**INDIAN SCHOOL AL WADI AL KABIR**

Assessment -1 2023-24

**SUB: Informatics Practices(065)**

Date: 28/09/2023 Time Allowed: 3 hours

Class: XI Maximum Marks: 70

|  |  |  |
| --- | --- | --- |
| *General instructions:*  1. This question paper contains four sections, Section A to D.  2. All questions are compulsory.  3. Section A has 15 questions carrying 01 mark each.  4. Section B has 10 questions carrying 02 marks each.  5. Section C has 05 questions carrying 03 marks each.  6. Section D has 05 questions carrying 04 marks each.  7. All programming questions are to be answered using Python Language only. | | |
|  | **Section –A** |  |
| **Q. No.** | **Question** | **Marks** |
| 1 | Which of the following is a valid identifier?  a) 21School  b) school@123  c) winner12#  d) book\_store | 1 |
| 2 | Elements of a list are enclosed in \_\_\_\_\_\_\_\_\_\_\_\_ brackets.   1. Square bracket 2. Round bracket 3. Curly bracket 4. None of the above | 1 |
| 3 | Evaluate the following expression : 86-3\*4+6//2   1. 70 2. 307 3. 77 4. 72 | 1 |
| 4 | How many time(s) the following loop will execute?  for x in range(-600, 300, 200):  print(x, end=” ”)   1. 6 2. 4 3. 5 4. 7 | 1 |
| 5 | A 8-bit word is called a \_\_\_\_\_\_\_\_\_\_\_\_\_   1. Bit 2. Byte 3. Nibble 4. Kilo byte | 1 |
| 6 | Evaluate the expression.  10\* ( 3 % 4) / 2 + 7   1. 21 2. 22 3. 21.0 4. 22.0 | 1 |
| 7 | Microsoft Excel is an example of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. General Purpose software 2. Customized software 3. Freeware software 4. All the above | 1 |
| 8 | Find the output.  a=5, b=6, c=0  a>b and b<10   1. False and True 2. True and False 3. True 4. False | 1 |
| 9 | The high speed memory placed between the CPU and the primary memory is known as \_\_\_\_\_\_\_\_\_\_\_\_\_.   1. RAM 2. ROM 3. Cache 4. None of the above | 1 |
| 10 | How many numbers of times will the following loop executes?  x, y, z = 20, 45, 0  while (x < y):  z = z + x \* 10  x = x + 12  print (“Result Z = ”, z)   1. 2 2. 3 3. 4 4. 5 | 1 |
| 11 | The \_\_\_\_\_\_\_\_\_\_ function arrange the elements of a list in an ascending or descending order.   1. reverse() 2. sort() 3. insert() 4. pop() | 1 |
| 12 | What will be the output of the following Python code snippet?  **>>>not(3>4)**  **>>>(5>2)&(3<=4)**   1. True   False   1. True   True   1. False   False   1. False   True | 1 |
| 13 | Find the output.  x=40  y=x+1  x,y=20,y+x  print(x,y)   1. 20 81 2. 20 61 3. 40 81 4. 40 61 | 1 |
| 14 | Evaluate the expression.  12 % 3 \*\* 4 // 5 + 6   1. 8 2. 8.0 3. 7 4. 7.0 | 1 |
| 15 | Guess the output  a)5\*\*2 b)17//4  a. 10 and 4  b. 25 and 4  c. 10 and 4.0  d. 25.0 and 4.0 | 1 |
|  | **SECTION – B** |  |
| 16 | 1. Differentiate between / and % operator in Python.   / operator gives the quotient and % operator gives the remainder.   1. Identify and correct the errors in the following code:   if( x==1):  M = 50  else:  M=15 | 2 |
| 17 | What will be the output?   1. >>> num1 = 10   >>> num2 = 2  >>> num1 >= 10 or num2 >= 10  True   1. >>> num1,num2 = 10, 0   >>> not (num1 = = 20)  True | 2 |
| 18 | Which data type will be used to represent the following data values in python and why?   1. Mobile Number : Integer 2. Name of the student : string | 2 |
| 19 | What will be the output of the given python statement?  **i)print('Arun','Manoj','Sandeep', sep='@')**  **Arun@Manoj@Sandeep**  **ii) print('Pen','Pencil','School', sep='@', end='!!!')**  Pen@Pencil@School!!! | 2 |
| 20 | What is the difference between append() and extend() in List?   * append()-Appends a single element passed as an argument at the end of the list * extend():Appends each element of the list passed as argument at the end of the given list | 2 |
| 21 | Find out the errors in the following code in finding out factorial of a number ‘num’.  num=5  fact=1  for i in range(num):  fact = =fact\*(i+1)  print("Factorial=",fact) | 2 |
| 22 | Write the most appropriate list method to perform the following tasks:   1. Get the position of an item in the list- index() 2. Delete the 4th element from the list- pop() 3. Add single element at the end of the list – append()/extend()/insert() 4. Add an element in the beginning of the list – insert() | 2 |
