



## INFORMATICS PRACTICES (065)

### CBSE SAMPLE PAPER - 1

Time: 03:00 Hrs

CLASS - XI

Maximum Marks: 70

#### General Instructions:

1. This Question paper contains five sections, Section A to E.
2. All Qs are compulsory.
3. Section A has 18 Qs carrying 01 mark each.
4. Section B has 07 Very Short Answer type Qs carrying 02 marks each,
5. Section C has 05 Short Answer type Qs carrying 03 marks each.
6. Section D has 02 Qs carrying 04 marks each.
7. Section E has 03 Qs carrying 05 marks each.
8. All programming Qs are to be answered using Python Language only.

#### Section-A

Section A consists of 18 Questions of 1 mark each.

**Q1.** In ..... memory, once the program or data is written, it cannot be changed? [1]  
(A) EEPROM (B) PROM  
(C) EPROM (D) None of these

**Q2.** ..... is a network of devices that have an embedded hardware and software to communicate (connect and exchange data) with other devices on the same network. [1]  
(A) DBMS (B) IoT  
(C) SaaS (D) NLP

**Q3.** CPU memory is also called: [1]  
(A) High speed memory (B) Cache  
(C) Both (A) & (B) (D) None of these

Answer:

(C) Both (A) & (B)

**Q4.** The Describe command: [1]  
(A) Creates a table (B) Shows structure of a table  
(C) Adds a record (D) Deletes a record



**Q5.** The ..... clause is used to arrange records of a table. [1]  
(A) Alter (B) Order  
(C) Structure (D) Order by

**Q6.** ..... is a system that allows a group of connected computers to maintain a single updated and secure ledger which is updated only after all the nodes in the network authenticate the transaction. [1]  
(A) P2P (B) Client Server  
(C) DBMS (D) Blockchain

**Q7.** Which one of the following is not a keyword in Python language? [1]  
(A) Pass (B) Eval  
(C) Assert (D) Nonlocal

**Q8.** A condition or check applicable on a field or set of fields [1]  
(A) Constraint (B) Keyword  
(C) Clause (D) None of these

**Q9.** Which of the following is not a feature of MySQL: [1]  
(A) Free (B) Portable  
(C) Case sensitive (D) Supports query language

**Q10.** Which of the following is true for variable names in Python? [1]  
(A) Underscore and ampersand are the only two special characters allowed  
(B) Unlimited length.  
(C) All private members must have leading and trailing underscores.  
(D) None of the mentioned

**Q11.** A table can have maximum of primary keys : [1]  
(A) 1 (B) 2  
(C) 3 (D) Multiple



**Q12.** What will be the output of the following code : [1]

162//55 + 78%4 + 12\*\*2

- (A) 149
- (B) 147
- (C) 142
- (D) 148

**Q13.** Which of the following is not an example of robotics? [1]

- (A) Sophia
- (B) Drone
- (C) CRAY
- (D) Both A & B

**Q14.** A key that links multiple tables is called? [1]

- (A) Foreign key
- (B) Primary key
- (C) Candidate key
- (D) Alternate key

**Q15.** Which of the following can be used as valid variable identifiers in python and why? [1]

- (A) Total
- (B) > sumNum
- (C) IQ
- (D) Addition-2

**Q16.**..... is designed to solve a specific problem or to do a specific task. [1]

- (A) Application Software
- (B) System Software
- (C) Utility Software
- (D) User

**Directions (Q17 and Q18):** In the following Questions, a statement of Assertion (A) is followed by a statement of Reason (R).

**Mark the correct choice.**

**Q17.** Assertion (A): A computer can process all instructions that are programmed in it and can be superior to humans in executing them.

Reason (R): Human beings can think and program, the machine cannot think. [1]

- (A) Both A and R are true and R is the correct explanation of A
- (B) Both A and R are true but R is NOT the correct explanation of A
- (C) A is true but R is false
- (D) A is false and R is true

Answer:

- (B) Both A and R are true but R is NOT the correct explanation of A



**Q18.** Assertion (A): Operator is a type of Token.

Reason (R): Identifier starts with alphabet or underscore. [1]

- (A) Both A and R are true and R is the correct explanation of A
- (B) Both A and R are true but R is NOT the correct explanation of A
- (C) A is true but R is false
- (D) A is false and R is true

Answer:

- (B) Both A and R are true but R is NOT the correct explanation of A

### Section-B

**Section B consists of 7 Questions of 2 marks each.**

**Q19.** Write the advantage and disadvantage of script mode. [2]

**OR**

Differentiate between interactive mode and script mode..

**Q20.** Write the following mathematical equation as Python expressions. [2]

(i)  $3x^3 + 4x^2 + 5x + 7$

(ii)  $Y = a + b + c^3$

**Q21.** What is the original purpose of SQL? [2]

**Q22.** Give the output of the following with justification : [2]

```
x = 3
```

```
x + = x - x
```

```
print (x)
```

**Q23.**What is a public cloud? Give few examples of Public cloud. [2]

**Q24.** Write a code in python to input a list of names from the user and display the names whose length is more than 5. [2]

**Q25.** What are Python data types? [2]

## Section-C

Section C consists of 5 Questions of 3 marks each.

