**Indian School Al Wadi Al Kabir**

**Assessment– I**

**COMPUTER SCIENCE (Code: 083)**

**SET- I**

CLASS : XI Max. Marks:70

Date : 29/09/2024 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 21 questions carrying 01 mark each.
4. Section B has 07 Very Short Answer type questions carrying 02 marks each.
5. Section C has 03 Short Answer type questions carrying 03 marks each.
6. Section D has 04 questions carrying 04 marks each.
7. Section E has 02 questions carrying 05 marks each.
8. All programming questions are to be answered using Python Language only.
9. In case of MCQ, text of the correct answer should also be written.

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|  | **SECTION A** |  |
| 1. | \_\_\_\_\_\_\_\_\_\_\_ is an example of output device  a. Mouse  b. Scanner  c. Projector  d. Touch Screen | 1 |
| 2. | Read Only Memory (ROM) is a \_\_\_\_\_\_\_\_\_\_ memory.  a. Non-Volatile Memory  b. Volatile Memory  c. Both a & b  d. None of these | 1 |
| 3. | Which of the following are the sub units that make the CPU?  a. ALU  b. Control Unit  c. Both a & b  d. None of these | 1 |
| 4. | CPU is commonly called \_\_\_\_\_\_\_\_\_\_\_\_\_   1. Register 2. Processor 3. Control Unit 4. All the above | 1 |
| 5. | Which of the following is not an application software?  a. Windows 7  b. GIMP  c. Photoshop  d. MS-excel | 1 |
| 6. | Which of the following statement will create list?  a. L1=list( )  b. L1=[1,2,3,4]  c. Both a and b  d. None of the above | 1 |
| 7. | Which of the following is not a valid identifier name in Python?  a. 5Total  b. \_Radius  c. pie  d. name | 1 |
| 8. | Which statement is used to terminate the loop?  a. continue  b. break  c. for  d. None of the above | 1 |
| 9. | What will be the output for following Code?  p=7\*8/5//2\*\*1\*\*3  print(p)   1. 5 2. 6 3. 5.0 4. 6.0 | 1 |
| 10. | Consider the following string mySubject  mySubject = ‘Computer Science’  What will be the output of following statement?  print( mySubject[ -7 : -1 ] )   1. Science 2. Scienc 3. r Scienc 4. r Science | 1 |
| 11. | Which of the following will return the last element of a list L with 5 elements?   1. L[5] 2. L[-4] 3. L[-1] 4. L[6] | 1 |
| 12. | Which of the following is not an octal number:   1. 435 2. 786 3. 542 4. 236 | 1 |
| 13. | Find the output of following expression-  5\* len(“2.25”) % 5   1. 0 2. 5 3. 1 4. 25 | 1 |
| 14. | Which of the following statement(s) would give an error after executing the following code?  a=10                       # Statement 1  b="ISWK"               # Statement 2  S=a+b                     # Statement 3  print(S)                   # Statement 4   1. Statement 1 2. Statement 2 3. Statement 3 4. No error | 1 |
| 15. | A=11 \_\_ 3. Which operator should be used in place of \_\_ to get the value of  A as 2.   1. / 2. // 3. % 4. None of the mentioned | 1 |
| 16. | Write the output of following python code  Str="Better late than never"  print(Str,sep="@", end=":")   1. B@e@t@t@e@r@l@a@t@e@t@h@a@n@n@e@v@e@r: 2. Better @ late @ than @ never: 3. Better late than never: 4. Better late than never@: | 1 |
| 17. | Which of the following statements will make a selection construct?   1. if - else 2. for 3. while 4. All the above | 1 |
| 18. | Which statement is correct?   1. List is immutable & String is mutable 2. List is mutable & String is immutable 3. Both List and String are Mutable. 4. Both List and String are Immutable | 1 |
| 19. | Which of the following will give output as [23,2,9,75]. If list1=[6,23,3,2,0,9,8,75]   1. print(list1[1:7:2]) 2. print(list1[0:7:2]) 3. print(list1[1:8:2]) 4. print(list1[0:8:2]) | 1 |
| 20. | Write the equivalent Boolean expression for the Logic Circuit.     1. (A’+B).(BC’) 2. (A’B)+C’ 3. (A’B’)+C 4. (A’+B).C’ | 1 |
|  | Q.21 is Assertion (A) and Reasoning (R) based questions. Mark the correct choice.  a) Both (A) and (R) are true and (R) is the correct explanation for (A).  b) Both (A) and (R) are true and (R) is not the correct explanation for (A).  c) (A) is true but (R) is false.  d) (A) is false but (R) is true. |  |