| 23 | Write a program using if..else to check the person is eligible to vote or not by getting input from the user. If the age is more than or equal to 18, he is eligible otherwise not.  age=int(input(“Enter the age”)  if age<=18:  print(“Eligible to vote”)  else:  print(“Not eligible”) | 2 |
| 24 | Differentiate between RAM and ROM. | 2 |
| 25 | Write a Python program to input a number n and print n2, n3 n4.  n=int(input(“Enter the number:”))  square=n\*\*2  cube=n\*\*3  quad=n\*\*4  print(“n^2=”,square,”n^3=”,cube,””n^3=,quad) | 2 |
|  | **Section C** |  |
| 26 | Draw the block diagram of the components of a computer system. Briefly write about the functionality of each component. | 3 |
| 27 | Write a program to check whether a number is palindrome or not by getting input from the user.  n=int(input("Enter a number: "))  rev=0  org=n  while n>0:  rem=n%10  rev=rev\*10+rem  n//= 10  print("Reversed number: ", rev)  if org==rev:  print("it is palindrome")  else:  print("it is not a palindrome") | 3 |
| 28 | What will be the output of the following code fragment?  If the values of a are:   1. a = 25 2. a=12 3. a=48   if ( a % 3 = = 0 and a % 4 = =0):  b = a \* 10  elif (a%8 = =0):  b = a + 50  else:  b = a \* 20  print(“Result=”, b)   1. Result= 500 2. Result =120 3. Result =480 | 3 |
| 29 | Predict the output of the following code fragments:   1. for K in range(15,20):   print(K)   1. for J in range(5):   print(J, end=” ”)   1. for I in range(5, 20, 3):   print(I, end=” \t”)   1. 15   16  17  18  19   1. 0 1 2 3 4 2. 5 8 11 14 17 | 3 |
| 30 | Define the terms.   1. Data Capturing 2. Data Storage 3. Data Retrieval 4. Data capturing involves the process of gathering data from different sources in digital form. 5. Data storage is the process of storing the captured data for processing later. 6. Data Retrieval involves fetching data from the storage devices, for its processing as per the user requirement. | 3 |
|  | **Section D** |  |
| 31 | Write a program to input the bill amount of a purchase and calculate the discount based on the following criteria.  Billamt Discount %  >=20000 20 % of bill  15000- 20000 10 % of bill  10000- 15000 5 % of bill  <10000 0  amt=float(input("Enter the bill amount :"))  disc=0  if amt >= 20000 :  disc= 0.15 \* amt  elif amt >= 15000 :  disc = 0.10\* amt  elif amt >= 10000 :  disc = 0.05\*amt  else:  disc=0  print("your discount value is :", disc) | 4 |
| 32 | 1. Write a program to print the Fibonacci series by getting the limit from the user.   a=0  b=1  print("fibonacci series of 10 elements:")  print(a,b,end=" ")  for i in range(8):  c=a+b  print(c,end=" ")  a=b  b=c   1. Write a program to print the multiplication table of a number ‘n’ using while loop.   num = int(input("Enter the number : "))  i = 1  print("Multiplication Table : ")  while i<=10:  num = num \* 1  print(num,'x',i,'=',num\*i)  i += 1 | 2  2 |
| 33 | 1. Write a program to calculate sum of odd numbers and even numbers in the list. The list is L1=[23,56,45,12,8]   L1=[23,56,45,12,8]  even=0  odd=0  for i in L1:  if i%2==0:  even=even+i  else:  odd=odd+i  print(even)  print(odd)   1. Write program to search the element ‘x’ in a list and count the number of occurrence of ‘x’ in the list. The list is L1=[23,56,45,12,8,23,40]   L1=[23,56,45,12,8,23,40]  c=0  element=int(input("Enter element to be searched for:"))  for i in L1:  if i==element:  c=c+1  print("Element is found")  print(c) | 2  2 |
| 34 | Find the output of the following.   1. L1 = [500, 200]   L2 = [150, 275, 400]  print(L1 + L2)  L1.append([700,750])  L1.append(800)  print(len(L1))  print(L1)  print(L1.index(800))  [500, 200, 150, 275, 400]  4  [500, 200, [700, 750], 800]  3   1. List1 = [20, 40, 30, 50, 60, 40, 50, 30, 10, 20, 60, 30]   print(List1.pop(1))  40 | 3  1 |
| 35 | What is computer software? Differentiate between System software and application software.  A set of instruction to perform any specific task is referred to as a software. | 4 |

***All the Best***