(FOR THE CANDIDATES ADMITTED

DURING THE ACADEMIC YEAR 2022-23 ONLY)

SUBJECT CODE **22 UCT 515**

REG.NO. [　　　　]

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF-SEMESTER EXAMINATIONS : NOVEMBER – 2024

B.Sc. – COMPUTER TECHNOLOGY　　　　**MAXIMUM MARKS: 50**

V SEMESTER　　　　**TIME : 3 HOURS**

PART – III
OPEN SOURCE TECHNOLOGIES

SECTION – A　　　**(10 X 1 = 10 MARKS)**

ANSWER THE FOLLOWING QUESTIONS.　　　**(K1)**

1. Which operator is used for concatenation in PHP?
   a)　+　　b)　*　　c)　/　　d)　. -

2. What is the primary purpose of arrays in programming?
   a) Storing single values　　　　　　c) Storing key-value pairs
   b) Storing multiple values of the same data type　d) Defining functions

3. How do you create an object of a class in PHP?
   a) new ClassName()　　　　　　b) create ClassName()
   c) instantiate ClassName()　　　　d) make ClassName()

4. How do you prevent SQL injection vulnerabilities in PHP?

   a) Using prepared statements　　b) Sanitizing user input

   c) Limiting database privileges　　d) All of the above

5. What is the output of the following code?

```
x = 5
if x > 2:
    print("x is greater than 2")
```

   a) SyntaxError　　　　b) x is greater than 2
   c) Nothing　　　　　　d) x is 5

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES　　　**(K2)**

6. Explain the process of handling form input in PHP.

7. Explain the process of looping through an array in PHP.

8. Illustrate how you read the contents of a file in PHP.

9. Indicate the method of inserting data into a MySQL table using SQL.

10. Distinguish between a module and a package.

ETHICAL PAPER

SECTION – B   (5 X 3 = 15 MARKS)
ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.   (K3)

11.   a)   List the unique features of PHP.
                                    (OR)
      b)   Examine briefly about the GET and POST method in PHP with examples.
12.   a)   List any 5 String function in PHP with suitable examples.
                                    (OR)
      b)   Examine the following scripts in PHP.
             i)   array_merge()
             ii)   array_unique()
             iii)   array_slice()
13.   a)   Describe User-defined function with example.
                                    (OR)
      b)   List all PHP functions that are commonly used for directory operations.
14.   a)   Describe about PHP MySQL functions.
                                    (OR)
      b)   Examine method of implementing error handling in PHP? Discuss on how can you
           send an error message via email?
15.   a)   List and describe the standard or built-in data types in Python. Include examples for
           each type.
                                    (OR)
      b)   Assess the method to import data from a module in Python? Provide an example.

SECTION – C   (5 X 5 = 25 MARKS)
ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.
                                    (K4 (Or) K5)
16.   a)   Analyze and briefly describe the different types of operators in PHP:
                                    (OR)
      b)   Outline the rules that must be followed when naming variables in PHP with an
           example.
17.   a)   Examine the different types of conditional statements in PHP. Provide an example for
           each type.
                                    (OR)
      b)   Analyze the foreach loop in PHP and its usage. How does it differ from other looping
           structures in PHP? Provide an example to demonstrate how for each can be used to
           iterate through an array.
18.   a)   Experiment the Read and Write Process from Files in PHP.
                                    (OR)
      b)   Analyze the purpose and usage of the following PHP directory functions: chdir(),
           chroot(), closedir(), dir(), getcwd(), opendir(), readdir(), rewinddir(), and scandir().
           Provide an example where appropriate.
19.   a)   Discuss the concept of PDO, and compare it to MySQL .
                                    (OR)
      b)   Discuss what happens if you don't specify a database in a PDO connection string, and
           how does PDO handle errors during the connection process?
20.   a)   Experiment how Python manages control flow through conditional statements
                                    (OR)
      b)   Examine how Python handles file operations such as opening, reading, writing,
           appending, and deleting files.

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