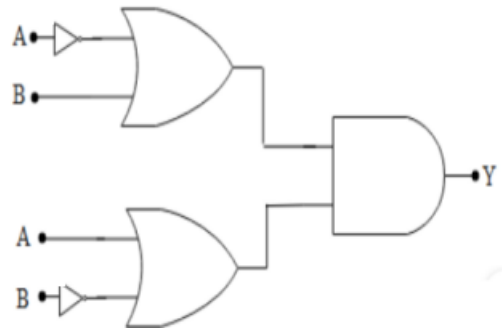
Marking Scheme 2023-2024
Class :XI
Subject: Computer Science(083)

	Section A	Marks
1.	b. True	1
2.	b. Anti Virus	1
3.	a. K[5]= "e"	1
4.	c. RAM	1
5.	c. XOR	1
6.	b. American Standard code for Information Interchange	1
7.	b. (22,44,66)	1
8.	(i) Options a,c,d only	1
9.	c. import math print(math.pow(12,4))	1
10.	a. 18	1
11.	a. del D1["input"]	1
12.	a. copyright infringement	1
13.	c. To create targeted advertisements based on user interests	1
14.	b. True True	1
15.	c. Trojan Horse	1
16.	c. To prevent environmental pollution and health hazards	1
17.	d. A is False but R is True	1
18.	a. Both A and R are True and R is the correct explanation of A.	1
	Section B	
19.	Interpreter: a, c Compiler: b, d **OR** a. UTF 8 and UTF 32	1 mark each for correct identification of options for Interpreter and compiler **OR** ½ mark each for correct encoding scheme.

<table>
<tr><td></td><td>b. PB,TB,GB,KB</td><td>1</td></tr>
<tr><td>20</td><td>A = int(input("Enter First Number: "))
B = int(input("Enter Second Number: "))
Op = input("Enter Operator") #Error 1
if Op = ="+": # Error 2
  C = A + B
elif Op == "-": # Error 3
  C = A - B
else: #Error 4
  C = "Invalid operator entered"
print("Result = ",C)</td><td>½ mark for each correction</td></tr>
<tr><td>21.</td><td>
<table>
<tr><th>Implicit Type Conversion</th><th>Explicit Type Conversion</th></tr>
<tr><td>Also known as coercion</td><td>Also called type casting</td></tr>
<tr><td>Data type conversion is done automatically by Python and is not instructed by the programmer.</td><td>Data type conversion is explicitly done by programmer.</td></tr>
<tr><td>Example:
num1 = 10 #num1 is an integer
num2 = 20.0 #num2 is a float
sum1 = num1 + num2 #sum1 is sum of a
#float and an integer
print(sum1)
print(type(sum1))</td><td>Example:
num1 = 10
num2 = 20
num3 = num1 + num2
print(num3)
print(type(num3))
num4 = float(num1 + num2)
print(num4)
print(type(num4)</td></tr>
</table>
OR
a. 0 ==(2==3)
b. 3+(4==4)+5==9</td><td>(½ mark for each correct explanation of Implicit type conversion and explicit type conversion)
(½ mark for each correct example of Implicit type conversion and explicit type conversion)
OR
1
1</td></tr>
<tr><td>22.</td><td>a. General Public Licence
Intellectual Property Right
b. (i) Inform Himanshu so that he may change his password.</td><td>½+½

