

SEVTI DEVI MEMORIAL VIDYA MANDIR Opposite Dashrath Puri Metro Station, Mahavir Enclave, New Delhi-45 Subject: Informatics Practices(065) Annual Examination (2024-2025)

MaximumMarks:70

Time Allowed: 3 Hrs

General Instructions:

- 1. This question paper contains five sections, Section A to E.
- 2. All questions are compulsory.
- 3. Section A has 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 02 questions carrying 04 marks each.
- 7. Section E has 03 questions carrying 05 marks each.
- 8. All programming questions are to be answered using Python Language only.

Section-A

Section A consists of 18 questions of 1 mark each.

Question 1.

...... device prints information and data from the computer into a paper. [1]

- (A) Scanner
- (B) Printer
- (C) Plotter
- (D) None of these

Question 2.

..... is a subsystem of Artificial Intelligence, wherein computers have the ability to learn from data using statistical techniques, without being explicitly programmed by a human being. [1]

(A) Machine Learning (B) Natural Language (C) Statistical Learning (D) Virtual Reality Question 3. The executes the instruction in the stored sequence. [1] (A) ALU (B) CU (C) MU(D) CPU Ouestion 4. Which of the following is not a valid SQL data type? [1] (A) DECIMAL (B) NUMERIC (C) FLOAT (D) CHARACTER Ouestion 5. Which data type can store unstructured data in a column? [1] (A) RAW (B) CHAR (C) NUMERIC (D) VARCHAR Ouestion 6. Which of the following provides immersive experiences to the users? [1] (A) Three-dimensional (3D) videography (B) Video games (C) Both (A) and (B) (D) Natural Language Processing Ouestion 7. Which of the following is not the mode of interacting with python? [1] (A) Interactive Mode (B) Script Mode (C) Hybrid Mode (D) None of the above Ouestion 8. Data types used to store Unicode characters in SQL: [1] (i) Char (ii) Varchar (iii) Nchar (iv) Nvarchar (A) (i) and (ii) (B) (iii) and (iv) (C) All of these (D) None of these Question 9. Select the functions performed by a DDL-[1] (A) It should specify the proper data types. (B) It may define the length of the data items. (C) It may specify the means of checking the errors in the data. (D) All of these Question 10. Which of the following is the correct extension of the Python file? [1] (A) .python (B) .pi (C) .py (D) .p Ouestion 11. Which command is used to insert a new record in a table ? [1] (A) ADD (B) INSERT INTO (C) INSERT (D) NEW Question 12. What will be the value of the following Python expression? 4 + 3 % 5. [1] (A) 7 (B) 2 (C) 4 (D) 1 Ouestion 13. The predictive typing feature of search engine that helps us by suggesting the next word in the sentence while (A) Machine Learning (B) Natural Language Processing (C) Error checking (D) Auto correct Option Ouestion 14. Which is not a valid operator in SQL? [1] (A) ABOVE (B) IN (C) LIKE

(D) BETWEEN Question 15. connects the input, output and other external devices to the system. [1] (A) Data bus (B) Serial bus (C) Control bus (D) I/O Bus Ouestion 16. (A) Arithmetic logic unit (B) Control unit (C) Memory unit (D) None of these Ouestion 17. Assertion (A): Random Access Memory is volatile and stores data currently in used. Reason (R): RAM is storage medium that retains its contents ever after the supply of electricity turned off. [1] (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 Question 18. Assertion (A): Python data structures cannot have duplicate items and do not support ordering. Reason (R): A statement is an instruction that a Python interpreter can execute. [1] (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 Ouestion 19. What are string literals, how can they be represented? [2] OR What is the difference between / and // operator? Ouestion 20. Correct the errors x,y, z = 4,8,12 [2] print (x, y, z)a, b, c = x, y, zprint (a; b; c;) Question 21. What is the difference between DDL and DML? [2] Ouestion 22. Find the output [2] a = [10, 20, 30, 40, 50, 60]for i in range (1,5): a[i - 1] = a[i]for i in range (0, 5): print (a[i], end = " ") Question 23. Define Smart Cities. [2] Ouestion 24. Write the output for the following codes: [2] $A = \{10:1000, 20: 2000, 30: 3000, 40: 4000, 50: 5000\}$ print (A. items ())

print (A. keys ())

print (A. values ())
Question 25.
What is DISTINCT statement? How is it used? [2]
Question 26.
Write SQL query for the questions that follow based on given table Garment: [3]
TABLE: GARMENT

GCODE	DESCRIPTION	PRICE	FCODE	READDATE
10023	PENCIL SKIRT	1150	F03	19-DEC-08
10001	FORMAL SHIRT	1250	F01	12-JAN-08
10012	INFORMAL SHIRT	1550	F02	06-JUN-08
10024	BABY TOP	750	F03	07-APR-07
10090	TULIP SKIRT	850	F02	31-MAR-07
10019	EVENING GOWN	850	F03	06-JUN-08
10009	INFORMAL PANT	1500	F02	20-OCT-08
10007	FORMAL PANT	1350	F01	09-MAR-08
10020	FROCK	850	F04	09-SEP-07
10089	SLACKS LearnCE	3SE.in 750	F03	20-OCT-08

(i) To display GCODE and DESCRIPTION of each GARMENT in descending order of GCODE.

