

Indian School Al Wadi Al Kabir

Assessment 1

COMPUTER SCIENCE (Code: 083)

Class : XI Time: 3 Hours
Date : 29/09/2022 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.	Part	Question	Marks
No.	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	(2)
		Points = Points + J #Line 3	
		print("Final Point Achieved = ', Point) #Line 4	
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:	(2)
		If the values are X=False , Y=True , Z=True	(2)
		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	
12		Write a Python program that reads a number of Minutes and print it in	(2)
12		, , ,	(2)
		form: Hours: Mins. For example if Minutes = 150	
4.2		Output should be – 2 Hours : 30 Mins.	(2)
13		Identify the error in the following code and rewrite the correct code with	(2)
		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	
14		Identify the error in the following code and rewrite the correct code with	(2)
		underlining each corrections.	
		for J IN Range(201,250):	
		IF J % 6 == 0	
		print(J)	
		else:	
		Print(J*10)	
		SECTION – B	
	4.3	Each question carries 3 marks	
15	(i)	What will be the output of the following code segment?	(2)
		z = 30 + float (25 + 3 / 4)	
		w = 30 + int (25 + 3.0 / 4.0)	
		print(z, w, sep = ' & ')	
	(ii)	What will be the output of the following code?	(1)
		x = 100	
		x, y, x = x + 50, x + 25, x * 4	
		print(x, end='@')	
		print(y)	
16		Write the output of the following code fragment if	`(3)
		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)	
		printy value of it - , ites	

		(a)	Write the output of the following code fragment if	(3)
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) Draw the following Boolean Circuit: A + B'.C + A'.B + A.C' Write the Boolean equation from the following circuit: A + B'.C + A'.B + A.C' Write the Boolean equation from the following circuit: A p = 0 for M in range(50, 100, 20): P = P + M print("Current P Value = ", P) print("Answer = ", P) (b) Count how many number of times the above code in Q No. 19 (a) will execute? 20 State and Prove both the De Morgan's Laws using Truth tables. Section C Each question carries 4 marks 21 Convert the following numbers (any 4) i) (1237):e to (): ii) (192):e to (): ii) (192):e to (): iii) (192-1):e to (): iii) (724.7):e to (): iii) (724.7):e to (): iii) (79.A.B5):e to (): Virte a Menu driven program to perform the given operations: 1. To find and display Area and Perimeter of Circle. Area = πr² Perimeter = 2πr 2. To input marks in 5 subjects, find and display total and average marks. 3. Invalid Choice. 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 performed.			i) value of BasicPay=2500 ii) value of BasicPay=6000	
Bonus = BasicPay*5 elif(BasicPay<3000): Bonus = BasicPay*4 elif(BasicPay<4000): Bonus = BasicPay*2 else: Bonus = BasicPay*2 print("Bonus Amount = ",Bonus) 18 Draw the following Boolean Circuit: A + B '. C + A'. B + A. C' Write the Boolean equation from the following circuit: A + B '. C + A'. B + A. C' Write the Boolean equation from the following circuit: A print("Current P Value = ", P) print("Answer = ", P) (b) Count how many number of times the above code in Q No. 19 (a) will execute? 20 State and Prove both the De Morgan's Laws using Truth tables. Section C Each question carries 4 marks 21 Convert the following numbers (any 4) i) (237) ₁₀ to () ₂			BasicPay=int(input("Enter the Basic Salary?"))	
elif(BasicPay<3000): Bonus = BasicPay*4 elif(BasicPay<44000): Bonus = BasicPay*3 else: Bonus = BasicPay*2 print("Bonus Amount = ",Bonus) Draw the following Boolean Circuit: A + B'.C + A'.B + A.C' Write the Boolean equation from the following circuit: A + B'.C + A'.B + A.C' Write the Boolean equation from the following circuit: P = 0 for M in range(50, 100, 20): P = P + M print("Current P Value = ", P) printt("Answer = ", P) (b) Count how many number of times the above code in Q No. 19 (a) will execute? State and Prove both the De Morgan's Laws using Truth tables. Section C Each question carries 4 marks 21 Convert the following numbers (any 4) i) (237) ₁₀ to () ₁₂ Decimal to Binary ii) (192) ₁₀ to () ₁₅ Decimal to Hexadecimal iii) (724.7) ₈ to () ₁₀ Octal to Decimal iii) (724.7) ₈ to () ₁₀ V) (DFA.B5) ₁₅ to () ₈ Hexadecimal to Octal 22 Write a Menu driven program to perform the given operations: 1. To find and display Area and Perimeter of Circle. Area = πr² Perimeter = 2πr 2. To input marks in 5 subjects, find and display total and average marks. 3. Invalid Choice. 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 total and the calculated as per total and the calculated as per total and sent and the calculated as per total and sent and Fines are calculated as per total and the calculated as pe			if(BasicPay < 2000):	
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1 I Lallacciae esitasia.			The number of days entered by the user and Fines are calculated as per the	(· /

	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 ifelse	(4)
	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.	
25	Write a Menu driven program to perform the given operations using for	(4)
	loop:	
	1. To display factors of a given no. N.	
	2. To display factorial value of a given no. M.	
	3. Invalid Choice.	
26	Write a Menu driven program to perform the given operations using for	(4)
	loop:	
	1. To sum the following series: 2 + 5 + 8 + 11 + + 20	
	2. To sum the following series: $x + x^2 / 2 + x^3 / 3 + \dots + x^n / n$	
	3. Invalid Choice.	

All the Best