Indian School Al Wadi Al Kabir
Final Assessment
COMPUTER SCIENCE (Code: 083)

CLASS : XI   Max. Marks:70

Date: 22/02/2024   Time: 3 hours
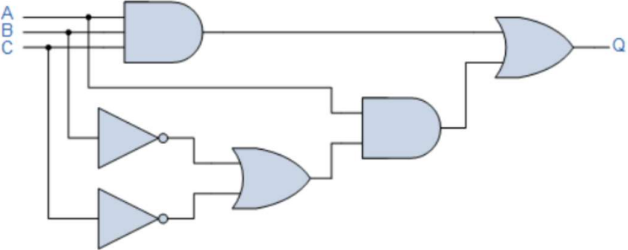
General Instructions:

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Section A has 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 02 questions carrying 04 marks each.
7. Section E has 03 questions carrying 05 marks each.
8. All programming questions are to be answered using Python Language only.

	SECTION A	
1.	State True or False. Python loops can have an else clause. (True/False)	1
2.	Find all valid identifiers from the following a. a_bcd b. None c. 5result d. True	1
3.	A patent protects an invention for_____years, after which it can be freely used. a. 10 b. 20 c. 30 d. 40	1
4.	Find the output for the following expression. >>>a,b,c,d=2,3,5,1 >>>import math >>>math.ceil(a**b+c*d+b//a/c) a. 13 b. 13.2 c. 14 d. 14.0	1
5.	Consider the given expression 40 < 30 or 32 > 20 and not 5 < 15 Which of the following will be the correct output, if the given expression is evaluated ? a. True	1

	b. False c. None d. NULL	
6.	Antivirus is a type of which software? a. Application software b. Utility Software c. System Software d. Firmware	1

7.	Which statements in the following program will print the same results?
	tup = (1,2, 3,4, 5, 6, 7, 8, 9)
	print(tup[-4:-1]) # statement(1)
	print(tup[5]) # statement(2)
	print(tup[5:]) # statement(3)
	print(tup[-4:8]) # statement(4)
	
	a. 1 and 2
	b. 1 and 4
	c. 2 and 3
	d. 1, 3 and 4
		1

8.	Consider the following code. Identify the correct output. for i in "EXAM": print([i.lower( )], end= "#") a. e#x#a#m# b. ['exam'] # c. ['exam#'] d . ['e']#['x']#['a']#['m']#	1
9.	The octal equivalent of 111010 is..... a. 81 b. 72 c. 71 d. 82	1
10.	The one who tries to gain unauthorized access to computers or networks in order to steal sensitive data with the intent to damage or bring down systems is called as ----------------- a) Cracker b) Plagiarism c) Ethical Hacker d) Phishing	1

11.	Name the Boolean theorem A + A' = 1
	   a. Associative law
	   b. Complementarity law
	   c . Involution law
	   d. Distributive law
		1

12.	What will be the correct output :- S= "python is very funny language" print(S.split("n")) (i) ['pytho', ' is very fu', ' ', ' ', 'y la', 'guage'] (ii) ['pytho', ' is very fu', ' ','y la', 'guage'] (iii) ['pytho', ' is very fu', 'y la', 'guage'] (iv) ['pytho', ' is very fun', 'y la', 'guage']	1

13.	Which of the following statement(s) would give error after executing the following code?
	
	s1='must' #statement 1
	s2='try' #statement 2
	n1=10 #statement 3
	n2=3 #statement 4
	print(s2*s1) #statement 5
	print(s1+s2) #statement 6
	print(s1+n1) #statement 7
	
	a. statement 4
	b. statement 6
	c. statement 5 and 7
	d. No Error
		1

14.	Which of the following is not true a. (A+B)' = A'+ B' b. A .A'= 0 c. A'+ AB = A'+ B d. A(A+B) = A	1
15.	Observe the given declaration and select the output of the following print statement. >>>d={1:'Rita',2:'Sita',3:'Raina'} >>>print(d[1][1] + '@' + d[2][1] + '@' + d[3][2]) a. Rita@Sita@Raina b. i@i@i c. R@S@a d. R@i@a	1

16.	Which of the following is not considered as IPR?	1
	a. copyright	
	b. Digital footprint	
	c. Patent	
	d. Trademark	

17.		1
	Which of the following logic expression represents the logic diagram given below?	
	a. (A.B.C)+A.(B ' +C')	
	b. A' B'+C+B.A	
	c. A.B+C+(B'+C ').A	
	d. A+B+C(A+B)	

18.	According to the guidelines issued by CPCB, who will be responsible for the final safe disposal of the product when it becomes an e-waste?	1
	a) The Seller	
	b) The customer/user	
	c) The manufacturer	
	d) None of these	
	a.	

