BRAIN INTERNATIONAL SCHOOL
SAMPLE PAPER-1 (2024-25)
Subject:- COMPUTER SCIENCE CLASS: XI

Duration: 3 hours **Max Marks:70**

General Instructions:

1. This question paper contains five sections, Sections A to E.

2. All questions of a particular section must be attempted in the correct order.

3. SECTION A has 18 Objective Type Questions of 1 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.

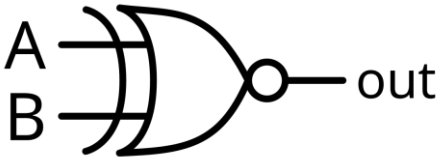
8. All programming questions are to be answered using Python Language only

Section-A

S.No.	Question	Marks
1	Which of the following is a valid keyword a) For c) if b) elif d) false	**1**
2	Find the output of the following code: a=(5,6) b=(7,8) c=(a,)+(b,) print(c,type(c)) (i) ((5,6),(7,8)) <class 'tuple'> (ii) [5,6,7,8] <class 'list'> (iii) (5,6,7,8) <class 'tuple'> (iv) (14,14) <class 'tuple'>	**1**
3	Give examples to explain packing and unpacking.	**1**

4.	Consider the following List
	myList=[1,2,3,4,5,6,7,8,9,10]
	for i in myList:
	  if i%2==0:
	  print(i*2,end=",")
	  else:
	  print(i*3,end=",")
	What will be the output?
		1

5	Nisha was making an online payment for an online shopping website. What precaution should she take before making a payment?	**1**
6	Give 2 examples of system software. **OR** Give 2 examples of application software.	**1**
7	Prerna has a list of marks of 20 students, she got a list of another 20 students from Ranjana. Suggest an appropriate function of list to add this new list to her previous list so that it becomes one list.	**1**
8.	What will be the output of the following? print("ComputerScience".split("e")) (i) ["Comput","e","Sci","e","nc","e"] (ii) ["Comput","Sci","nc"] (iii) ["Comput","e","rScience"] (iv) ["Comput","Sci","nc"," "]	**1**
9.	Define IPR and difference between patent and trademark.	**1**
10.	Give at least 2 methods to declare a tuple. **OR** Give at least 2 modules which can be used in both List and Tuple with examples.	**1**
11.	The type of fraud that involves using someone else's identity online is called: (i) Phishing (iii) Cyber Stalking (ii) Identity theft (iv) Plagiarism	**1**

12.	What will be the output of the following: T1=tuple(range(0,5)) print(T1) T2="-".join("hello") print(T2)	**1**
13	In the Hexadecimal Number System which letter represents 12, 15.	**1**
14	Identify the following logic gate and logical expression for the same  **OR** Draw XOR gate and give its truth table	**1**
15	Digital signatures are the digital equivalent of the paper certificate (True/ False)	**1**
16	What does "net etiquette" refer to? A. The rules and conventions for using the internet respectfully and responsibly. B. The study of networking technologies and protocols. C. A type of online gaming community. D. A web design technique for creating interactive websites.	**1**
	Q17 and 18 are ASSERTION AND REASONING based questions. Make the correct choice as a. Both A and R are True and R is the correct explanation for A. b. Both A and R are True and R is not the correct explanation for A. c. A is True but R is False. d. A is False but R is True.	
17	**Assertion(A):** The internet is a collection of interconnected computer networks, linked by transmission medium such as fibre optic cables, transmission wires, wireless connections, etc. **Reason(R):** World Wide Web is a collection of websites or web pages stored in web servers and connected to local computers through the internet.	**1**
18	**Assertion(A):** A Boolean is a data type that can store two values True. and False.	**1**

	Reason(R): A Boolean can be created by using keywords True or False or by applying logical operators on other values	
	Section B	
19	Which type of operating system is primarily designed for the following: a. for users who cannot use the input devices like mouse, keyboard etc. b. For users who use touch inputs like touchscreen to provide inputs. **OR** Encode the word “COMPUTER” using ASCII and convert the encoded value into binary code.	**2**
20	The code given below accepts a number as an argument and returns the reverse number. Observe the following code carefully and rewrite it after removing all syntax and logical errors. Underline all the corrections made. N=int(input(“enter the number:”)) Rev=0 While N>0: Rem == N%10 Rev = rev*10+Rem N//10 print(Rev) **OR** Write a Program in Python to accept n names and store in a tuple and then accept a name and search in the tuple. Also return the position where the name is found **For example :** if the tuple contains ["Ankit", "Siddharth", "Rahul", "Sangeeta", "rahul"] user enter search data as "Rahul"	**2**

