**INDIAN SCHOOL AL WADI AL KABIR**

Final Assessment 2022-23

 **Informatics Practices (065)**

Date: 05/03/2023 Time Allowed :3 hours

Class: XI Maximum Marks: 70

*General Instructions:*

1. This question paper contains five sections, Section A to E.

2. All questions are compulsory.

3. Section A have 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 03 Long Answer type questions carrying 05 marks each.

7. Section E has 02 questions carrying 04 marks each.

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|  | **Section –A** |  |
| **QNo** | **Question** | **Marks** |
| 1 | Which of the following is volatile in nature? a. ROMb. HARD DISKc. RAMd. CD | (1) |
| 2 | \_\_\_\_\_\_ is the high-speed memory used in the computer.a. RAMb. Hard diskc. Cached. BIOS | (1) |
|  3 | Which is /are the feature/s of IoT devices?a) Remotely controllableb) Programmablec) Can turn themselves off if necessaryd) All of the above | (1) |
| 4 | Which one of the following is not an application software package? a. Open Officeb. Microsoft Officec. Adobe PageMakerd. Ubuntu | (1) |
| 5 | Which of the following is an example for cloud storage ?a. google driveb. digital oceanc. Zoomd. None of these | (1) |
| 6 | Which of the following is valid variable name? a. 3abc\_4b. \_\_\_\_\_\_\_3c. %abcdd. Roll no | (1) |
| 7 | Which of the following is an invalid operation? a. '4' + '5'b. 4 + 5c. '4' + 5d. None of the Above | (1) |
| 8 | What is the output of the following expression ?2//5+ 15%2-8//2\*\*2a. -3b. -1c. 4d. 3 | (1) |
| 9 | What is the output for the given code ,if value of S=4 , T =0 , U= 3(S>T) or ( not(T) ) and ( T>=S or U<=S)a. Trueb. Falsec. Errord. None of these | (1) |
| 10 | Ms. Deepa is inserting records into an item table . She is not able to enter same itemno for two items, Also she is not able to leave the itemno column blank. What constraint has she given for itemno column while creating the table? a. Primary keyb. Not Nullc. Uniqued. Check | (1) |
| 11 | \_\_\_\_\_\_ keyword is used to display non-repeated values in MySQL.a. Uniqueb. Removec. Distinct d. All | (1) |
| 12 | Kamal had created a table named stock. Later he forgot the name of the columns and the data types given. Which command will help him to know the above details ?a. Show stock;b. Desc stock;c. Display stock;d. Select \* from stock; | (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. 5b. 15c. 9d. 6 | (1) |
| 14 | Which operator is used to match column values against a list of values ?a. Between b. like c. IN d. IS | (1) |
| 15 | A table Project has 5 columns and 6 rows. Two more details/rows of projects are added to the table. What is the cardinality and degree of the table?a) Cardinality = 6 , degree = 7b) Cardinality = 5 , degree = 6c) Cardinality = 6, degree = 8d) Cardinality = 8 , degree = 5 | (1) |
| 16 | \_\_\_\_\_\_\_\_\_\_ data type is considered as fixed length in MySQL.a. CHAR(n)b. VARCHAR(n)c. TEXT(n)d. STR(n)  | (1) |
| 17 | The SQL keyword used with wildcards.a. NOT INb. LIKEc. INd. BETWEEN | (1) |
| 18 | Select the equivalent statement which gives the same output as the following statementSELECT \* FROM EMP WHERE SALARY BETWEEN 10000 AND 20000;a) SELECT \* FROM EMP WHERE SALARY IN ( 10000, 20000);b) SELECT \* FROM EMP WHERE SALARY >10000 OR SALARY < 20000;c) SELECT\* FROM EMP WHERE SALARY >=10000 AND  SALARY <=20000;d) SELECT\* FROM EMP WHERE SALARY >=10000 OR SALARY <=20000; | (1) |
|  | **SECTION – B** |  |
| 19 | Explain the different types of System Software. ORExplain the different types of Application Software.  | (2) |
| 20 | What will be the output of the following code ?x,y=30,28if x+2 >y-5: x = x+5 y = x+ y\*2x = x-10print(x,y) | (2) |
| 21 | Explain Primary key and candidate key with examples. | (2) |
| 22 | p= 8q= 1k = 0for x in range(p,q,-2): if x%3==0: k = k + x print(k)  | (2) |
| 23 | What is the difference between RAM and ROM? | (2) |
| 24 | Find the output of the following program:L= [76,56,98,23,41,54,21,15]L[1]=L[2]+L[4]L.insert(2,45)del L[3:6]L.insert(20,6)print(L) | (2) |
| 25 | Differentiate between DDL and DML commands.Categorize the following commands as DDL or DML:CREATE, INSERT, UPDATE, DROP | (2) |
|  | **Section C** |  |
| 26 | Write a program to input a list LIST1 and replace every even element with double of its value and every odd element with half of its value. Display the final list. | (3) |
| 27 | Draw the block diagram of a computer system. Briefly write about the functionality of each component. | (3) |
| 28 | Write a program to input a list D1 and find the sum of all elements which are divisible by 7 or 3. ORWrite a program to input a list D2 of numbers and count the number of even numbers and odd numbers separately. | (3) |
| 29 | Write a short note on the following:a) Cloud computingb) Big data and its characteristics ORDefine the following terma. Robotics b. Grid Computing  | (3) |
| 30 | Write a program to find the sum of the seriesS= x/3 + x3/5 + x 5/7 + ……………+ x n/n+2 | (3) |
|  | **Section D** |  |
| 31 | i. Find the output of the following code:D1={10:110,20:220,30:330}D2={40:450,30: 800,50:610}D1.update(D2)D1.pop(20)D1[20] = 220print(D1)ii. Write a program to input name and salary of ‘n’ employees as key:value pairs in to a dictionary ‘emp’ and display the name of employees getting salary more than 5000.  | (2)(3) |
| 32 | Consider the following **STOCK** table and write MySQL Queries for the following (i) to (v):**Table:** STOCK