Q26. Consider the table Accessories given below and write SQL queries:

[3]

TABLE: ACCESSORIES

No	Name	Price	Id
A01	Mother Board	12000	S01
A02	Hard Disk	5000	S01
A03	Keyboard	500	S02
A04	Mouse	300	S01
A05	Mother Board	13000	S02
A06	Keyboard	400	S03
A07	LCD	6000	S04
T08	LCD	5500	S05
T09	Mouse	350	S05
T10	Hard Disk	4500	S03

- (i) Display name and price of all accessories in ascending order of their price.  
(ii) To display names of accessories whose name ends with "d" and price is above 1000.  
(iii) To increase the price of accessories by 200 whose name has "b" somewhere in between.

OR

Write queries with respect to the table Hospital given below :

Table : Hospital

PatId	Pname	Dept	Charges
P01	Amit	ENT	5600
P02	Sunil	Eye	7000
P03	Rina	Ortho	2500
P04	Akash	Ortho	9000
P05	Amitabh	ENT	4000
P06	Preeti	Ortho	5000

- (i) Display details of "Ortho" department patient in descending order of names.  
(ii) Add a new column Docname varchar(20) to the table.  
(iii) Delete records of patients whose name starts with "A"



**Q27.** What will be the output of the following statements? [3]

(i) list1 = [12,32,65,26,80,10]  
list1.sort()  
print (list1)

(ii) list1 = [1,2,3,4,5]  
list1 [len (list1) -1]

(iii) list1 = [1,2,3,4,5,6,7,8,9,10]  
list1 [::-2]  
list1 [1:3] + list1 [3:]

**Q28.** Differentiate Alter and Update commands in SQL. [3]

Answer:

Alter	Update
1. It belongs to DDL category	1. It belongs to DML category
2. It changes the structure of the table	2. It modifies data of the table.
3. Columns can be added, modified, deleted etc.	3. Data can be changed, updated with values and expressions.

**Q29.** Explain the use order by clause. [3]

**OR**

Write most appropriate data types for the following columns of a Book table in a database storing data of books.

- (A) Bookname
- (B) Date of publication
- (C) Price

**Q30.** Write a program to input Roll and name of as many students and create a dictionary from the details entered. Each entry should have roll as key and name as value. Also display the dictionary. [3]

## Section-D

Section D consists of 2 Questions of 4 marks each.

Q31. Write SQL queries for the table given below:

[4]

CID	CNAME	GENDER	SID	AREA
1001	R SHARMA	FEMALE	101	NORTH
1002	MR TIWARY	MALE	102	SOUTH
1003	MK KHAN	MALE	103	EAST
1004	AK SINGH	MALE	102	EAST
1005	S SEN	FEMALE	101	WEST
1006	R DUBEY	MALE	104	NORTH
1007	M AGARWAL	FEMALE	104	NORTH
1008	S DAS	FEMALE	103	SOUTH
1009	RK PATIL	MALE	102	NORTH
1010	N KRISHNA MURTY	MALE	102	SOUTH

(i) Display Name and SID of "Male" customers.

(ii) Display details of customers of NORTH area whose name ends with "A"

(iii) Update the table to change AREA to SOUTH for all FEMALE customers

(iv) Remove records of customers having Sid) 104.

Q32. (i) What will be the output for the following Python statement?

[4]

```
L = [10, 20, 30, 40, 50]
```

```
L = L + 5
```

```
print(L)
```

(ii) What will be the output of the following python code?

```
L =[10, 20]
```

```
L1 = [30, 40]
```

```
L2 = [50,60]
```

```
L. append (L1)
```

```
L. extend(L2)
```

```
print(L)
```

(iii) Find the output

```
>>>11 = [1, 2, 3, 4]
```

```
>>>12= [2, 3, 4, 5]
```

```
>>>11 > 12
```

OR(Option for iii only)

Predict output of the following:

```
L = [10,12,2,22,19,40]
```

```
L[2] = 14
```

```
L.insert(3, 11)
```

```
del L[4:5]
```

```
print(L)
```

### Section-E

Section E consists of 3 Questions of 5 marks each.

Q33. Write SQL query for the Qs that follow based on given table Worker

[5]

Worker_ID	Name	Salary	Joining_Date	Department
001	Monika	10000	2014-02-20	HR
002	Shikha	8000	2014-06-11	Admin
003	Arun	30000	2014-02-20	HR
004	Nishant	15000	2014-02-20	Admin
005	Vivek	15000	2014-06-11	Admin
006	Santosh	20000	2014-01-20	Accountant
007	Naresh	7500	2014-04-11	Accountant

(i) To display Name and joining date of workers whose salary is greater than 10000.

(ii) To display details of those workers whose name started with 'N'.

(iii) To display all workers details from worker table order by Name ascending.

(iv) To display Name and Salary of those workers who work in 'HR' or 'Admin Department.

(v) To display the total number of workers who work in Accountant department.



OR

Consider the **table Hospital** storing details of patients as follows :

PatId	Pname	Dept	Charges	DtofAdm
P1	Varun	PAED	700	2021-09-02
P2	Sunita	PAED	900	NULL
P3	Samarpan	ENT	1000	2020-08-09
P4	Rishabh	ORTHO	500	1995-06-05
P5	Bineeta	ORTHO	450	2012-03-04

Write SQL commands for (i) – (v)

- (i) To create the table with appropriate data types.
- (ii) To display only the names and departments of patients of "ENT".
- (iii) To increase the charges of all departments by 20%.
- (iv) To add a new column Phone of type integer.
- (v) Remove the entire table.

**Q34.** What are the major components of a computer system? How do different components of a computer communicate with each other ? [5]

**Q35.** Write a program to input a sentence and using a list display the words that have even number of vowels. [5]

OR

Write a Python program to find the list of words that are longer than n from a given list of words.