Indian School Al Wadi Al Kabir

Assessment 1

COMPUTER SCIENCE (Code: 083)

Class : XI
Date : 29/09/2022

Time: 3 Hours
Max. Marks : 70

General Instructions:

- The question paper is divided into 3 sections – A, B and C
- Section A, consists of 14 questions (1-14). Each question carries 2 marks.
- Section B, consists of 6 questions (15-20). Each question carries 3 marks.
- Section C, consists of 6 questions (21-26). Each question carries 4 marks.

		Section –A **Each question carries 2 marks**	
Q. No.	**Part No.**	**Question**	**Marks**
1	(a)	Identify the valid identifier(s) from the following: a) 6Rate b) Amount3 c) Exchange$Rate d) _isAvailable	(1)
	(b)	Identify the odd one out from the following: a) not b) ** c) AND d) //	(1)
2	(a)	Identify the Odd one out from the following: a) monitor b) printer c) Joystick d)plotter	(1)
	(b)	Define : Nibble and Byte	(1)
3		Define: Bus and also write the types of Bus in a computer architecture.	(2)
4		Define: Assembler and Compiler.	(2)
5		Expand and define: ASCII, ISCII and Unicode.	(2)
6		Differentiate RAM to ROM with at least 3 points.	(2)

7		Identify errors in the following code (if any) and correct the code by rewriting it with corrections.
		Points = INT(input("Enter Starting Point: ")) #Line 1
		For J in range (50, 500, 50) #Line 2
		Points = Points + J #Line 3
		print("Final Point Achieved = ' , Point) #Line 4
			(2)

8		How many times the following loop will executes? X, Y, Z = 100, 175, 500 for K in range(X, Y, 15) : Z += X print("Z = ", Z) print("Final Value of Z = ", Z)	(2)
9		Define: Literals and explain the types of literals with example.	(2)
10		Evaluate the following expressions: i) 20+15*3+10/2 ii) (10+20) *4 iii) 30 + (7-2) ** 2 // 50 – 6* 4 iv) 40+ 10 – 25 * 4 // 2 ** 5	(2)

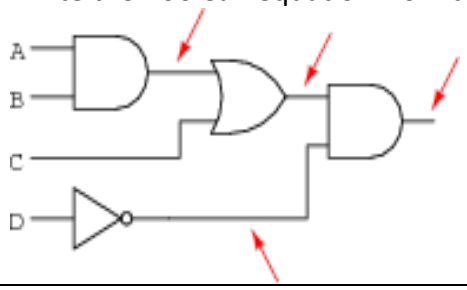
11		Evaluate the following expressions: If the values are X=False , Y=True , Z=True a) X and Y or (not Z) b) not X or Y and Z c) Y or Z and not X d) Z and Y or X and not Z	(2)
12		Write a Python program that reads a number of Minutes and print it in form : Hours : Mins. For example if Minutes = 150 Output should be – 2 Hours : 30 Mins.	(2)

13		Identify the error in the following code and rewrite the correct code with underlining each corrections.
		x = int(input()) # Line 1
		y = int(INPUT()) # Line 2
		z = int(input()) # Line 3
		if (x > y and x > z): # Line 4
		print(“X id maximum”) # Line 5
		Elif (y > z) # Line 6
		print(“Y id maximum”) # Line 7
		ELSE: # Line 8
		print(“Z id maximum”) # Line 9
			(2)

14		Identify the error in the following code and rewrite the correct code with underlining each corrections. for J IN Range(201,250): IF J % 6 == 0 print(J) else: Print(J*10)	(2)
		SECTION – B **Each question carries 3 marks**	
15	(i)	What will be the output of the following code segment? z = 30 + float (25 + 3 / 4) w = 30 + int (25 + 3.0 / 4.0) print(z, w, sep = ‘ & ’)	(2)
	(ii)	What will be the output of the following code? x = 100 x , y, x = x + 50 , x + 25, x * 4 print(x, end='@') print(y)	(1)

16		Write the output of the following code fragment if
		i) value of M=35
		ii) value of M =40
		iii) value of M=80
		M=int(input("Enter the value of M ? "))
		N=5
		if(M%8 == 0):
		Res=N*M
		else:
		Res=N**4
		print("Value of R = ",Res)
			`(3)

17	(a)	Write the output of the following code fragment if
		i) value of BasicPay=2500 ii) value of BasicPay=6000
		BasicPay=int(input("Enter the Basic Salary ? "))
		if(BasicPay < 2000):
		Bonus = BasicPay*5
		elif(BasicPay<3000):
		Bonus = BasicPay*4
		elif(BasicPay<4000):
		Bonus = BasicPay*3
		else:
		Bonus = BasicPay*2
		print("Bonus Amount = ",Bonus)
			(3)

18		Draw the following Boolean Circuit: A + B'.C + A'.B + A.C'	(2)
		Write the Boolean equation from the following circuit: 	(1)
19	(a)	Find the output of the following code fragment: P = 0 for M in range(50, 100, 20): P = P + M print("Current P Value = ", P) print("Answer = ", P)	(2)
	(b)	Count how many number of times the above code in Q No. 19 (a) will execute?	(1)
20		State and Prove both the De Morgan's Laws using Truth tables.	(3)
		Section C **Each question carries 4 marks**	
21		Convert the following numbers (any 4) i) $(237)_{10}$ to ( )$_2$ Decimal to Binary ii) $(192)_{10}$ to ( )$_{16}$ Decimal to Hexadecimal iii) $(724.7)_8$ to ( )$_{10}$ Octal to Decimal iv) $(1011\ 0101\ 1101.1010111)_2$ to ( )$_{16}$ Binary to Hexadecimal v) $(DFA.B5)_{16}$ to ( )$_8$ Hexadecimal to Octal	(4)
22		Write a Menu driven program to perform the given operations: 1. To find and display Area and Perimeter of Circle. Area = πr^2 Perimeter = $2\pi r$ 2. To input marks in 5 subjects, find and display total and average marks. 3. Invalid Choice.	(4)
23		Write a Python program to calculate library fine for books returned late. The number of days entered by the user and Fines are calculated as per the following criteria:	(4)

		First five days : Rs. 1.5 per day. Six to ten day : Rs. 3.0 per day. Eleven to Fifteen day : Rs. 4.0 per day. Above Fifteen days : Rs. 5.0 per day	
24		Write a Menu driven program to perform the given operations using if..else statement: 1. To Check the given No. is odd or even 2. To check the given No. is divisible by both 3 and 4. 3. Invalid Choice.	(4)
25		Write a Menu driven program to perform the given operations using for loop: 1. To display factors of a given no. N. 2. To display factorial value of a given no. M. 3. Invalid Choice.	(4)
26		Write a Menu driven program to perform the given operations using for loop: 1. To sum the following series: 2 + 5 + 8 + 11 + …….. + 20 2. To sum the following series: $x + x^2 / 2 + x^3 / 3 + \ldots\ldots + x^n / n$ 3. Invalid Choice.	(4)

All the Best