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ItemNo**  | **Item**  | **Dcode** | **Qty** | **UnitPrice** | **StockDate**  |
| 5005  | Ball Pen 0.5  | 102 | 100 | 16 | 2010-03-31  |
| 5003  | Ball Pen 0.25  | 102 | 150 | 20 | 2010-01-01  |
| 5002  | Gel Pen Premium  | 101 | 125 | 14 | 2010-02-14  |
| 5006  | Gel Pen Classic  | 101 | 200 | 22 | 2009-01-01  |
| 5001  | Eraser Small  | 102 | 210 | 5 | 2009-03-19  |
| 5004  | Eraser Big  | 102 | 60 | 10 |  NULL  |
| 5009  | Sharpener Classic  | 103 | 160 | 8 | 2009-01-23  |

1. Display the itemName and unitprice of items with dcode 101 .
2. Display the details of items with qty more than100 and price less than 20.
3. Display the itemno, name and dcode of all the items have stockdate before 2010-01-01.
4. Display the details of all items with qty in the range 100 to 200
5. Display the details of all the items whose stockdate is not known.
 | (5) |
| 33 | Rehana is the sales manager of a company and she wants to know certain detailsabout her department. Help her to know the details by writing queries for thefollowing questions based on the given table.Table: **Sales**

|  |  |  |  |
| --- | --- | --- | --- |
| OrderId | Orderdate | Salesperson | OrderAmount |
| 101 | 2022-09-04 | Ravi Kumar | 34000 |
| 102 | 2022-08-20 | Reshma Arora | 50000 |
| 103 | 2022-11-11 | Ravi Kumar | 55000 |
| 104 | 2022-10-25 | Manjunath | 60000 |
| 105 | 2022-10-12 | Reshma Arora | 50000 |

i. To display names of Salesperson (without duplicate).ii. To list Order Id and respective Order Amount in descending order of Order Amountiii. To display the Salesperson and amount of salespersons whose name contains  the word “Arora”iv. To list Order id, Order date and Order Amount that were booked after 1st October 2022.v. To display the id and date of all orders of Ravi kumar and Manjunath. | (5) |
|  | **Section E** |  |
| 34 | i.Write SQL query to create a table ‘**movie**’ with the following structure:

|  |  |  |
| --- | --- | --- |
| Field | Type | Constraint |
| Movieid | Integer(5) | Primary Key |
| Moviename | Varchar(30) |  |
| Type | Varchar(20) | Not Null |
| Releasedate | date |  |
| Rating | Int(5) |  |

ii. Write command to display all the tables/relations in a database.iii. Write command to add the following record to the above table 101, dictator, comedy,2012-05-16, 4 | (4) |
| 35 | Write the output of the SQL queries (a) to (d) based on the table TRAVEL given below :Table : TRAVEL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| T\_ID | START | END | T\_DATE | FARE |
| 101 | DELHI | CHENNAI | 2021-12-25 | 4500 |
| 102 | DELHI | BENGALURU | 2021-11-20 | 4000 |
| 103 | MUMBAI | CHENNAI | 2020-12-10 | 5500 |
| 104 | DELHI | MUMBAI | 2019-12-20 | 4500 |
| 105 | MUMBAI | BENGALURU | 2022-01-15 | 5000 |

(a) SELECT START, END FROM TRAVEL WHERE FARE <= 4000 ;(b) SELECT T\_ID, FARE FROM TRAVEL WHERE T\_DATE LIKE '2021-12-%' ;(c) SELECT T\_ID, T\_DATE FROM TRAVEL WHERE END = 'CHENNAI' ORDER BY FARE ;(d) SELECT DISTINCT END FROM TRAVEL; | (4) |