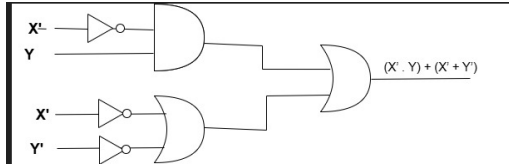


Marking Scheme 2025-2026
Class :XI
Subject: Computer Science(083)

	Section A	Marks
1.	d) Hard Disk Drive	1
2.	c) XOR	1
3.	b) Interpreter	1
4.	c) GNU General Public License (GPL)	1
5.	d) type()	1
6.	c) Runtime Error	1
7.	b) Device driver	1
8.	a) 10 7 4 1 loop completed	1
9.	b) 3	1
10.	c) Str[-3:]	1
11.	c) [0, 5, 10, 15]	1
12.	b) {'100':None,'200':None,'300':None, '400',None}	1
13.	d) 275	1
14.	b) 15	1
15.	b) 11	1
16.	c) Phishing	1
17.	b) Engaging in respectful and constructive comments.	1
18.	c) to provide guidelines on the processing, storage and transmission of sensitive information	1

19.	c) Release of toxic substances into soil and water	1
20	c) A is True but R is False.	1
21	b) Both A and R are True and R is not the correct explanation for A.	1
	Section B	
22	(i) a) and b) (ii) c)	$\frac{1}{2} + \frac{1}{2}$ 1

23	<table> <tr> <th>Feature</th><th>ASCII (American Standard Code for Information Interchange)</th><th>ISCII (Indian Standard Code for Information Interchange)</th></tr> <tr> <td>Full Form</td><td>American Standard Code for Information Interchange</td><td>Indian Standard Code for Information Interchange</td></tr> <tr> <td>Developed by</td><td>ANSI (American National Standards Institute)</td><td>Bureau of Indian Standards (BIS), India</td></tr> <tr> <td>Purpose</td><td>Represent English characters using binary codes</td><td>Represent Indian scripts like Devanagari, Tamil, Telugu, etc.</td></tr> <tr> <td>Character Set Size</td><td>128 characters (7-bit)</td><td>256 characters (8-bit)</td></tr> <tr> <td>Language Support</td><td>English only</td><td>Supports many Indian languages</td></tr> <tr> <td>Examples</td><td>A = 65, a = 97, 1 = 49</td><td>Includes characters like क, ख, अ, etc.</td></tr> <tr> <td>Usage</td><td>Widely used globally in programming, networking, etc.</td><td>Used in Indian language processing</td></tr> <tr> <td>Limitations</td><td>Cannot handle Indian or other complex scripts</td><td>Limited to Indian languages but better suited for them</td></tr> </table>	Feature	ASCII (American Standard Code for Information Interchange)	ISCII (Indian Standard Code for Information Interchange)	Full Form	American Standard Code for Information Interchange	Indian Standard Code for Information Interchange	Developed by	ANSI (American National Standards Institute)	Bureau of Indian Standards (BIS), India	Purpose	Represent English characters using binary codes	Represent Indian scripts like Devanagari, Tamil, Telugu, etc.	Character Set Size	128 characters (7-bit)	256 characters (8-bit)	Language Support	English only	Supports many Indian languages	Examples	A = 65, a = 97, 1 = 49	Includes characters like क, ख, अ, etc.	Usage	Widely used globally in programming, networking, etc.	Used in Indian language processing	Limitations	Cannot handle Indian or other complex scripts	Limited to Indian languages but better suited for them	1 + 1 = 2
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	OR De Morgans Law state: $(A.B)'= A'+B'$ <table><tr><td>A</td><td>B</td><td>A'</td><td>B'</td><td>(A.B)'</td><td>A'+B'</td></tr><tr><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>1</td></tr><tr><td>0</td><td>1</td><td>1</td><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td></tr><tr><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td></tr></table> OR $(A+B)'= A'.B'$ <table><tr><td>A</td><td>B</td><td>A'</td><td>B'</td><td>(A+B)'</td><td>A'.B'</td></tr><tr><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>1</td></tr><tr><td>0</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td></tr><tr><td>1</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td></tr><tr><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td></tr></table>	A	B	A'	B'	(A.B)'	A'+B'	0	0	1	1	1	1	0	1	1	0	1	1	1	0	0	1	1	1	1	1	0	0	0	0	A	B	A'	B'	(A+B)'	A'.B'	0	0	1	1	1	1	0	1	1	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	
A	B	A'	B'	(A.B)'	A'+B'																																																									
0	0	1	1	1	1																																																									
0	1	1	0	1	1																																																									
1	0	0	1	1	1																																																									
1	1	0	0	0	0																																																									
A	B	A'	B'	(A+B)'	A'.B'																																																									
0	0	1	1	1	1																																																									
0	1	1	0	0	0																																																									
1	0	0	1	0	0																																																									
1	1	0	0	0	0																																																									
24.	Convert the following: a) $(110101.110)_2=(65.6)_8$ b) $(BCA2)_{16} = (1011110010100010)_2$ OR $F= (X' . Y) + (X' + Y')$ 	2																																																												
25	a. Green#Blue# b. Red#Green#Blue# Minimum value of x = 0 Maximum value of y = 3	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$																																																												
26	<code>{"Pen": 10, "Eraser": 5, "Marker": 12}</code>	2																																																												
27	<table><tr><th>Active Digital Footprint</th><th>Passive Digital Footprint</th></tr><tr><td> - Created when a user intentionally shares information online. - It includes activities like: - Sending emails - Posting on social media - Filling online forms </td><td> - Created without the user’s direct knowledge or intent. - It includes data collected automatically when: - Visiting websites - Browsing the internet </td></tr></table>	Active Digital Footprint	Passive Digital Footprint	- Created when a user intentionally shares information online. - It includes activities like: - Sending emails - Posting on social media - Filling online forms	- Created without the user’s direct knowledge or intent. - It includes data collected automatically when: - Visiting websites - Browsing the internet	2																																																								
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	○ Commenting on websites or apps ● Captures details like IP address, device information, and browsing behavior. OR ● Use of assistive technologies like screen reader, voice input or adapted keyboard ● Creating a respectful and bias free classroom environment ● Enhancing equal participation and opportunities for all genders Any two	
	Section C	
28	<pre> m =int(input('enter a number ')) #Error1 fact = 1 for i in range(<u>1</u>, m+1); #Error 2, 3 fact = fact * i print (" Factorial ", fact) #Error 4 </pre>	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$
29	I\$ L\$ 2*&2*&!	1+1+1
30	<pre> graph TD Start([Start]) --> Init[i = 1, sum = 0] Init --> ReadN[/Read N/] ReadN --> Decision{if i <= N} Decision -- yes --> Process[sum=sum+i
i=i+1] Process --> Decision Decision -- no --> PrintSum[Print sum] PrintSum --> Stop([Stop]) </pre>	$\frac{1}{2}$ mark for start and stop $\frac{1}{2}$ mark for inputting values, 1 mark for condition $\frac{1}{2}$ mark for cumulative sum and incrementing value of i $\frac{1}{2}$ marks for printing result