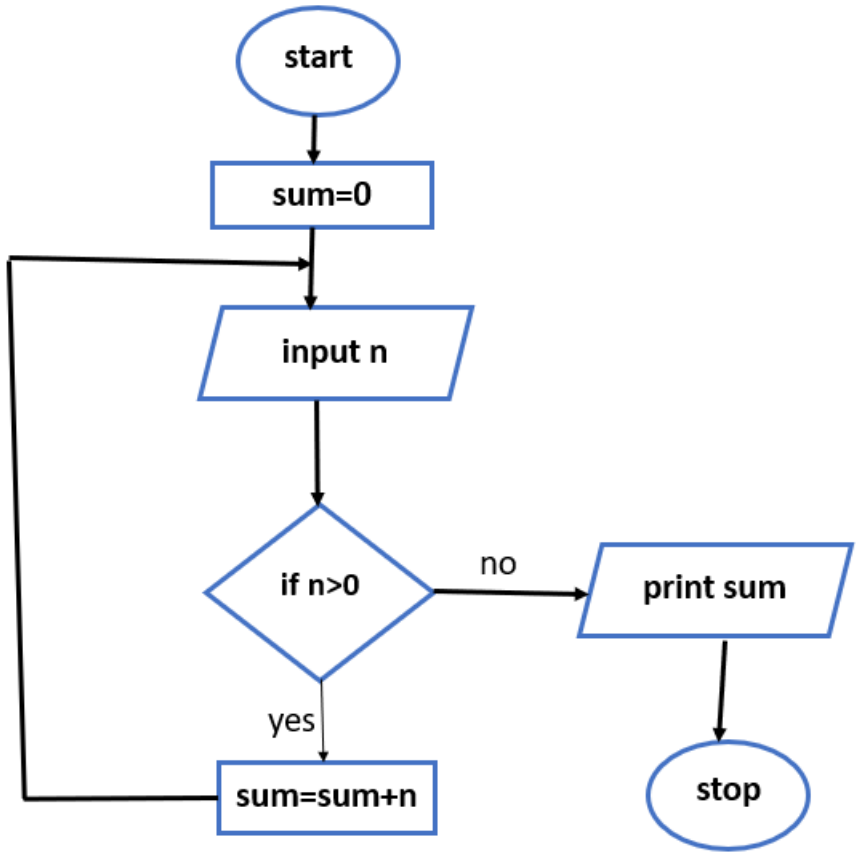
1</td></tr>
<tr><td>23.</td><td>a. 1903
b. 562.54
OR
 
</td><td>1
1

2</td></tr>
<tr><td>24.</td><td>a. 3#4#5#

OR</td><td>2</td></tr>
</table>

	a. 9 b. 1024 c. 27.2 d. 3	½ *4=2
25.	G1=A+B G2=(AB)' G3=(A+B)(AB)'	1 mark for (A+B) 1 mark for (AB)'
	Section C	

26	str1=input("Enter a string")
	L=[]
	length=len(str1)
	for i in range(length):
	  if str1[i].isupper():
	  L.append(i)
	print(L)
	
	OR
	
	Str1="Ubuntu is an Open Source Operating System"
	L=Str1.split()
	for word in L:
	  if word[0]=='O':
	  print(word[::-1],end=" ")
	  else:
	  print(word,end=" ")
		½ -Input
		½-loop
		1-if
		½- adding to list
		½ for print
		
		½-split words
		½-loop
		1-if
		½ -print in reverse order
		½ – print normally

27.		½ -start, stop ½-Initialization of sum ½-Input ½ for each Loop and Checking the number is greater than 0 ½- print
28.	ND-*34	½*6=3
29	a. make , use or sell (any 2) b. Oversharing can have several consequenses: a. Privacy risks: When you share too much personal information online, you may inadvertently expose yourself to identity theft, fraud, or other forms of cybercrime. b. Cyberstalking and harassment: Oversharing can make you more vulnerable to cyberstalking, online harassment, or even real-life threats if someone with malicious intent gains access to your personal information. c. Employment and Academic consequences: Employers and educational institutions may review social media profiles during the hiring or admissions process. d. Targeted Advertising and data mining: Social media platforms and other companies often use the data you share to target you with advertisements and promotions.	½+½=1 1+1 (any two points)

