

**COMPUTER SCIENCE
SAMPLE QUESTION PAPER
CLASS-XII**

Max. Marks: 70

TIME: 3 hrs

Note: All questions are compulsory.

SECTION-A (Very short answer type questions)

10x1

Q1. Which of the following is the correct extension of the Python file?

- a) .python
- b) .pl
- c) .py
- d) .p

Q2. Identify the primary purpose of the if statement in Python?

- a) To execute a block of code based on a condition
- b) To perform mathematical operations
- c) To repeat a block of code
- d) To define a function

Q3. State True or False:

"In a Python program, if a break statement is given in a nested loop, it terminates the execution of all loops in one go."

Q4. Which keyword is used to define a function in Python?

- A) func
- B) define
- C) def
- D) function

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Am

Q5. What is the output of the following code snippet?

```
Python
def add(a, b):
    return a + b

result = add(3, 5)
print(result)
```

A) 8 B) 3 C) 5 D) 35

Q6. Which of the following statements is FALSE about keys in a relational database?

- a. Any candidate key is eligible to become a primary key.
- b. A primary key uniquely identifies the tuples in a relation.
- c. A candidate key that is not a primary key is a foreign key.
- d. A foreign key is an attribute whose value is derived from the primary key of another relation.

Q7. Which SQL command is used to add new rows of data to a table?

- a) ADD
- b) CREATE
- c) INSERT
- d) APPEND

Q8. The input of logic gate are 1 and 0, then the output of which logic gate is 1.

- a. And gate
- b. Or gate
- c. Not Gate
- d. Nand Gate

Q9. Fill in the blank:

The modem at the sender's computer end acts as a _____.

- a. Model
- b. Modulator
- c. Demodulator
- d. Convertor

Q10? Ali wants to transfer pictures from her mobile phone to her laptop. He uses Bluetooth Technology to connect two devices. Which type of network will be formed in this case?

- a. PAN
- b. LAN
- c. MAN
- d. WAN

SECTION-B (Short answer type questions: Type-I)

9x2

Q11. Rewrite the following code in Python after removing all the syntax errors. Underline each correction done in the code.

```
num1, num2 = 10, 45
While num1 % num2 == 0
num1+= 20
num2+= 30
Else:
print('hello')
```

Q12. Write the simple snippet of code demonstrating use of function in python.

Q13. Define constructor in python?

Q14. Name three access specifier in python?

Q15. How can you create an empty array in Python?.

Q16. Give an example of domain and its attributes in DBMS.

Q17. Write down truth table of Nor Gate.

Q18. State Distributive law.

Q19. List Two disadvantages of Star topology?

SECTION-C (Short answer type questions: Type-II)

9x3

Q20. Explain the concept with the help of suitable example in python?

Q21. What do you understand by scope of a variable? Give an example in each.

Q22: List the advantages of object-oriented programming?

Q23. What do you understand by Data hiding and Data abstraction.

Q24 Explain how you can create a list named "my_list" containing integers from 1 to 5..

Q25.. Consider a database schema for a product inventory system with the following table:

- Products: product_id (Primary Key), product_name, unit_price, quantity_in_stock

Write an SQL query to update the quantity_in_stock for the product with product_id = 101 to 50 units.

Q27. What are the various data types in SQL?

Q28. Define cyberbullying and provide examples of cyberbullying behavior.

Q29. Write down differences between LAN and WAN networks.

SECTION-D (Long answer type question)

3x5

Q30. What are conditional statements in python? Write a python program to demonstrate one conditional statement?

(OR)

Explain various loops in python with help of suitable example?

Q31. Define concept of List in python and also demonstrate how to create a list in Python?

(OR)

What do you understand by Set in Python? What are various set items?

Q32.State and prove using truth table De morgan's Law?

(OR)

Explain the working of Nand And Nor Gate with the help of their Truth tables?

MARKS DISTRIBUTION

Sr. No.	Unit No.	Very Short Answer (1 mark)	Short Answer Type-I (2 marks)	Short Answer Type-II (3 marks)	Long Answer (5 marks)	Total Marks
1	Unit 1	3	1	-	1	10
2	Unit 2	2	1	2	-	10
3	Unit 3	-	2	2	-	10
4	Unit 4	-	1	1	1	10
5	Unit 5	2	1	2	-	10
6	Unit 6	1	2	-	1	10
7	Unit 7	2	1	2	-	10
		10	9*2(18)	9*3(27)	5*3(15)	70