	Output: Rahul at 2 rahul at 4	
21	Go Through the Python code shown below, find out the possible output or outputs from the suggested output options (i) to (iv). Also, write the minimum and maximum values, which can be assigned to the variable MyNum import random MyNum=0 Max=5 MyNum=15+random.randint(0,Max) for N in range(MyNum,20): print(N,"$",end=" ") (i) 10 $19 $ (iii) 10 $19 $ 20$ (ii) 16 $17 $18 $19 (iv) $16 $17 $18 $19	**2**
22	a) How is a mutable object different from an immutable object in Python? b) Identify one mutable object and one immutable object from the following: (1,2), [1,2], {1:1,2:2}, '123' **OR** **Consider the following lists** **L1=[1,2,3,2,1,2,4,2]** **L2=[10,20,30,40,50,60,70,80,90],** **then Answer the following using builtin functions only** A) Write a statement to count the occurrences of 4 in L1. B) Write a statement to sort the elements of list L1 in ascending order. C) Write a statement to insert all the elements of L2 at the end of L1. D) Write a statement to reverse the elements of list L2.	**2**

23	Differentiate between the following(any 2) a) RAM and ROM b) Compiler and Interpreter c) System software and Application Software	**2**
24	Consider the following string myAddress myAddress=”WAZ-1, New Ganga Nagar, New Delhi” what will be the output of the following string operation: print(myAddress.replace(“New”,”Old”).upper()) print(myAddress.find(“New”)) print(myAddress.split(“New”)) print(myAddress.partition(“,”))	**2**
25	A software developer named Ravi created a new mobile application and shared it with colleagues and friends. However, Ravi later discovered that someone had copied the entire code of the application and released it as their own. Ravi is unsure of what legal actions to take to protect their intellectual property rights. a) Describe the different types of intellectual property rights, including copyrights, patents, and trademarks, and their significance for Ravi's mobile application. b) Explain the concept of plagiarism and copyright infringement in the context of the copied mobile application. c) What are the possible legal measures Ravi can take to address the violation of their intellectual property rights and seek appropriate recourse? d) What precautions Ravi must take while uploading the code online. **OR** With the growth of the Internet, many cases of cyber crimes, frauds, cyber attacks and cyber bullying are reported. Which legal body in India deals with appeals regarding cyber -related issues and how? Also give an example of Cyberbullying, Plagiarism, Phishing.	**2**
	Section C	
26	Write a Program in Python to accept a string from the user and count the number of words and upper case characters. Also replace all the vowels with ‘*’ and display the new string. **Example** **input**	**3**

	String: Computer Science paper **Output** Word count: 3 Uppercase Count: 2 New String: C*mp*t*r Sc**nc* p*p*r **OR** Write a program in Python, that creates a dictionary, PLACES having Monuments as key and place as value (Monument:Place pair) eg D={“Red Fort”:”Delhi”,”Taj Mahal”:”Agra”,”Gateway of India”:”Mumbai”,”Charminar”:”Hyderabad”, “Qutub Minar”: “Delhi”, “Akbar’s Tomb”:”Agra”} Now accept place and display the monument in that place and accept place and display all the monuments in that place **Example** **Input:** D={“Red Fort”:”Delhi”,”Taj Mahal”:”Agra”,”Gateway of India”:”Mumbai”,”Charminar”:”Hyderabad”, “Qutub Minar”: “Delhi”, “Akbar’s Tomb”:”Agra”} Enter Monument to search : Red Fort **Output** Found Enter Place to Search: Delhi **Output:** Red Fort Qutub Minar	
27	Convert the following while loop into for loop a=1 b=20 sum=0	**3**

	while a<b:
	x=int(input("Enter the number:"))
	sum+=x
	a=a+2
	print("Sum=",sum)
	OR
	
	Convert the following for loop to while
	Max=1
	for a in range(1,11):
	D=int(input("enter data:"))
	if Max<D:
	Max=D
	print("Maximum=",Max)	

28	Draw a flowchart to accept 10 numbers and find their sum and average. **OR** Draw a flowchart to accept 10 numbers and find the maximum among them.	**3**

29	Write the output of the following program:
	
	Str="CBSE Digital India"
	for i in range(len(Str)-1,0,-1):
	if Str[i].isupper():
	print(Str[i].lower(),end="")
	elif i%2==0:
	if Str[i].islower():
	print(Str[i].upper(),end="")
	else:
	print("@",end="")
		3

30	Write a program in Python to create a nested tuple to accept a store (rollno, name, marks) of 10 students. Display the following Menu: 1. Display result of each student 2. Display total number of students getting marks more than 75 and 90	**3**

When user press option 1, it should display result in the following format

Rollno Name Marks Result

Where result is “pass” if Marks is more than 33 and “Fail” if less than 33

When the user selects option 2 it should display the number of students getting above 90 and number of students getting above 75.

