CLASS XI
ANNUAL EXAMINATION 2024-25
COMPUTER SCIENCE
SET - B
MARKING SCHEME

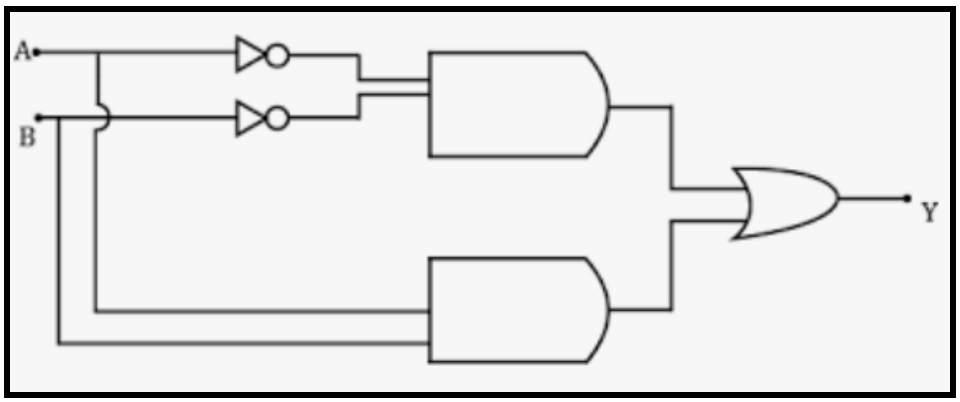
B1	B2		
Q1.	Q4	What will be the output: **s='Welcome to the site https://python.org '** **print(s.find('o', 10, 20))** **a) Integer value** b) String value c) Boolean value d) None of the above	1
Q2	Q2	Operators with the same precedence are evaluated in which manner? **a) Left to Right** b) Right to Left c) Can't say d) None of the mentioned	1
Q3	Q3	Which of the following is not a complex number? a) k = 2 + 3j b) k = complex(2) **c) k = 2 + 3i** d) k = 2 + 3J	1
Q4.	Q1	Select the correct output of the code: **s = "Programming is fun"** **M=s.split()[-2]*3** **print(M)** a) ['is', 'is', 'is'] b) error c) ("isisis") **d) isisis**	1
Q5.	Q7	What is the length of t1? **t1= ((((1,2,3,4), "a", "b"),"g", 1, 3), "John")** **print(len(t1)** a) 5 b) 4 **c) 2** d) 3	1
Q6.	q6	What will be printed as output: **s = "GAME"** **r = ""** **for item in s:** **r = item.upper() + r** **print(r)** a) GAME **b) EMAG** c) game d) None of the above	1

Q7.	Q5	Identify the output of the following python code: **D={1:"one",2:"two", 3:"three"}** **L=[]** **for k,v in D.items():** **if 'o' in v:** **L.append(k)** **print(L)** **a) [1,2]** b) [1,3] c)[2,3] d)[3,1]	1
Q8.		Select the correct output of the code: **a = "CBSE EXAM 2024"** **a = a.partition("E")** **print(a)** **a) ('CBS', 'E', ' EXAM 2024')** b) ('CBSE', 'E', ' EXAM 2024') c) ('CBS', 'EX', ' EXAM 2024') d) ('CBS', 'EXAM', '2024')	1
Q9.		Select the correct output of the code: **Numbers = [9, 18, 27, 36]** **for Num in Numbers :** **for N in range(1, Num % 8) :** **print(N, "#", end=" ")** **print( )** **a)1 #** b)9 # c)9 # d) Error in the code **1 # 2 #** 9 # 18 # 9 # 18 # 27 # **1 # 2 # 3 #** 9 # 18 # 27 9 # 18 # 27 # 36 #	1
Q10.	Q11	Which of the following is not a function/method of the random module in Python ? **a)randfloat()** b)randint() c)random() d)randrange()	1
Q11.	Q10	Consider the given expression: **17%5==2 and 4%2>0 or 15//2==7.5**	1

		Which of the following will be the correct output if the given expression is evaluated? a)True **b) False** c)17 d) 4	
Q12.	Q12	What does the list.pop(x) method do in Python? a) Removes the first element from the list. **b) Removes the element at index x from the list and returns it.** c) Adds a new element at index x in the list. d) Replaces the element at index x with None.	1
Q13.	Q13	Which of the following are not valid symbols in the hexadecimal number system ? a) 8 b)9 **c) G** d)F	1
Q14.	Q16	What possible outputs are expected to be displayed on the screen at the time of execution of the program from the following code? **import random** **temp=[10,20,30,40,50,60]** **c=random.randint(0,4)** **for i in range(0, c):** **print(temp[i],"#")** **a) 10#20#** b) 10#20#30#40#50# **c) 10#20#30#** d) 50#60#	1
Q15.	Q15	Select the output of the code: **s = 'Laugh And live'** **l = s.split()** **s_new = '#'.join([l[0].lower(), l[1], l[2].title()])** **print(s_new)** a) laugh#and#live b) LAUGH#and#live c) Error in the code **d) laugh#And#Live**	1
Q16.	Q14	What will be the output of the following Python expression? **x = 5** **y = 10** **result = (x ** 2 + y) // x * y - x** **print(result)** a) 0 b) -5 **c) 65** d) 265	1
Q17	Q17	Identify which statement will raise an error?	

