**INDIAN SCHOOL AL WADI AL KABIR**

Sample Paper 2023-24

**SUB: Informatics Practices (065)**

Date: Time Allowed:3 hours

Class: XI Maximum Marks: 70

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| *General instructions*:  • Please check that this question paper contains 35 questions.  • The paper is divided into 5 Sections- A, B, C, D and E.  • Section A, consists of 18 questions (1 to 18). Each question carries 1 Mark.  • Section B, consists of 7 questions (19 to 25). Each question carries 2 Marks.  • Section C, consists of 5 questions (26 to 30). Each question carries 3 Marks.  • Section D, consists of 2 questions (31 to 32). Each question carries 4 Marks.  • Section E, consists of 3 questions (33 to 35). Each question carries 5 Marks.  • All programming questions are to be answered using Python Language only | | |
|  | **SECTION –A** |  |
| **Q** | **Question** | **M** |
| 1 | List is enclosed in \_\_\_\_\_\_\_\_\_\_\_\_ brackets .  a. Square bracket  b. Curly bracket  c. Round bracket  d. None of the above | 1 |
| 2 | Which of the following is a valid identifier?  a) 21School  b) school@123  c) winner12#  d) book\_store | 1 |
| 3 | Write the output of the following code :  list(“ISWK”)  a. [‘I’, ‘S’, ‘W’, ‘K’]  b. (‘I’, ‘S’, ‘W’, ‘K’)  c. [‘ISWK’]  d. None of the above | 1 |
| 4 | Evaluate the following expression : 86-3\*4+6//2   1. 70 2. 307 3. 77 4. 72 | 1 |
| 5 | A 8-bit word is called a \_\_\_\_\_\_\_\_\_\_\_\_\_   1. Bit 2. Byte 3. Nibble 4. Kilo byte | 1 |
| 6 | Python supports \_\_\_\_\_\_\_\_\_\_\_\_\_ types of control structures.  a. 1  b. 2  c. 3  d. 4 | 1 |
| 7 | 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 |
| 8 | Which of the following is used to delete all the elements from Dictionary?  a. pop( )  b. clear()  c. get()  d. None of the above | 1 |
| **9** | The \_\_\_\_\_\_\_\_\_\_ function arrange the elements of a list in an ascending or descending order.   1. reverse() 2. sort() 3. insert() 4. pop() | 1 |
| 10 | Microsoft Windows is an example for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. Open Source Software 2. Freeware Software 3. Propreitary Software | 1 |
| 11 | No. of rows in a relation is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. Cardinality 2. Degree 3. Domain 4. Tuple |  |
| 12 | A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is used to represent relation between two tables.   1. Primary key 2. Candidate key 3. Foreign key 4. None of the above | 1 |
| 13 | \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the command used to open a database.   1. Desc database 2. Use database 3. Show database 4. Open database | 1 |
| 14 | \_\_\_\_\_\_\_\_\_\_\_\_\_\_is the command used to remove a database when you don’t need it anymore.   1. Remove database 2. Delete database 3. Drop database 4. Clear database | 1 |
| 15 | \_\_\_\_\_\_\_\_\_\_\_\_ is used for pattern matching.   1. Between 2. Distinct 3. Not null 4. Like | 1 |
| 16 | DBMS stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | 1 |
| 17 | A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a set of values that can be assigned to an attribute.   1. Cardinality 2. Tuple 3. Domain 4. Attribute | 1 |
| 18 | A relation STUDENT has 8 rows and 7 columns. What is the degree and cardinality of the relation?   1. 7,8 2. 8,7 3. 8,8 4. 7,7 | 1 |
|  | **SECTION – B** |  |
| 19 | Find output(s) of the following code fragment:   1. >>> list1 = [10,20,30,40]   >>> list1.append([50,60])  >>> list1   1. >>> list1.insert(0,100)   >>> list1 | 2 |
| 20 | What will be the output of the given python statement?  **i)print('English','Maths','Physics', sep='@')**  **ii) print('Book','Library','School', sep='@', end='!')** | 2 |
| 21 | Find output(s) of the following code fragment:  TV = { 'Ikon' : 22000 ,'Samsung' : 29300, 'LG' : 27800, 'Sony' : 38000, 'Philips' : 24000}  print(TV.keys())  print(TV.values()) | 2 |