31	<pre> T=(10,20,30,20,30,100,200) L=[] for x in T: if not (x in L): L.append(x) print(L) </pre>	1 mark for loop 1 mark for if ½ for append ½ for print
32	(a) case (i) Plagiarism and case(ii) Copyright infringement (b) • <u>Plagiarism</u>: Ravi submitted someone else's work as his own without giving proper credit. This violates academic and ethical standards, as it misrepresents the original author's work. • <u>Copyright Infringement</u>: Meena used a copyrighted image without permission. Even though she gave credit, using someone's work without a license or consent still infringes on the owner's exclusive rights under copyright law.	½ + ½ 1 1
	Section D	
33	<pre> {1: 'one', 2: 'two', 3: 'three', 4: 'four', 5: 'five', 6: 'six'} {1: 'one', 2: 'two', 3: 'three', 5: 'five', 6: 'six'} {1: 'one', 2: 'two', 3: 'three', 5: 'five', 6: 'six', 7: 'seven'} True </pre>	1+1+1+1
34	<pre> code=input("Enter a string") flag1=0 if len(code)==8: flag1=1 flag2=1 x=code[0:3] for a in x: if not (a.isalpha()): flag2=0 break flag3=0 y=code[3] if y in "\$#@!": flag3=1 flag4=1 z=code[5:8] for b in z: if not(b.isdigit()): flag4=0 break if flag1==0 or flag2==0 or flag3==0 or flag4==0: </pre>	1 mark for each part

	<pre> print("invalid code format ") else: print("code ok ") </pre>	
SECTION E		
35	<pre> text = input("Enter a string: ") shift_value = int(input("Enter shift value: ")) result = "" for char in text: if char.isalpha(): if char.isupper(): base = ord('A') else: base = ord('a') shifted = chr((ord(char) - base + shift_value) % 26 + base) result += shifted else: result += char # Keep non-alphabetic characters unchanged print("Shifted string:", result) b. s=0 k=[1,2,3,4,5] i=0 while i< len(k): s=s+k[i] i +=1 print(s) </pre>	½ 1 ½ 1 ½ ½ 1
36	<pre> student= {'name': "John Doe", 'age': 20, 'grade': "A"} a) print(student['name']) b) student['age']=21 c) student['course']= "Python Programming" d) del(student['grade']) e) print(student) OR a) numbers.append(6) b) numbers.insert(0,0) c) numbers.remove(3) d) numbers.sort(reverse=True) e) print (numbers[-1]) </pre>	1 1 1 1 1 OR 1 1 1 1 1

37	(a) Trojan (disguised as a prize-claiming tool), possibly accompanied by adware and virus. (b) <u>Virus</u>: May have spread into her system after downloading the malware, potentially corrupting files or disabling security features. <u>Trojan</u>: The fake prize-claiming software acted as a Trojan, secretly harming her system after appearing legitimate. <u>Adware</u>: Caused the frequent appearance of unwanted pop-up advertisements and browser changes. (b) Avoid clicking suspicious email links or downloading attachments from unknown sources. Use up-to-date antivirus/anti-malware software. OR a) i) E-waste refers to discarded electronic devices like phones, laptops, and televisions. ii) E-waste contains harmful chemicals that can leak into the soil and water, polluting the environment and affecting human health. iii) One responsible method is recycling the devices through certified e-waste collection centers. b) i) Ransomware ii) She could have avoided downloading software from untrusted or malicious websites.	1 1+1+1 $\frac{1}{2} + \frac{1}{2}$ 1+1+1 1+1
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