OR

Complete the following code:

Preeti has created a dictionary of month names with the number of days in Python. You have help her in completing the program:

```
Days={“January”:31,”February”:28,”March”:31,”April”:30,”May”:31,\

”June”:30,”July”:31,”August”:31,”September”:30,”October”:30,\

“November”:30,” December”:31}

#Display months having 31 days

for Key,Value in _____:      #line1

    if _____:              #line 2

        print(Key)

#display Months and days starting with “A” or “M”

for Key in D.keys():

    if _____ #line 3

        print(_____)          #line 4


#change number of days in February as 29

_____                  #line 5
```

	print(Days) _____ #line 6 i) The function to display both key and values in line1. ii) The condition to check if the number of days is 31 in line 2. iii) The condition to check if the month name starts with “A” or “M” in line 3. iv) Print number of month and number of days in line 4. v) Change the number of days of the month “February” to 29 in line 5. vi) Display Months in the sorted order in line 6.	
Section D		
31	a) What are the different methods to include math modules in your program? b) Name any 2 built-in functions and support by an example. c) Differentiate between ceil() and floor() function of math module with the help of an example. d) give the output of print(math.abs(-29)) **OR** Differentiate between: a) List.sort() and sorted(List), assuming List is a variable which contains list of values b) mutable and immutable data type c) Str.count(“hello”,12,25) and Str.find(“hello”,12,25) assuming Str=”Hello World! hello to all” d) print(Str[::-1] assuming Str=”Hello World”	**1x4=4**

32	a. Given a string s="Python is very interesting" Write a slice statement to produce the following output: (i) Python (ii) pto (iii) print reverse of the entire string (iv) print nohtyp b. Rewrite the following while loop into its equivalent for loop A=int(input("enter a value") while A!=0 count=count+1 if count<A print(count) else print(count+A) A=A+1	**½ *4=2** **2**
	Section E	
33	a) Mr Jayanto Das is confused between Twitter and Linkedin. With the help of examples explain the difference between them. **OR** Sunita is a teacher in a rural area. She is facing gender and disability issues while teaching / computer in the classroom. Write a mail stating these issues.(not more than 30 words) b) Ravi received mail from the IRS department. On clicking "Click here", he was taken to a site designed to imitate an official-website, such as IRS.gov. He uploaded some of the important information on it. Identify and explain the cybercrime being discussed in the above scenario. **OR** Shreya was not able to attend the class and she called up Rajni enquiring about the topic discussed in the class. Rajni informed her that tuples in Python were discussed and also downloaded a PowerPoint presentation from the Internet.	**2,2,1**

	She mailed the Presentation after changing the name to "made by Rajni" stating that she made this presentation for her. Identify and explain the cybercrime being discussed in the above example. **c)** Define hacker and how it is different from Cracker.	
34	a) Convert the following binary to octal $(1100111100)_2$ to $(?)_8$ b) Convert the following Hexadecimal to decimal number system $(A2D)_{16}$ to $(?)_{10}$ c) State and proof De Morgan's law using Truth Table d) Draw logic circuit diagram of the following expression A'B+(C'.(A+C)) e) Define Blockchain or Cloud Computing	**1+1+1+1+1**
35	Write the program to accept a,r and n find the sum of the geometric series given below: $S = a + ar + ar^2 + ar^3 + ar^4 \ldots\ldots + ar^n$ OR Write a program that reads a line and prints its frequency chart like: 1. Number of uppercase letters 2. Number of lowercase letter 3. Number of alphabets 4. Number of digits	**5**

BRAIN INTERNATIONAL SCHOOL
SAMPLE PAPER-2 (2024-25)
Subject:- COMPUTER SCIENCE CLASS: XI

Duration: 3 hours Max Marks:70

General Instructions:

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Section 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. One internal choice is given in Q35 against part c only.
8. All programming questions are to be answered using Python Language only.

