre>>>> N=[[i for i in range(5)],[j for j in range(5,10)]] >>> N[2][2]</pre> <p>A. Index out of range error</p> <p>B. 6</p> <p>C. 7</p> <p>D. 8</p>	0.77
Q No	Section C answer any 5 out of 6	
	Only one correct solution to be selected	
	<p>Look at the code and answer the Q from 50-55</p> <pre>___ checkforpalindrome(str): #Statement 1 declares a function return str___str[::-1] #Statement 2 uses an operator to check if the string and it's reverse are both same mystr=_____("Enter a string ") #Statement 3 will accept a string ans=_____ (mystr) #Statement 4 will call the function if(_____): #Statement 5 should be True for the selection execution print("the string is a palindrome") _____: #Statement 6 executes if not True print("the string is not a palindrome")</pre>	
50	<p>Statement 1 will be</p> <p>A. def</p> <p>B. DEF</p> <p>C. define</p> <p>D. type</p>	0.77
51	<p>Statement 2 will be</p> <p>A. =</p>	0.77

	B. == C. + D. AND	
52	Statement 3 will be A. accept B. insert C. input D. int(input)	0.77
53	Statement 4 will be A. def B. return C. call checkforpalindrome D. checkforpalindrome	0.77
54	Statement 5 will be A. ans B. not ans C. True D. Both A and C	0.77
55	Statement 6 will be A. elif B. if C. else D. endl	0.77