 **Indian School Al Wadi Al Kabir**

**Assessment – 1**

**COMPUTER SCIENCE (Code: 083)**

CLASS : XI **ANSWER KEY** Max. Marks:70

Date: 28 /09/2023 Time: 3 hours

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|  | **SECTION A** |  |
| 1. | 1 GB = \_\_\_\_\_\_\_\_\_\_\_  **a. 1024 MB**  b. 1024 KB  c. 1000 Bytes  d. 1000 TB | 1 |
| 2. | --------- statement that takes the control out of the loop.  **a. break**  b. continue  c. pass  d. jump | 1 |
| 3. | Which of the following cannot be a variable?  a. \_init  **b. in**  c. it  d. on | 1 |
| 4. | What will be the output of the code:  >>> s="i love my country"  >>> r = "i love my class"  >>> s[2:6] + r[-7:]  a. 'loveyclass'  **b. 'lovey class'**  c. 'loveclass'  d. 'love class' | 1 |
| 5. | What will be the output of the following expression?  print( 95//3\*\*2\*\*2+12-3%2)  **a. 12**  b. 14  c. 11  d. 10 | 1 |
| 6. | Operating system is an example of \_\_\_\_\_\_\_\_\_\_\_\_  a. Application Software  **b. System Software**  c. Utility Software  d. General Purpose Software | 1 |
| 7. | Consider a list L = [5, 10, 15, 20], which of the following will result in an error:-  a. L[0] += 3  b**. L += 3**  c. L \*= 3  d. L[1] = 45 | 1 |
| 8. | What will be the output of the following Python code?  str1 = “Be Honest”  for i in str1.split(‘e’):  print(i, end=“& ”)  a. Be&Honest&  b. B&e& Honest&  c. **B& Hon&st&**  d. Be& Hone&st& | 1 |
| 9. | Decimal equivalent of the Hexadecimal no 2C is \_\_\_\_\_\_\_\_\_\_  a. 33  b. 34  **c. 44**  d. 43 | 1 |
| 10. | Write the output of the following:  st = [[101,"Amit",98],[102,"Geetu",95],[103,"Manoj",87],[104,"Sawan",79]]  print( str(st[2][2] + str(st[3][0])  a. 193  b. 182  **c. 191**  d. 166 | 1 |
| 11. | Name the boolean theorem X + X’Y = X + Y  a. Associative law  b. Complimentarity law  c . Involution law  **d. Third Distributive law** | 1 |
| 12. | By default the input() function returns  a. Integer  b. Float  c. Boolean  **d. String** | 1 |
| 13. | Given the Python declaration s1=”Hello”. Which of the following statements will give an error?  a. print(s1[4])  b**. s1[4]=”Y”**  c. s1=s1[4]  d. s2=s1 | 1 |
| 14. | A.A’= \_\_\_\_\_\_\_\_\_\_\_\_\_  a. A’  **b. 0**  c. 1  d A | 1 |
| 15. | Identify the output of the following Python Statements.  S=”GOOD MORNING”  print(S.capitalize( ), S.title( ), end = ‘#’)  a. GOOD MORNING Good Morning#  b. Good Morning# Good Morning  c. Good morning#Good Morning#  d. **Good morning Good Morning#** | 1 |
| 16. | Write the output of the following code :  >>>L=[“Amit”,”Sumit”,”Naina”]  >>>print(L[-1][-1])  a. [Naina]  b. [a]  **c. a**  d. None of the above | 1 |
| 17. | Which of the following logic expression represents the logic diagram given below?    a. (A+ B’) (C’+ D)  **b. AB’+ C’D**  c. (AB)’+ ( CD)’  d. A’B+CD’ | 1 |
| 18. | Which of the following is not a token?  a. //  b. X  **c. ##**  d. 23 | 1 |
|  | **SECTION B** |  |
| 19. | Rewrite the following code after correcting the errors.  x=int(input(“Enter a number”))  if x % 2=0:  print (x, “is even”)  else if x<0:  print ( x, “should be positive”)  else;  print (x “is odd”) | 2 |
| 20. | What is the difference between interpreter and compiler ?  Ans: An interpreter converts HLL to machine language line by line and simultaneously executes the converted line. If an error occurs in a line, the line is displayed and interpreter does not proceed unless the error is rectified .  A compiler converts an HLL program to machine language in one go. If there are errors, it gives the errors list along with the line numbers. Once the errors are removed, error-free object code is made available and after and after this compiler is no more needed in the memory | 2 |
| 21. | Given is a Python String declaration:  exam="Python Programming"  Write the output of:  print(exam[10:13] + exam[-13: :-4])  **grany** | 2 |
| 22. | Find the output of the following code.  A, B, C = 20,5,15  A,C,B = A//10,C//5,B\*2  D = 0  for K in range(A, B, C):  D = D + B  print('Result = ', D)  **Result = 30** | 2 |