	SECTION A	
1.	_____is the part of the CPU that performs the arithmetic operations. A) ALU B) CU C) Memory D) None	1
2.	A nibble in computer memory is a group of_____. A) 8 bits B) 8 bytes C) 4 bits D) 4 bytes	1
3.	Which of the following does not store data permanently? (i) Hard Disk (ii) Floppy disk (iii) RAM (iv) ROM	1
4.	Which of the following is not an operating system? a) Windows b) Linux c) Oracle d) DOS	1
5.	Keys of the dictionary must be : (A) Similar (B) Unique (C) Can be similar or unique (D) All of these	1
6.	Which of the following fall under utilities software? (i)Text editor (ii) backup (iii) Disk defragmenter (iv) All of the above	1
7.	Is python a case sensitive language? A) True B) False	1
8.	Which of the following can be used as valid variable identifiers in Python? i) 4th Sum ii) Total iii) Number# iv) _Data	1
9.	To increase the value of k five times using an assignment operator, the correct expression will be : k += 5 B) k *=5 C) k = k**5 D) k =*5	1
10.	What is the value of x ? x = int (13.25 +4/2) a) 17 b) 14 c) 15 d) 23	1
11.	What will be the output of the following code:- x = 73 y = x%9 print(y)	1
12.	The_____statement forms the selection construct in Python. A) for B) while C) if D) None	1

13.	Suppose t = (1, 2, 4, 3), which of the following is incorrect? a) print(t[3]) b) t[3] = 45 c) print(max(t)) d) print(len(t))	1
14.	Identify the type of error a=10 , b=0 c=a/b i) Semantics Error ii) Syntax Error iii) Run Time error iv)No Error	1
15.	A loop becomes an infinite loop if a condition never becomes true. a. True b. False	1
16.	What is the output of following code : L = [5, 8] print (L * 3) a) Syntax error b) [5,8,5,8,5,8] c) [15,24] d) [8,11]	1
Q17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as (i) Both A and R are true and R is the correct explanation for A (ii) Both A and R are true and R is not the correct explanation for A (iii) A is True but R is False (iv) A is false but R is True		
17.	Assertion(A): Comments in the python start with the hash character, #, and extend to the end of the physical line Reason(R): Comments are interpreted and shown on the output screen.	1
18.	Assertion(A): The input statement is used to get the output on the screen. Reason(R): The value inputted by the user while executing a program are fetched and stored in the variable using the input() function.	1
SECTION B		
19.	Draw logic circuit for following expression: (A+B)'. (B'+C)	2
20.	What is the purpose of count ( ) function in string ? Write an example of count ().	2
21.	Predict the output of the following code: x=1 if x>3:	2

	if x>4:
	print('a')
	else:
	print('b')
	elif x<2:
	if (x!=0):
	print('c')
	print('d')	

22.	Convert the following for loop code in to while loop. for x in range (1,100,2): print(x)	2
23.	Explain use of % and //operators with example?	2
24.	What do you understand by syntax error? Give an example in this context.	2
25.	Define the term L- Value and R-Value with example.	2
	SECTION C	
26.	State De Morgan's law and prove it with the help of truth table	3

27.	Find and write the output of the following python code :
	Text="Gmail@Com"
	Len=len(Text)
	ntext= " "
	for iin range(0,Len):
	if Text[i].isupper():
	ntext=ntext+Text[i].lower( )
	elif Text[i].isalpha( ):
	ntext=ntext+Text[i].upper( )
	else:
	ntext=ntext+'bb'
	print(ntext)
		3

