 **Indian School Al Wadi Al Kabir**

**Assessment – 1**

**INFORMATICS PRACTIES (Code: 065)**

CLASS : XI Max. Marks:70

Date: 29/09/2024 Time: 3 hours

**General Instructions:**

Please check this question paper contains 37 questions.

● All questions are compulsory.

● The paper is divided into 5 Sections- A, B, C, D and E.

● Section A consists of 21 questions (1 to 21). Each question carries 1 Mark.

● Section B consists of 7 questions (22 to 28). Each question carries 2 Marks.

● Section C consists of 4 questions (29 to 32). Each question carries 3 Marks.

● Section D consists of 2 questions (33 to 34). Each question carries 4 Marks.

● Section E consists of 3 questions (35 to 37). Each question carries 5 Marks.

● All programming questions are to be answered using Python Language only.

● In case of MCQ, text of the correct answer should also be written.

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|  | **SECTION A** |  |
| 1. | Which of the following can be used as valid identifier(s) in Python?   1. 4thSum 2. Total 3. Number# 4. Data | 1 |
| 2. | Suppose list1 is [3, 4, 5, 20, 5, 25, 1, 3], what is list1 after list1.pop(1)?   1. [3, 4, 5, 20, 5, 25, 1, 3] 2. [1,3,3, 4, 5, 20, 5, 25] 3. [3, 5, 20, 5, 25, 1, 3] 4. [1, 3, 4, 5, 20, 5, 25,] | 1 |
| 3. | Which of the following is not an assignment operator?   1. \*\*= 2. /= 3. = = 4. %= | 1 |
| 4. | What will be the output of the following statement:  print(4+3\*5/3-5%2)   1. 8.5 2. 8.0 3. 10.2 4. 10.0 | 1 |
| 5. | \_\_\_\_\_\_ is the high-speed memory used in the computer.  a. RAM  b. Hard disk  c. Cache  d. BIOS | 1 |
| 6. | Which of the following operator is Floor division?  a. %  b. /  c. //  d. \*\* | 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. | Which of the following can add list of elements to a list?   1. append() 2. extend() 3. add() 4. none of these | 1 |
| 9. | Which for loop statement will produce 5 odd numbers?  a. for x in range(1,9,2):  b. for x in range(1,10,2):  c. for x in range(9, 1, -2):  d. None of these | 1 |
| 10. | Which of the following is ranked from smallest to largest?  a. KB, MB, TB, GB  b. MB, TB, GB, KB  c. GB, KB, MB, TB  d. KB, MB, GB, TB | 1 |
| 11. | How many time(s) the following loop will execute?  for x in range(-6 , 3, 2):  print(x, end=” ”)  a. 6  b. 4  c. 5  d. 7 | 1 |
| 12. | By default the input() function returns  a. Integer  b. Float  c. Boolean  d. String | 1 |
| 13. | Predict the output of the following code:  LIST1 = [4,5,3,4,6,5,7,4,3,8,9,4,5]  print(LIST1.index(3) \* LIST1.count(5))  a. 5  b. 15  c. 9  d. 6 | 1 |
| 14. | Which one of the following is not an application software package?  a. Open Office  b. Microsoft Office  c. Adobe Pagemaker  d. Ubandu | 1 |
| 15. | Write the output of the following Python expression:  print (( 4>5) or (2 != 1) and ( 4<9 ))   1. True 2. False 3. None 4. Error | 1 |
| 16. | Identify the output of the following Python statements.  x = [ [10.0, 11.0, 12.0] , [13.0, 14.0, 15.0] ]  y = x[1][2]  print(y)  a. 12.0  b. 13.0  c. 14.0  d. 15.0 | 1 |
| 17. | Identify the output of the following Python statements.  x = 2  while x < 9:  print(x, end='')  x = x + 1  a. 12345678  b. 123456789  c. 2345678  d. 23456789 | 1 |
| 18. | Which of the following is not a token?    a. //  b. X  c. ##  d. 23 | 1 |
| 19. | Antivirus is a type of which software?  a. Application software  b. Utility Software  c. System Software  d. Firmware |  |
| 20 | The \_\_\_\_\_\_\_\_\_\_ function arrange the elements of a list in an ascending or  descending order.  a. reverse()  b. sort()  c. insert()  d. pop() |  |
| 21. | Which of the following is not an output device?  a. Dot matrix printer  b. VDU  c. Mouse  d. Plotter |  |
|  | **SECTION B** |  |
| 22. | 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 |
| 23. | What is the difference between interpreter and compiler ? | 2 |
| 24. | What will be the output of the following statements?  list1 = [1,2,3,4,5,6,7,8,9,10]  print(list1[ : :-2])  print(list1[ : 3] + list1[ 3 : ]) | 2 |
| 25. | Find the output of the following code.  c=0  for i in range(5):  if(i%2==0):  c=c+2  if(i%4==0):  c+=3  print(c) | 2 |
| 26. | Find the output of following:  colours = ["violet", "indigo", "blue", "green", "yellow", "orange", "red"]  del colours[4]  colours.remove("blue")  colours.pop(3)  print(colours) | 2 |
| 27. | Write two differences in the LIST functions , pop() and remove() . | 2 |
| 28. | What will be the output of the following code ?  a, b, c=12, 15, 16  b, c, a = a+b, b//3, c%5  b=b+5  c=c\*3  print(a, b, c, sep=’ $ ’ , end = ‘#’) | 2 |
|  | **SECTION C** |  |
| 29. | Write the most appropriate list method to perform the following tasks in the list L=[4,6,2,4,8,9,2,1,5,4,7,8,9]   1. Get the position of the element 8 in the list L.   ii) Delete the 6th element from the list L.  iii) Add the element 6 at the end of the list L.  iv) Add the element 3 in the index 5 of the list L. | 3 |
| 30. | 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) | 3 |
| 31. | 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) | 3 |
| 32. | Define the following:   1. Device Drivers 2. Primary memory 3. Application Software | 3 |
|  | **SECTION D** |  |
| 33. | a. Write a program to print the first 10 Fibonacci numbers.  b. Write a program to find the sum of the series  s= x2/4 + x4/6 + x6/8 + …..xn/n+2 where x and n are entered by the user | **4** |
| 34. | A company decided to give bonus to employee according to following criteria-  Time period of service Bonus  More than 10 Years 10% of salary  >=6 and <=10 8% of salary  Less than 6 years 5% of salary  Ask user for their salary and years of service and calculate and print the bonus amount and total salary (salary+bonus) | 4 |
|  | **SECTION E** |  |
| 35. | a. Write a program to input a number and find the sum of its digits.  b. Write a program to input a number and check whether it is a perfect number  or not. | 5 |
| 36. | a. Write a program to input a list of ‘n’ elements and find the sum of all  elements ending with 7 .  b. Write a program to input ‘n’ elements to a list L and replace every even  elements with half its value and every odd number with three times its value. | 5 |
| 37. | a. Write a program to input ‘n’ elements in to a list L1 and find and display the  greatest and smallest in the list.  b. Write a program to input ‘n’ elements to a list and count the number of  elements divisible by 3 or 5. | 5 |