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HALF YEARLY EXAMINATION-2025-26
Class XI
Subject- Computer Science

Time : 3 hrs **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.

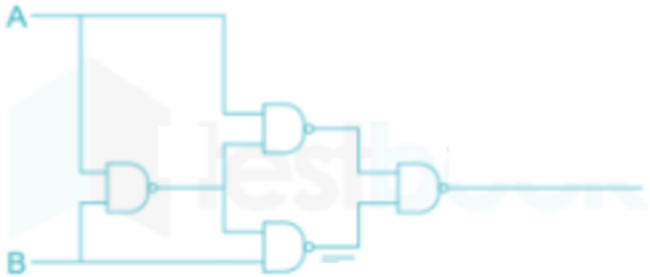
8. All programming questions are to be answered using Python Language only.

	SECTION – A	
1.	Find the invalid identifier from the following: i) name ii) break iii) section iv) rollno	**1**
2	Flash memory is a type of memory i) primary ii) ROM iii)secondary iv) all of these	**1**
3	Which of the following are keywords in Python: i. program ii. computer iii. string iv. while	**1**
4	Expand the following terms: i. CPU ii. PROM	**1**
5	Name any two operating system.	**1**
6	Which of the following is not a octal number: i) 113 ii) 834 iii) 732 iii) 364	**1**

7	If the following code is executed , what will be the output- **s = "upper case if"** **print(s[2])**	**1**
8	What will be the result of following Python expression: **2*3+2//2**	**1**
9	Find the output of following code: (if 1 is entered for **x** and 0 is entered for y) x= input('Enter First Number ') y=int(input("Enter second number")) print(x+y)	**1**
10	Find the output of following expression- * 10*len("1001") %10	**1**
11	According to boolean law : X+1 =? i) X ii) 1 iii) 0 iv) X	**1**
12	The hexadecimal digits are 0 to 9 and A to ..... i) E ii) F iii) G iv) H	**1**
13	Which of the following are jump statement : i) break ii) while iii) if iv)for	**1**

14	Write the output of the following statements:
	`for i in range(10):`
	`  if(i%2!=0):`
	`  print("Hello",i)`
		1

15	MS-Office is an example of- i) System Software ii) Application Software iii) Utility Software iv) Customized Software	**1**
16	What is the role of CPU in Computer .	**1**
	Q17 and 18 are ASSERTION AND REASONING based questions. Mark 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**: In Boolean algebra, the OR operation is commutative. **Reasoning**: The commutative property of addition holds true in Boolean algebra, which means that A + B is equal to B + A for any two Boolean variables A and B.	**1**
18	**Assertion(A):** if and for are legal statements in Python. **Reasoning(R):** Python is case sensitive and its basic selection and looping statements are in lower case.	**1**

	SECTION – B	
19	Explain if construc with example .	**2**
20	What do you understand by variable. Write a statement for variable assignment.	**2**
21	Convert the following from given number system to required number system: i. $(123)_8 = (?)_{16}$ (ii) $(ABC)_{16} = (?)_8$	**2**
22	Robert has written the code but the code is showing errors. Help Robert and rewrite the code after making all necessary correction or change and underline each correction.	**2**
23	Explain if statement with example. **Or** Explain type casting with example .	**2**
24	Write Boolean expression for the following circuit 	**2**
25	Re-write the following FOR Loop code using WHILE Loop to get same output- for i in range (2): print("hello")	**2**
	SECTION – C	
26	Draw the logic circuit diagram for: **AB + ((B+C). BC)**	**3**
27	Explain the binary operators in python with example ?	**3**
28	Explain internal and external memory .	**3**
29	Write a program to input radius of a circle and find its area and perimeter . **Write a program to calculate the electricity bill (accept number of unit from user) according to the following criteria :** **Unit — Price** **First 100 units — no charge** **Next 100 units — Rs 5 per unit** **After 200 units — Rs 10 per unit** **(For example if input unit is 350 than total bill amount is Rs2000)**	**3**
30		**3**
	SECTION - D	
31	Write a program in python to find the factorial of a number.	**2+2+1=5**

32	Write a Python program to print the following pattern. 54321 4321 321 21 1	**5**

33	Write a python program which accept two variables as input and displays the total after adding both the values.	**5**
	SECTION – E	
34	State and Prove DeMorgan's Theorem using Truth Table.	**4**
35	Write the output of following Python Statements	**4**
i	a = **True** b = **False** c = **False** **if** a **or** b **and** c: print ("Great") **else**: print ("Fabulous")	
ii	a = 4.5 b = 2 print (a//b)	