28.	Write a program to print grade of a student as per input percentage as per criteria given below:-	3

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

29.	Write a program to check whether an integer number input by a user is prime or not? OR Write a program to input an integer value and display it in reverse order.	3
30.	Explain Arithmetic, Relational and logical Operators with one example for all these operators. OR What do you mean by data types? Explain different datatypes available in python with examples.	3
	SECTION D	
31.	Convert the following accordingly: (i) $(106)_{10} = (\ ?\ )_{16}$ (ii) $(78)_{10} = (\ ?\ )_{2}$ (iii) $((122)_{10} = (\ ?\ )_{2}$ (iv) $(13B)_{16} = (\ ?\ )_{10}$ (v) $(101101)_{2} = (\ ?\ )_{10}$	4+1
32.	a) Rewrite the following code after removing syntax error and underline the correction: x=int("Enter value for x:") for y in range[0,11]: if x=y print(x+y) Else: Print x-y a) Generate the series 1,2,4,8,16,32,64 by using loop.	3+2
33.	a. What is the output of this expression, print('Hello'=='Hello') ? b. What will be the output of following code: x, y = 2, 6 x, y = y, x + 2 print(x,y) c. Evaluate the following expressions i) 12 + (3 ** 4 - 6) / 2 ii) 12 + 3 * 3-6 / 2	1+2+2
	SECTION E	
34	Write a python code to read a string and Count alphabets, digits, and special symbols from a given string Given:str1 = "P@#yn26at^&i5ve" Expected Outcome: Total counts of chars, digits, and symbols Alphabets = 8	4

	Digits = 3 Symbol = 4	
35	i) Write logical expression for the following: Name is Raj and age is between 18 and 25 ii) if….elif…..,else are not block or compound statement (True/False) iii) Write a program to input an alphabet and check it is a vowel or not. **OR (Choice is only for Part (iii)** Write a program to input a number and check it is odd/even.	4
********** End of Paper **********		

BRAIN INTERNATIONAL SCHOOL

SAMPLE PAPER-3 (2024-25)

Subject:- COMPUTER SCIENCE CLASS: XI

Duration: 3 hours **MM:70**

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 1 mark each.**
4. **Section B has 07 Very Short Answer type questions carrying 2 marks each.**
5. **Section C has 05 Short Answer type questions carrying 3 marks each.**
6. **Section D has 03 Long Answer type questions carrying 5 marks each.**
7. **Section E has 02 questions carrying 4 marks each.**
8. **All programming questions are to be answered using Python Language only.**

SECTION A		
1	Evaluate the following expression in Python: `print( 17//2 * 3 + 10.0)` **a.** 34.5 **b.** 34.0 **c.** 25.0 **d.** 34	1
2	Which of the following is an invalid datatype in Python? a. set b. None c. int d. Real	1

3	What will be the output of the following code:
	`NumLst = [2,5,1,7]`
	`print(NumLst * 2)`
	a. `[2,5,1,7,2,5,1,7]`
	b. `[2,5,1,7][2,5,17]`
	c. `[4,10,2,14]`
	d. `Error`
		1

4	Consider the given expression: `False or not False and True` Which of the following will be the correct output if the given expression is evaluated? **a.** `None` **b.** `1` **c.** `False` **d.** `True`	1
5	Which of the following is a function of the math Module? **a.** random() **b.** mean() **c.** floor() **d.** median()	1

6	_____is a software with source code that anyone can inspect, modify, and enhance. **a.** Operating system **b.** Utility software **c.** Compiler **d.** Open Source	1

7	The operator 'and' is a _____operator in Python ? **a.** Logical **b.** Relational **c.** Arithmetic **d.** Augmented	1

8	Which of the following outputs is the correct option for the code shown here ?
	`STR='TEXT CONTENT'`
	`print(STR.strip('T'))`
	a. `EX CONEN`
	b. `EX CONTEN`
	c. `EXT CONTEN`
	d. `TEXT CONTEN`
		1

9	_____is a cyber attack, also known as sniffing. **a.** Virus **b.** Phishing **c.** Spam **d.** Eavesdropping	1
10	Which of the following is a Logic Gate? **a.** `not` **b.** `in` **c.** `between` **d.** `like`	1
11	Which of the following is the correct way to make a copy of a dictionary **D** ? **a.** `D1=D` **b.** `D1+=D` **c.** `D1=D.copy()` **d.** `D1=D.assign()`	1
12	Which of the following operators displays the remainder with integers ? **a.** `**` **b.** `%` **c.** `//` **d.** `+`	1
13	Which of the following is an example of system software ? **a.** Open office **b.** Windows **c.** Antivirus **d.** Firefox	1

14	Consider the following statement: `Grade={10:'A', 30:'C', 20:'B'}` Which of the following is the correct option to display the sorted list of the keys in the dictionary **Grade** in ascending order ? **a.** `print(sort(Grade.keys()))` **b.** `print(Grade.sort())` **c.** `print(sorted(Grade))` **d.** `print(sort(Grade))`	1	
15	_____are visitors who leave inflammatory comments in public comment sections. **a.** Cyber Trolls **b.** Hackers **c.** Digital footprints **d.** Confidentiality	1	