		a) print(“15”*3) b) print(“15+3”) **c) print(“15”+3)** d) print(“15”+”3”)	
Q18	Q18	Identify the output of the following code snippet: **text = "GERMAN EXCHANGE"** **text=text.replace(‘GE’,'#')** **print(text)** a) #RMAN EXCHAN# **b) #RMAN EXCHAN##** b) GERMAN EXCHAN# d) #RMAN EXCHANGE	
Q19	Q19	What would the following expression return: **print(“Hello123”.sort())** a) true b) True **c) Error** d) False	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	
Q20.	Q21	(a) Both A and R are true and R is the correct explanation for A	1
Q21.	Q20	(b) Both A and R are true and R is not the correct explanation for A	1
Q22	Q23	**rev = 0** **While num => 0:** **rem == num %10** **rev = rev*10 + rem** **Num = num/10** **print(rev)**	2
Q23	Q22	**(i)10000000** **(ii)7D1**	2

Q24	Q24	**(22, 44, 66)**	2
Q25	Q25	**A digital footprint – sometimes called a digital shadow or an electronic footprint – refers to the trail of data you leave when using the internet. It includes websites you visit, emails you send, and information you submit online.** **Active and Passive Digital Footprints**	2
Q26	q28	**K[0]=590** **K.append(340)**	2
Q27	Q27	**Python data type is categorized into two types: Mutable Data Type – A mutable data type is one whose values can be changed. Immutable Data Type – An immutable data type is one in which the values can't be changed or altered.**	2
Q28	Q26	**Since he searched for wrist watches and sports items, the adware uses this data to display related advertisements. (b) To avoid this, Robin should use ad blockers, browse in private mode, and be cautious about installing software from untrusted source**	2
Q29	Q31	**eUMMER OLYMPICS 004**	3
Q30	Q30	**list1=eval(input(“Enter the elements :”))** **sum = 0** **for i in list1:** **if i % 10 == 3:** **sum += i** **print(sum)**	3
Q31	Q29	**N = int(input(“Enter the number N :”))** **new_str = ""** **for i in range(len(test_str)):** **if (i+1) % N == 0:** **new_str += “#”** **else:** **new_str += test_str[i]** **print("String after replacement : " ,new_str)**	3

Q32	Q32	 (A'+B').(A+B)	4

Q33	Q33	(i)Ransomware is a type of malware that encrypts the victim's personal data until a ransom is paid. They commonly use difficult-to-trace digital currencies such as paysafecard or Bitcoin and other cryptocurrencies are used for the ransoms, making tracing and prosecuting the perpetrators difficult.
		(ii)
		N=int(input('Enter the N:'))
		D={}
		for i in range(1,N+1):
		name=input('Enter name :')
		marks=eval(input('Enter the marks in 5 subjects'))
		D[name]=marks
		for i in D:
		if D[i][0]>=85 and D[i][1]>=85 and D[i][2]>=85 and D[i][3]>=85 and D[i][4]>=85:
		print(i,"-", "SCHOLAR")
			4

Q34	Q35	(i)Append function in Python adds a single element to the end of the list, whereas the extend function adds multiple elements (from an iterable) to the list. Append takes a single element as an argument, while extend takes an iterable as an argument. (ii)[20, 36, 27, 100, 65, 135, 335]	4
Q35	Q34	(i)The split() function can be used to split a given string or a line by specifying one of the	5

		substrings of the given string as the delimiter.On the other hand, partition() is used to split a string into three parts: the part before the separator, the separator itself, and the part after the separator. (ii)K*A*N*A*K* m%e%e%t%s% K*A*N*A*K*	

Q36	Q37	(i) D.pop("SARA")
		D.update({"PRATEEK:72})
		(ii)
		num = int(input("Enter a number: "))
		a=0
		b=1
		c=a+b
		t=()
		while c <=num:
		if c%2==0:
		t=t+(c,)
		a=b
		b=c
		c=a+b
		print(t)
			5

Q37	Q36	**s=input("Enter the string :")** **str=s.split( )** **count1=0** **count2=0** **for i in str:** **if i[0] in "AEIOU": # checks for word starting with uppercase vowel** **count+=1** **elif i[0].isdigit(): # checks for word starting with any digit**	

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        count2+=1
print(count1,count2)
```

(ii)

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N=int(input("Enter the number N:"))
D={}
for i in range(1,N+1):
    tuple1=( )
    for k in range(1,i+1):
        if i%k==0:              # checks for factor of each number
            tuple1=tuple1+(k,)          # add element to the tuple
        D[i] = tuple1           # assign value as tuple storing all factors
    print(D)
```