| 21. | **Assertion (A)**:- If the condition of the while loop is initially false, the body is  not executed even once.  **Reasoning (R)**:- During execution of while loop, body of the loop executed only when loop condition gets true . | 1 |
|  | **SECTION B** |  |
| 22. | Sonu has written the following code but the code is showing errors. Help Sonu and rewrite the code after making all necessary correction or change and underline each correction. | 2 |
| 23. | Differentiate between Primary memory and secondary memory. | 2 |
| 24. | a. Write the output of following Python Statements  S =”GOOD MORNING”  print(S.title())   1. Consider the following string mystring:   mystring = "Actions speak, louder than words"  What will be the output of following string operations :   1. print(mystring.split(' ')) 2. print(mystring.index('louder')) | 2 |
| 25. | What will be the output displayed at Line3, Line 5, Line 7 and Line 9 of following Python code:  data = [2,5,6,2,7,5,2,9,11,18,2,4]  data.insert(2,5)  print(data) **# Line 3**  data.append([5,16])  print(data) **# Line 5**  data.extend([100,200])  print(len(data)) **# Line 7**  c = data.count(2)  print(c) **# Line 9** | 2 |
| 26. | What does each of the following expressions evaluates to? Suppose that L is the list  L=["These", ["are", "a"], ["few", "words"], "that", "we", "will", "use"]   1. len( L ) 2. L[3 : 4] + L[1 : 2] | 2 |
| 27. | 1. What is the output produced when this code executes?   A = 0  for I in range (4, 8):  if I % 2 = = 0:  A = A + I  print (A)   1. If the following code is executed, what will be the output?              st = "Nothing#Is#Impossible"  print(st[ -12 :-2:3]+st[2:14]) | 2 |
| 28. | Do the following conversions to other number systems .   1. (76F)16 = ( ? )10 2. (11001010)2 = ( ? )8 | 2 |
|  | **SECTION C** |  |
| 29. | Write a program to count and display the number of values divisible by 8 in a list NumList with N number of elements entered by the user. | 3 |
| 30. | 1. What gets printed with the following code ?   x = True  y = False  z = False  if not x or y :  print(1)  elif not x or not y and z:  print (2)  elif not x or y or not y and x:  print (3)  else:  print (4)   1. What gets printed?   names = [‘Amir’, ‘Barry’, ‘Charles’, ‘Dao’]  if ‘amir’ in names:  print(1)  else:  print(2)   1. 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) | 3 |
| 31. | Write a Program to take a String from the user and Replace Every Blank Space with hash(#). | 3 |
|  | **SECTION D** |  |
| 32. | Write a program to calculate BMI of a person after inputting his weight in Kgs and height in Meters and then print the Nutritional Status as per following table (BMI=weight / height\*height): | 4 |
| 33. | 1. Write code in python to print the following pattern using nested loop.   1  1 2  1 2 3  1 2 3 4  1 2 3 4 5   1. Write code in python to input the value of x and n and print the sum of the following series.   1 + x + x2 + x3 + x4 + x5 + ……………………… xn | 4 |
| 34. | 1. What do you understand by the term variable. Write a statement for assigning a value to a variable. 2. Write the output of following Python Statement.   L=[ ]  for i in range(4):  L.append(2\*i+1)  print(L)   1. Re-write the following FOR loop code using WHILE loop to get same output.   for i in range ( 20 , 10, -3) :                print( “hello”)   1. How many times the above loop will get executed? | 4 |
| 35. | a. Write a program to input a number and check whether the number entered by the user is palindrome or not.  b. Write a program to input a number and find its factors. | 4 |
|  | **SECTION E** |  |
| 36. | 1. Explain repetition operation in string with an appropriate example. 2. Write a menu driven program to    1. Input a number and print its multiplication table.    2. Input a number and check whether it is prime or not. | 1+4=5 |
| 37. | 1. Draw logic circuit diagram for the following expression.   Y = ab + bc + ca   1. State DeMorgan’s Law of Boolean Algebra and verify them using truth table. | 2+3=5 |