 **Indian School Al Wadi Al Kabir**

**Assessment – II-RETEST**

**COMPUTER SCIENCE (Code: 083)**

CLASS : XI Max. Marks:70

Date: 14/12/2023 Time: 3 hours

**General Instructions:**

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Section A has 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 02 questions carrying 04 marks each.
7. Section E has 03 questions carrying 05 marks each.
8. All programming questions are to be answered using Python Language only.

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|  | **SECTION A** |  |
| 1. |  Which of the following acts as an interface between a device and the operating system?1. System Utility
2. Language Translator
3. Device Drivers
4. Anti-virus software
 | 1 |
| 2. |  Which of the following is an invalid keyword in Python?1. False
2. return
3. non\_local
4. None
 | 1 |
| 3. |  Pick the odd one out.1. >=
2. = =
3. !=
4. \*=
 | 1 |
| 4. |  What will be the output of the following statement? import math  print(25//math.fmod(20,3)+3\*2-11%3)1. 14.33
2. 18.0
3. 16.0
4. 22.0
 | 1 |
| 5. |  Consider the given expression 17>14 and 16<13 and 10==10 or 17>14 and not 20Which of the following will be the correct output, if the given expression is evaluated ?1. True
2. False
3. None
4. NULL
 | 1 |
| 6. | \_\_\_\_\_\_\_ is non-volatile and has large storage capacity. 1. ROM2. RAM3. REGISTERS4. HARDDISK | 1 |
| 7. | Given the following TupleTup = (10,20,30,50)Which of the following statements will result in an error?1. print(Tup[0]+50)
2. Tup.pop(2)
3. print(Tup[1:2])
4. print(len(Tup))
 | 1 |
| 8. |  What will be the output of the following Python code? S=”Wadi kabir@Muscat@53” A=S.split(“@“)  print(A)1. [‘Wadi kabir’,’@’, ‘Muscat@53’]
2. [‘Wadi kabir’,’@’, ‘Muscat’, ‘@’, ‘53’]
3. [‘Wadi kabir’, ‘Muscat’,’53’]
4. [‘Wadi kabir’, ‘Muscat @ 53’]
 | 1 |
| 9. | Decimal equivalent of the Octal number 324 is \_\_\_\_\_\_\_\_\_\_a. 213b. 212c. 219 d. 222 | 1 |
| 10. | Write the output of the following code :A = {1 : "One", 2 : "Two", 3 : "Three"}print(A[2] + A[1])a. Errorb. TwoOnec. 21d. {1 : “One”, 2 : “Two”, 3 : “Three”} | 1 |
| 11. |  Name the Boolean theorem A+ B = B + A a. Associative law b. Complementarity law c . Involution law d. Commutative law | 1 |
| 12. | Evaluate the following expression and identify the correct answer:import matha= math.ceil(20.1) - math.floor(14.99)+math.pow(4,2)print(a)1. 21.0
2. 23.0
3. 24.0
4. 25.0
 | 1 |
| 13. | Suppose a dictionary D1 is declared as D1 = {“LG”:145, “Sony”:185, “Ikon”:115} which of the following are correct? a) print(D1.value) b) D1.update("Sony":175) c) print (D1.key ()) d) D1.update({"Sony":175}) | 1 |
| 14. |  X + 1 = \_\_\_\_\_\_\_\_\_\_\_\_\_ a. X’ b. 0 c. 1 d X | 1 |
| 15. | What will be the result of the following code?>>>d1 = {“abc” : 5, “def” : 6, “ghi” : 7}>>>print (d1[0])(a) abc(b) 5 (c) {“abc”:5} (d) Error | 1 |
| 16. | Write the output of the following code :colors=["violet", "indigo", "blue", "green", "yellow", "orange", "red"]del colors[4]colors.remove("blue")colors.pop(3)print(colors) 1. ['violet', 'indigo', 'orange', 'red']
2. ['violet', 'green', ‘yellow’, 'red']
3. ['violet', 'indigo', 'green', 'red']
4. ['violet', 'indigo', 'green', ‘orange’, 'red']
 | 1 |
| 17. | Which of the following logic expression represents the logic diagram given below?a) Q = (A+B) ((B.C)+(B+C)) b) Q = (A.B) + ((B+C)(BC)) c) Q = (A.B) + (B+C) + (BC) d) Q = (A+B) ((B+C)+(B+C)) | 1 |
| 18. |  Find the operator which cannot be used with a string in python from the following.1. +
2. in
3. \*
4. //
 | 1 |
|  | **SECTION B** |  |
| 19. | Find the output of the following code.Num = 20Sum = 0for i in range (10, Num, 3): Sum+=i if i%2==0: print (i\*2) else: print (i\*3)print(Sum) | 2 |
| 20. |  Explain Application software. Give examples. | 2 |