| 22 | 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 |
| 23 | Explain IS NULL and IS NOT NULL in sql with an example | 2 |
| 24 | |  | | --- | | Differentiate between RAM and ROM. | | 2 |
| 25 | What will be the output of the following code fragment?  If the values of a are:   1. a = 25 2. 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) | 2 |
|  |  |  |
|  | **SECTION C** |  |
| 26 | 1. How many time(s) the following loop will execute?   for x in range(-300, 300, 100):  print(x, end=” ”)   1. How many time(s) the following loop will execute?   for A in [15, 30, 50, 100]:  print(A,” % ”)   1. How many time(s) the following loop will execute?   for K in range(10):  print(K, end=”@”)  print(K\*2, end=”\n”) | 3 |
| 27 | Write a program to print Fibonacci series upto n numbers. | 3 |
| 28 | 1. What is the difference between pop() and remove() in list? 2. Write a program to find minimum and maximum element from a list of elements. |  |
| 29 | Write a program to find the reverse of a number. | 3 |
| 30 | Draw the block diagram of the components of a computer system. Briefly write about the functionality of each component. | 3 |
|  | **SECTION D** |  |
| 31 | Consider the table EXAM given below. Write commands in MySql for (i) to (iv)  **Table: EXAM**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **No.** | **Name** | **Stipend** | **Subject** | **Average** | **Division** | | 1 | Karan | 400 | English | 15 | FIRST | | 2 | Aman | 680 | Maths | 24 | FIRST | | 3 | Javed | 500 | Accounts | NULL | FIRST | | 4 | Bishakh | 200 | IP | 20 | SECOND | | 5 | Sugandha | 400 | History | 10 | THIRD | | 6 | Suparna | 550 | Geo | 5 | THIRD | | 7 | Ankit | 400 | NULL | 10 | THIRD |  1. To count the number of students, who have either Accounts or IP as Subject. 2. To decrement stipend by 100 if average is below 10   Write the output for the following sql queries.   1. Select name from EXAM where Average <10; 2. Select \* from EXAM where stipend between 500 and 600; | 4 |
| 32 | 1. Write any two difference between list and dictionary by giving an example.   List is enclosed in square brackets and dictionary is enclosed in curly bracket.   1. WAP that repeatedly asks the user to enter employee names and salaries. Store all of them in a dictionary whose keys are employee names and values are salaries. And also write a code to search an employee details from the dictionary. | 4 |
|  | **SECTION E** |  |
| 33 | 1. Create a table **Flight** with the following field(s) specifications:   Table : **FLIGHT**   |  |  |  | | --- | --- | --- | | Field Name | Field Data Type and Size | Constraints | | FCode | Char(5) |  | | Airlines | Varchar(15) |  | | Source | Varchar(25) | Unique | | Destination | Varchar(25) | Not null | | Fare | Double(8,2) |  |  1. Insert the following records in the above table **Flight**.   (“WY483”, “Oman Air”, “Dubai”, “Muscat”, 18425)   1. Write the sql command to make Fcode as primary key 2. Remove the column Fare from the table Flight 3. Remove the table | 5 |
| 34 | 1. Write a program to find and display the eldest person out of two. 2. Write a Python program to input basic salary of an employee and calculate the Incentive based on the following criteria:   Basic Salary Special Incentive  Less than Rs. 3,000 20 % of Basic Salary  Between Rs. 3,000 and Rs. 5,000 30 % of Basic Salary  Between Rs. 5,001 and Rs. 10,000 45 % of Basic Salary  More than Rs. 10,000 70 % of Basic Salary |  |
| 35 | Consider the following table- Product    Write commands in SQL for :   1. To display the Pno and name that contains letter ‘a’ in it. 2. To display details of the products purchased on or before 2012-12-12 3. To display name of product whose Qty is in the range of 80 to 110. 4. To display the name of products in the alphabetical order. 5. To increment Qty by 10 if PurchaseDate is 21-02-2013 |  |

***All the Best***