

KENDRIYA VIDYALAYA SANGATHAN SILCHAR REGION
HALF YEARLY
SUBJECT: COMPUTER SCIENCE
CLASS: XI

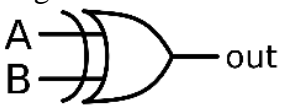
General Instructions:

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Sections A have 18 questions carrying 01 mark each.
4. Section B has 07 Very Short Answer type questions carrying 02 marks each.
5. Section C has 05 Short Answer type questions carrying 03 marks each.
6. Section D has 03 Long Answer type questions carrying 05 marks each.
7. Section E has 02 questions carrying 04 marks each.
8. All programming questions are to be answered using Python Language only.

MM 70

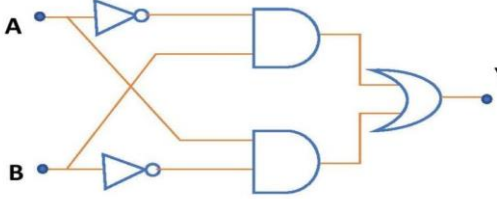
TIME: 03 HRS

OBJECTIVE TYPE QUESTIONS
SECTION A (18 QUESTIONS)

1	Operating system is an example of (a) Application Software (b) System Software (c) Utility Program (d) None of these	1
2	RAM and ROM are type of _____ memory.	1
3	The binary equivalent of the decimal number 10 is _____.	1
4	Which of the following is not a valid encoding scheme for characters? (a) ASCII (b) ISCII (c) Unicode (d) ESCII	1
5	It is a _____ Logical Gate 	1
6	The Boolean equation express the law $A+(B+C) = (A+B)+C$ (a) Associative Law (b) Indempotence law (c) Involution law (d) Commutative Law	1
7	Name two common tools for developing an algorithm.	1
8	Who developed python programming language?	1
9	The input() returns the value as _____ type.	1
10	Python is a _____ sensitive language.	1
11	List is an immutable data type. (a) True (b) False	1
12	What will the result of the expression 10 or 0?	1
13	Name any one jump statement.	1
14	Function range(3) will yield an iterable sequence like _____.	1

1 5	Which of the following functions will return always a tuple of 3 elements? (a)find() (b) index() (c) partition() (d)split()	1
1 6	The string indexes begin with _____ onwards.	1
1 7	Which of the following can delete an element from a list if the index of the element is given? (a)pop() (b)remove (c)del (d)all of these	1
1 8	List can contain values of these types (a)Integers (b) float (c)strings (d)all of these	1

VERY SHORT TYPE QUESTIONS
SECTION B (07 QUESTIONS)

19	State any two differences between compiler and interpreter?	2
20	What do you mean by Unicode encoding scheme?	2
21	Write Boolean expression of the given logical gate? 	2
22	Write a flowchart to calculate the area of rectangle.	2
23	Find output for i in range(1,16): if i%3==0: print(i)	2
24	Find output: print('one','Two'*2) print('one'+ 'Two'*2)	2
25	What are nested lists? Give Example.	2

SHORT TYPE QUESTIONS
SECTION C (05 QUESTIONS)

26	Explain the functional components of computer with the help of a block diagram.	3
27	Convert the following (a) $(423)_{10} - ()_{16}$ (ii) $(1010111010)_2 - ()_{16}$ (iii) $(266)_{10} - ()_8$	3
28	State and verify the following Boolean Laws :- (i) idempotence law (ii) involution law (ii) Commutative Law	3
29	Explain the different types of errors with example.	3
30	Rewrite the following code using for loop. while num>0: count+=1 sum+=num num-=2 if count==10: print(Sum/float(Count)) break	3

LONG TYPE QUESTIONS
SECTION D (03 QUESTIONS)

31	Write a program in python to check if a given number is an armstrong number or not.	5
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32	<p>What will be the output of following program:</p> <p>(a) <code>str="Python123.com"</code> <code>for i in range(len(str)):</code> <code> if(str[i].isalpha()):</code> <code> print(str[i-1],end="")</code> <code> if(str[i].isdigit()):</code> <code> print(str[i],end="")</code></p> <p>(b) <code>s='mahender, singh, dhoni'</code> <code>s1=s.split()</code> <code>for i in s1:</code> <code> if(i>'n')</code> <code> print(i.upper())</code> <code> else:</code> <code> print(i)</code></p> <p style="text-align: center;">OR</p> <p>Write a Python Program to check First Occurrence of a Character in a String</p>	3 + 2
33	<p>Find Output:</p> <code>list1 = ["python", "list", 1952, 2323, 432]</code> <code>list2 = ["this", "is", "another", "list"]</code> <code>print(list1[1:4])</code> <code>print(list1[1:])</code> <code>print(list1[0])</code> <code>print(list1 * 2)</code> <code>print(list1 + list2)</code>	5
COMPETENCY BASED QUESTIONS SECTION E (02 QUESTIONS)		
34	<p>Find Output:</p> <code>a,b,c=1,1,2</code> <code>d=a+b</code> <code>e=1.0</code> <code>f=1.0</code> <code>g=2.0</code> <code>h=e+f</code> <code>print(c==d)</code> <code>print(c is d)</code> <code>print(g==h)</code> <code>print(g is h)</code> <p style="text-align: center;">OR</p> <p>Find the errors</p> <p>(a) <code>a=bool(0)</code> <code>b=bool(1)</code> <code>print(a==false)</code> <code>print(b==true)</code></p> <p>(b) <code>name="Ramesh"</code> <code>print(name)</code> <code>name[2]='v'</code> <code>print(name)</code></p>	4
35	<p>Write a program in python to check if a given number is palindrome or not.</p> <p style="text-align: center;">OR</p> <p>Write a program in python to check if a given number is a perfect number or not.</p>	4