| 23. | Do the following:  1. (1011010)2 = ( 90) 10  2. ( 6A7F)16  = (65177) 8 | 2 |
| 24. | Write two differences in the functions of pop() and remove().  The pop method removes an individual item and returns it, while remove searches for an item, and removes the first matching item from the list.  Give examples | 2 |
| 25. | What will be the output of the following code ?  x,y=30,28  if x+2 >y-5:  x = x+5  y = x+ y\*2  x = x-5  print(x,y)  **30 91** | 2 |
|  | **SECTION C** |  |
| 26. | Find the output of the following :  A=[2,5,6,3,12]  for i in range(2,3):  if i//2 not in A:  print('BA',end=' ')  for j in A:  if j% i !=0:  print('La',end=' ')  **Ba La La** | **3** |
| 27. | Find the output of the following program:  L= [34,54,67,21,91,26,45,11]  L[1]=L[2]+L[4]  L.insert(2,45)  print(L)  del L[3:6]  print(L)  L.insert(20,6)  print(L)  **[34, 158, 45, 67, 21, 91, 26, 45, 11]**  **[34, 158, 45, 26, 45, 11]**  **[34, 158, 45, 26, 45, 11, 6]** | 3 |
| 28. | What will be the output of the following code?  L=[10,20]  L1=[30,40]  L2=[50,60,70]  L.append(L1)  L.extend(L2)  L.pop( )  print( L)  **[10, 20, [30, 40], 50, 60]** | 3 |
| 29. | Find the output of the following.  Text1="AsSesSMeNtExAm2023"  Text2=""  I=0  while I<len(Text1):  if Text1[I].isdigit( ):  Val = int(Text1[I])  Val = Val + 1  Text2=Text2 + str(Val)  elif Text1[I]>="A" and Text1[I] <="Z":  Text2=Text2 + (Text1[I+1])  else:  Text2=Text2 + "\*"  I=I+1  print(Text2)  **s\*e\*\*Me\*t\*x\*m\*3134** | 3 |
| 30. | Write the output of the following Python code.  L = [25,8,75,12]  for i in range(len(L)):  if L[i]%5 == 0:  L[i]//=5  if L[i]%3 == 0:  L[i]//=3  for ele in L:  print(ele ,end=“ % ”)  **5%8%5%4%** | 3 |
|  | **SECTION D** |  |
| 31. | a. Write a program to input a number and check whether it is a prime number or not.  N=int(input(“enter the number”))  for i in range(2,N):  if N%i ==0:  print(“it is not a prime no. “)  break  else:  print(“it is a prime no.”)  b. Write a program to input a number and find its factorial.  N=int(input(“enter the number”))  fact = 1  for I in range(1, N+1):  fact = fact\*I  print(fact) | **4** |
| 32. | Write a program to input the basic salary and calculate the DA as per the following criteria.  Basic salary DA %  >50000 25 % of Basic  Between 30000 and 50000 20 % of Basic  Between 20000 and 30000 15 % of Basic  Between 10000 and 20000 10 % of Basic  <10000 5 % of Basic  basic=int(input(“enter the basic”))  if basic >=50000):  DA= basic \*25/100  elif basic >=30000:  DA= basic \*20/100  elif basic >=20000:  DA= basic \* 15/100  elif basic >=10000:  DA = basic \* 10/100  else:  DA = basic \* 5/100  print(“DA = “, DA) | 4 |
|  | **SECTION E** |  |
| 33. | a. Write a program to print the following patttern.    D E F G H  D E F G  D E F  D E  D  for i in range(5):  ch = ‘D’  for j in range(5-i):  print(ch,end=’ ’)  ch=chr(ord(ch)+1)  print()  b. Write a program to find the sum of the following series where x and n are  accepted by the user.    S= x/3 + x3/5 + x5/7 + x7 / 9 + ……..+ x n /n+2  X=int(input(“enter x”))  N=int(input(“enter n”))  S=0  for i in range(1,n+1,2):  S = S + x\*\*i/(i+2)  print(S) | 5 |
| 34. | a. Write a program to input a list of ‘n’elements and find the sum of all  elements ending with 7 .  n=int(input(“enter n”))  l=[]  for i in range(n):  x=int(input(“enter the element”))  l.append(x)  sum=0  for i in range(n):  if l[i]%10==7:  sum=sum + l[i]  print(sum)  b. Write a program to input a string and count the number of uppercase letters  and digits in it.  S=input(“enter the string”)  C1=0  C2=0  For ch in S:  If ch.isupper():  C1=C1+1  If ch.isdigit():  C2=C2+1  print(C1,C2) | 5 |
| 35. | Write a program to input ‘n’elements in to a list L1 and copy all odd elements in the even position to another list L2.  n=int(input(“enter n”))  L1=[]  L2=[]  for i in range(n):  x=int(input(“enter the element”))  L1.append(x)  for i in range(n);  If i%2==0 and L1[i]%2!=0:  L2.append(L1[i])  print(L2) | 5 |