16	What will be the output of the given code?
	`import math`
	`math.floor(26.5)`
	a. 25
	b. 26
	c. 27
	d. 26.5
		1	

	Q17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as **a.** A is True and R is the correct explanation for A **b.** A is True but R is not the correct explanation for A **c.** A is True but R is False **d.** A is False but R is True		
17	Assertion(A): The Python statement `"SPLITTED STRINGS".split("S")` will return `['PLITTED ', 'TRING']` Reason (R): The **split()** method returns a list of words separated at the parameter sent.	1	
18	Assertion (A):- The expression `sorted('TEXT')` in Python will give Error. Reasoning (R):- String is an immutable type in Python.	1	
	SECTION B		

19	Rewrite the following logic using a **while** loop without making any change in the expected output:
	`L=[3]`
	`for I in range(5):`
	`  L.append((I+1)*5)`
	`print(L)`
		2	

20	Rewrite the following code after removing all the syntax errors with each of the corrections underlined:
	`n=int(input("Enter number to check :: ")`
	`  for i in range (2, n//2):`
	`  if n%i=0:`
	`  print("Number is not prime \n")`
	`  break`
	`  else`
	`  print("Number is prime \n')`
		2	

21	Differentiate between copyrights and trademarks.	2	

22	Write the output of the Python code given below:
	`L=[123,155,"b",128,160,"A"]`
	`for R in range(1,len(L)):`
	`if not(str(L[R]).isalpha()) and L[R]%10==12:`
	`  L[R]= L[R+1]`
	`elif str(L[R]).isalpha():`
	`  L[R]=ord(L[R])+2`
	`else:`
	`  print(L[R],end=" ")`
	`print()`
	`print(L)`
		2

23	Write the results of the following: a. `print(6 * 15 - 2 // 7 - 2 * 3)` b. `print(12 * 3 + 43 - 2 + 5 % 2)`	2

24	Write the output of the Python code given below:
	`D=('SUN','MON','TUE','WED','THU','FRI','SAT')`
	`L=D[1:len(D)-1]`
	`print('#'.join(L))`
	OR
	Write the output of the Python code given below:
	`D={'Grapes':50,'Mango':70,'Banana':20}`
	`print(sorted(D))`
		2

25	Draw a logic circuit equivalent for the following Boolean Expression:
	`A' + B' + C'`
	OR
	Draw a logic circuit equivalent for the following Boolean Expression:
	`(A'.B')+ C'`
		2

	SECTION C	
26	What is Data Protection? Give any two ways to protect your data online. **OR** Define the following terms : a) Ransomware b) Cyber Crime	3

27	Give any three basic rules of netiquette to avoid damaging your online as well as offline relationships.	3
28	Differentiate between split() and partition() in Python. Give suitable examples of each.	3
29	Write a Python code to accept a number and display its factors. The process should continue till the user wants. For Example **Enter N: 10** **Factors: 1,2,5,10**	3
30	Write a python program to create a dictionary STUDENT containing StudentNames as keys and corresponding Marks as values. The program should create a list STUD, of those StudentNames for which Marks is less than 33. **OR** Write a Python code to accept a string from the user , find and display the counts of special characters, alphabets and digits present in it.	3
	SECTION D	
31	Write a Python code to ● Input 10 integers into a list NUM. ● Display all the multiple of 5 from the list NUM ● Display the highest and lowest integer from the the list NUM ● Display the list NUM in the ascending order.	5
32	Write a Python code to ● Input Name of 5 subjects in the tuple SUB ● Input the Marks of these 5 subject in a list MARKS ● Create a dictionary RECORD and store the SUB as KEY with MARKS as VALUE in the dictionary RECORD. ● Display the Dictionary RECORD.	5
33	Convert the following from one number system to another (show the complete working) : **a.** $(512)_{10}$ = ( )$_2$ **b.** $(10010111)_2$ = ( )$_{10}$ **c.** $(451)_8$ = ( )$_{16}$ **d.** $(111001101)_2$ = ( )$_8$ **e.** $(175)_{10}$ = ( )$_8$	5
	SECTION E	
34	Write **single line Python commands** to perform each of the following operations: **QUOTE="Life is beautiful"** ● Display the length of the string **QUOTE**. ● Display the reverse of the string **QUOTE**. ● Display the count of **'i'** from the string **QUOTE** ● Display the substring **'beauti'** from the string **QUOTE**.	4
35	Explain any 4 built in functions which can be performed over a given list.	4

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