| 21. |  If the following code is executed, what will be the output of the following code?Topic="SolarMarketingMedia"print(Topic[5:10])print(Topic[-5:]) | 2 |
| 22. | What are the possible outcomes executed from the following code? Also, specify the maximum and minimum values that can be assigned to variable COUNT.import randomTEXT = "CBSEONLINE"COUNT = random.randint(0,3)C=9while TEXT[C] != 'L': print(TEXT[C]+TEXT[COUNT],end="\*") COUNT= COUNT + 1 C = C-1(i) EC\* NB\* IS\*(ii) NS\* IE\* LO\*(iii) ES\* NE\* IO\*(iv) LE\* NO\* ON\* | 2 |
| 23. |  Do the following: 1. (723)8 = ( \_\_\_\_\_\_\_\_\_\_\_\_) 16 2. ( BCD)16  = ( \_\_\_\_\_\_\_\_\_\_\_\_\_) 2 | 2 |
| 24. | Explain with examples the difference between a list and a dictionary. | 2 |
| 25. | i. Given is a Python list declaration: L=[23,43,45,76,78,89,10,33,42] What will be the output of : print(L[3:-3]) ii. Write the output of the following code: d1={‘a’:32,’b’:40,’c’:50} d2={‘d’:90,’c’:80,’e’:45} d1.update(d2) print(d1) print(d1.get(‘c’)) | 2 |
|  | **SECTION C** |  |
| 26. | Find the output of the following :tuple1 = (11, 2, 3, 4, 5 ,6)list1 =list(tuple1)new\_list = []for i in list1: if i%2!=0: new\_list.append(i\*2)new\_tuple = tuple(new\_list) print(new\_tuple) | **3** |
| 27. | Find the output of the following program:lis = [22, 11, 32, 45, 54, 34, 78]del lis[1:7:2]print ("List elements after deleting are : ")for i in range(0, len(lis)): print(lis[i],end = “@“) lis[i]=lis[i]+5lis.extend([65,92,12])lis.pop()lis.insert(1,15)print ("\nList elements after manipulation are : ")for i in range(0, len(lis)): print(lis[i],end=’#’) | 3 |
| 28. | Predict an output of the following:List1=[23,28,21,26,23,28,23]List1.insert(3,28)print(List1.index(26))print(List1.count(28))List1.pop(List1.count(23))print(List1) | 3 |
| 29. | Find the output of the following.mystr='IsWk-23'newstr=' 'count=0for i in mystr: if count % 2 == 0 : newstr=newstr+str(count) else: if i.islower(): newstr=newstr+i.upper() else: nerstr=newstr+i\*2 count+=1print(newstr) | 3 |
| 30. | Write the output of the following Python code. subject=[‘DELHI’, ‘CHENNAI’, ‘MUMBAI’,’BANGALORE’,’GOA’]for i in range(0,5): if ‘N’ in subject[i]: subject[i]=subject[i][:3] else: subject[i]=subject[i][3:]print(subject) | 3 |
|  | **SECTION D** |  |
| 31. | a. Write a program to input a number and find the sum of its digits.b. Write a program to find the sum of the series S=1+X1/3+ X3/5+X5/7+…..+XN/N+2 where X and N is entered by the user | **4** |
| 32. | Write a Python program to input the billamt amount made by a customer, calculate and display discount amount and net amount payable as per the following criteria:

|  |  |
| --- | --- |
| Shopping amount | Discount |
| More than 50000 | 25% of billamount |
| Between 30000 and 50000 | 18% of billamount |
| Between 20000 and 29999.9 | 8% of billamount |
| Less than 20000 | 5% of billamount |

Net amount payable = billamount – discount | 4 |
|  | **SECTION E** |  |
| 33. | a. Write a program to input ‘n’ numbers in to a list L1 and replace every number divisible by 7 with three times its value and the remaining with half its value.  b. Write a program to input a string and count the number words in it. | 3+2 |
| 34. | 1. Write a program to input a list L with ‘n’ elements and find the sum of all elements not divisible by 3 or 5.
2. Write a program to input a string and display every character with ‘#’ after each character.

 For example: if the string is “Indian School Wadi Kabir”Output should be : I#n#d#i#a#n# #S#c#h#o#o#l# #W#a#d#i# #K#a#b#i#r# | 3+2 |
| 35. | Write a program to create a dictionary “employee” with name and salary of ‘n’ students as key : value pairs. Find the sum of salary of all employees whose salary >8000. | 5 |