(ii) To display the details of all the GARMENTS, which have READYDATE in between 08-DEC-07 and 16-JUN-08 (inclusive of both the dates).

(iii) To display the average PRICE of all the GARMENTS. Which are made up of FABRIC with FCODE as F03

OR

Give the output of following queries based on given table ITEM.

I_Code	I_Name	Manufacturer	Qty	Discount	Amount
101	Pen	ABC	50	10	1000
. 102	Notebook	ABC	250	10	2050
103	Books	XYZ	150	8 LearnCE	SE.in 8500
104	Bags	ABC	10	5	5400
· 105	Table	XYZ	15	8	27000

(i) SELECT I_Name, Manufacturer FROM ITEM WHERE I_Code = 103;

(ii) SELECT Qty, Amout FROM ITEM WHERE Discount <8;

(iii) SELECT I_Code , I_Name , Qty FROM ITEM WHERE Manufacturer NOT IN ('XYZ');

Question 27.

Predict the output: [3]

Employee = {'Name': 'Rakesh', 'Dept': 'Clerk', 'Salary': 25000}

for key in Employee: print (key,':', Employee [key])

Question 28.

Write the command to create table Student using following structure: [3]

Column Name	Data type
Student_ID	Varchar (5) Primary key
StuName	Char (20)

Subject	Char (20)
Marks	Integer
Address	Varchar (30)

Question 29.Give the full form. [3](i) HDD (ii) CD (iii) DVDOR(i) SRAM (ii) DRAM (iii) CD-RWQuestion 30.Write a Python program to enter two lists and merge them. Also display merged list. [3]Question 31.Consider the table ABC given below, write commands in SQL for (i) to (ii) [4]**PID**NameGenderCityPincode

PID	Name	Gender	City	Pincode	Basic_Salary
1	Geet	F	Udhamwara	132141	50000
2	Surinder	М	Kupwara Nagar	193421	75000
3	Peter	М	Bhawani	434341	45000
4	Thomas	М	Ahmed Nagar	390021	50000
5	Garima	F	New Delhi	182141LearnCB	SE.in 35000
6	Simi	F	Udhamwara	110021	42000

(i) Display the name and city of people residing in Udhamwara city.

(ii) Display the PID, City and Pincode of ABC in descending order of Pincode.

(iii) Display the name and city of all the females getting Basic Salary above 40000.

(iv) Display Name and Basic Salary of all the persons whose Name start with 'G'.

Question 32.

Write output of the following code snippets. [4]

```
list1, list2 = [123, 'xyz'], [456, 'abc']
list1. extend (list2)
print ("Extended list:", list1) #Statement1
print (list1. index (456)) #Statement2
list1. insert (3, 'Hello')
print (list1) #Statement3
del list1 [2]
print (list1) #Statement4
OR (Option for #Statement 4 only)
What is the use of extend method of a list?
Question 33.
Consider the Employee table where EmpCode is primary key. [5]
```

EmpCode	EmpName	Designation	Salary	Joining Date
1001	Rahul	Accountant	25000	2011-5-25
1002	Krishna	Clerk LearnCE	3SE.in 20000	2010-6-19
1003	Akshat	Accountant	22000	2012-7-22
1005	Nishant	Supervisor	24000	2016-4-23
1006	Sonam	Accountant	22000	2010-5-24
1007	Pihu	Manager	38000	2012-6-18

(i) Write query will generate those Employees codes and names whose salary is greater than 24000.

(ii) Give output, SELECT EmpCode FROM Employee WHERE Designation IN ('Accountant');

(iii) Give output, SELECT DISTINCT Designation FROM Employee;

(iv) Write query will count the employees of Accountant designation?

(v) In this table two employees can have same EmpCode?

Question 34.

What is system software ? Explain any two system software. [5]

Question 35.

Write a Python program to input 'n' names and phone numbers to store it in a dictionary and to input any name and to print the phone number of the particular name. [5] OR

Write a code to create customer's list with their number & name and delete any particular customer using his /her name.