30	units=int(input("Enter the number of units"))
	if(units>=0 and units<=49):
	bill=units*0.50
	elif(units>=50 and units<=99):
	bill=units*0.75
	print(bill)
	elif(units>=100 and units<=199):
	bill=units*1.20
		½- input units
		½ -for each if..elif i.e 2 marks
		½ -for calculating surcharge

	elif(units>=200): bill=units*1.50 surcharge=bill*0.20 totalBill=surcharge+bill print("The Surcharge is",surcharge) print("The Total bill is",totalBill)	
	Section D	
31	a. 3 times b. Str1=" Programming" l=len(Str1) i=0 while i<l: print(Str1[i]) i=i+1	2 2
32	a. **round():** It is a built-in Python function used to round a floating-point number to a specified number of decimal places. The round() function takes two arguments: the first is the number you want to round, and the second (optional) argument is the number of decimal places you want to round to. If the second argument is not provided, the number is rounded to the nearest whole number. **Example:>>>**round(3.7) evaluates to 4 **int():**It is a built-in Python function used to convert a real number to an integer (a whole number without any decimal points). When you pass a floating-point number to int(), it truncates the decimal part and returns the whole number component. **Example:**>>>int(3.7) evaluates to 3 b. (i) import math f1=math.sqrt(a*a+b*b+c*c) (ii) import math f2=p+q/(math.pow((r+s),4))	(½ mark for each correct explanation of built-in functions round() and int()) (½ mark for each correct example of round() and int()) 1 1
	Section E	

33	a. (i) 11
	(ii) True
	('progra', 'm', 'ming is Fun')
	
	b. str1="VaSudhaiva KutumBakam"
	uc=0
	lc=0
	for i in str1:
	if i.isupper():
	uc=uc+1
	elif i.islower():
	lc=lc+1
	print("Upper Case Characters=",uc)
	print("Lower Case Characters=",lc)
		1
		1
		1
		
		½ – loop
		½ - isupper()
		½ -islower()
		½-for counting characters

34	a. dict_1={"2":"Two","3":"Three","5":"Five","7":"Seven","11":"Eleven"} b. dict_1.keys() c. "7" in dict_1 d. print(dict_1["5"]) e. pop() can delete an item with a chosen key while popitem will remove only the last entered item from the dictionary. **Example**: dict_1.popitem() returns ('11', 'Eleven') dict_1.pop('2') returns 'Two' **OR** **a.** Patna **b.** dict_keys(['Karnataka', 'Haryana', 'Sikkim', 'Bihar']) **c.** dict_items([('Karnataka', 'Bangalore'), ('Haryana', 'Chandigarh'), ('Sikkim', 'Gangtok'), ('Bihar', 'Patna')]) **d.** 4 **e.** False	1 1 1 1 1 1 1 1 1 1
35	(a) Yes, There is a discrepancy as the domain spelling is different in the mail. (b) Clicking on the link may install malware on the laptop which record all the keys pressed and send to hacker. (c) Points: 1. Do not click on any link or download any file from untrusted source 2. Do not respond or provide any information to unknown source. (d) Yes, email is an example of cyber crime. It is a type of email spoofing as here fake email address is used and students presumes it to be from an authentic source. **OR** (a) A digital footprint refers to the trail of data and information that individuals leave behind while using the internet. It includes all the actions, interactions, and content they create or engage with online. This data can be collected, stored, and analyzed by various entities, including websites, social media platforms, advertisers, and even governments (b) Active digital foot prints, Passive digital footprints (c) It's challenging to completely erase a digital footprint since data can be stored in various databases and archives. However, individuals can take steps to minimize their digital footprint, such as deleting unnecessary accounts, requesting data removal from certain platforms, and being cautious about what they share online. (d) Employers and colleges might use digital footprints to gain insights into an applicant's character, behaviour, and qualifications. They might review social media profiles, online portfolios, and professional networking sites to assess an individual's suitability for a position or academic program. (e) Website servers, social media platforms, search engines, online accounts, cookies and tracking mechanisms , mobile app.	1 1 1 2 1 1 1 1 1 1