	SECTION B	
19.	Explain the feasible methods of e-waste management to reduce the harm to humans and environment.	2
20.	Explain primary memory? What are the different types?	2
21.	Consider the following string mySubject:	2
	mySubject = "Computer Science"	
	What will be the output of the following string operations :	
	a) print(mySubject[-7:-1])	
	b) print(mySubject[::2])	

22.	What possible output(s) is/are **not** expected to be displayed on screen at the time of execution of the program from the following code? import random val=[80,70,60,50,40,30,20,10] start=random.randint(1,3) end=random.randint(start,4) for i in range(start,end+1): print(val[i],'*',end='') a. 50 * b. 70* 60 * 50 * c. 60 * 50 * 40 * d. 50 * 40 * 30*	2
23.	Do the following: 1. $(8ED2)_{16}$ = (_____) $_8$ 2. $(455)_8$ = (_____) $_{10}$	2
24.	Explain plagiarism.	2

25.	a) Given is a python string declaration:
	  String="Fall seven times and stand up eight."
	  Write the output of:
	    print(list(String[::10]))
	b) Write the output of the code given below:
	  Covid19_Vaccine={'Dose':1, 'Date_of_Dose':'15-06-2021',
	                                      'Name':'AstraZeneca'}
	  Covid19_Vaccine['At']='NMC Bawshar'
	  print(Covid19_Vaccine.keys( ))
		2

	SECTION C	
26.	What do you understand by digital footprint? What are the different types of digital footprints?	**3**

27.	Find the output of the following code:
	
	fruit_list1 = ['Apple', 'Berry', 'Cherry', 'Papaya']
	fruit_list2 = fruit_list1
	fruit_list3 = fruit_list1[:]
	fruit_list2[0] = 'Guava'
	fruit_list3[1] = 'Kiwi'
	sum = 0
	for ls in [fruit_list1, fruit_list2, fruit_list3]:
	    if ls[0] == 'Guava':
	        sum += 1
		3

	if ls[1] == 'Kiwi':
	      sum += 20
	  print (sum)	

28.	Write a program to find the sum of the following series. $S = 1 - x^2/4! + x^4/6! - x^6/8! + \ldots\ldots\ldots x^n/(n+2)!$ Where x and n are entered by the user.	3

29.	Predict the output of the Python code given below:
	st = "python programming"
	count = 4
	while True:
	  if st[0]== "p":
	    st = st[2:]
	  elif st[-2]=="n":
	    st = st[:4]
	  else:
	    count+=1
	    break
	 print(st)
	 print(count)
		3

30.	Predict the output of the Python code given below:
	data=["L",20,"M",40,"N",60]
	times=0
	alpha=""
	add=0
	for c in range(1,6,2):
	  times = times + c
	  alpha = alpha + data [c-1] + "@"
	  add = add + data[c]
	print (times, add, alpha)
		3

	SECTION D	
31.	a. Mr. Rajesh is an entrepreneur. He created a personal profile on social media platform and set all that information to be viewed by public. After few days, he came across a different profile page with his personal information (such as name, date of birth, profile picture etc) claiming to be Mr Rajesh. A message was sent from this profile to the people in his friend-list requesting online fund	**2 +2**

	transfer.
	  i. Mr. Rajesh is a victim of?
	  ii. What immediate action should he take to handle it?
	  iii. What can he do in future to safeguard his information?
	
	b. What is Intellectual Property Right (IPR)? Mention any two types of IPRs	

32.	Write a program to print grade of a student as per input percentage as per criteria given below:- Percentage range Grade More than or equivalent 90 A More than 80 B More than 60 C More than 50 D More Than 33 E Less than 33 F	4
	SECTION E	
33.	a. Write a program to input 'n' words(names) in to a list L and create another list named 'vList' that stores the names(elements) of L which contains vowels . For example: If L contains ['CHARLES', 'CHRYS', 'GAYATHRI', 'SYMTH','KYM', 'DOLLY'] The vList will have - ['CHARLES', 'GAYATHRI', 'DOLLY'] b. Write a program to input a list of n numbers and find the sum of numbers which are divisible by 3 but not divisible by 5.	3+2
34.	a. Write a program to input a list L with 'n' elements and shift all non-zero elements to left of the list and zeros to right of the list. b. Write a program to input a string and change all uppercase to lower case and all lowercase to uppercase.	3 +2
35.	a. Write a program to create a dictionary "student" with name and marks of 'n' students as key : value pairs. Display the names which are having more than 4 characters and mark less than 70. b. Write a program to input a string and creates a list containing length of each word of a string. For example, if the string is "Come let us have some fun", the list will have [4, 3, 2, 4, 4, 3]	3+2