



**Avinashilingam Institute for Home Science and Higher Education for Women**

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD (now MoE)

Re-accredited with 'A++' Grade by NAAC. CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

**Bachelor's Degree Arrear Examination – May 2025  
IV Semester**

Batch : 2022 Arrear  
Major : Computer Science

Time: 3 Hours  
Max. Marks: 100

**21BCSC18 Programming in Python**

**PART A  
Choose the Correct Answer**

10 x 1 = 10

1. What is the data type of `print(type(10.5))`?  
a. Int                      b. float                      c. double                      d. str                      CO1K1
2. Which of the following is an immutable data type in Python?  
a. List                      b. set                      c. dictionary                      d. tuple                      CO1K2
3. Which method is used to remove the last element from a list?  
a. `remove()`                      b. `pop()`                      c. `delete()`                      d. `discard()`                      CO2K1
4. What is the method to convert a string into a list?  
a. `split()`                      b. `list()`                      c. `separate()`                      d. `tokenize()`                      CO2K2
5. Identify the keyword used to define an anonymous function  
a. `def`                      b. `lambda`                      c. `anonymous`                      d. `function`                      CO3K2
6. Which keyword is used for exception handling in Python?  
a. `error`                      b. `except`                      c. `catch`                      d. `handle`                      CO5K1
7. How do you delete a key-value pair from a dictionary?  
a. `del d[key]`                      b. `d.remove(key)`                      c. `d.pop(key)`                      d. `discard()`                      CO4K1
8. Identify the method not applicable for tuples.  
a. `index()`                      b. `count()`                      c. `append()`                      d. `len()`                      CO3K1
9. Select the correct output of `print([1, 2, 3] + [4, 5])`.  
a. `[1, 2, 3, 4, 5]`                      b. Error                      c. `[1, 2, 3][4, 5]`                      d. `[5, 4, 3, 2, 1]`                      CO2K2
10. The statement used to create an empty set in Python.  
a. `{}`                      b. `set()`                      c. `[]`                      d. `set([])`                      CO3K2

**Part B**

5 x 6=30

**Answer ALL the questions**

**Answer should not exceed 400 words or two pages**

11. a. Discuss on variable declaration and Indentation in Python.                      CO1K1  
(or)
11. b. Elaborate on the different data types in Python.                      CO1K2

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|--|--------|
| 11. a. Discuss on if, elif and else in python.<br>(or)                     | CO2 K2 |
| 12. b. Write about for loop with suitable example.                         | CO2K1  |
| 13. a. Write a program to perform different arithmetic operations.<br>(or) | CO1K3  |
| 13. b. Categorize between mutable and immutable data types.                | CO3K2  |
| 14. a. Explain the concept of dictionaries with example.<br>(or)           | CO4K2  |
| 14. b. Write a program to implement nested dictionary in Python            | CO4K2  |
| 15. a. Discuss on the lambda function .<br>(or)                            | CO5K2  |
| 15. b. Discuss on few important libraries used in Python.                  | CO5K3  |

**Part C**

**5x12=60**

**Answer ALL questions**

**Each answer should not exceed 800 words or four pages**

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|---|-------|
| 16. a. Discuss on the types of control statements with examples.<br>(or)              | CO1K2 |
| 16. b. Write a program to find largest of three numbers using Conditional statements. | CO1K1 |
| 17. a. Categorize between arguments and parameters with suitable examples.<br>(or)    | CO2K3 |
| 17. b. Write a program to perform arithmetic operations using functions.              | CO3K3 |
| 18. a. Elucidate on the different string operations<br>(or)                           | CO3K2 |
| 18. b. Highlight on the various List operations used in Python.                       | CO3K2 |
| 19. a. Discuss on tuples with suitable example.<br>(or)                               | CO4K2 |
| 19. b. Explain the steps to append and delete an element from the list.               | CO4K1 |
| 20. a. Explain r, w, a and r+ modes used in files.<br>(or)                            | CO5K2 |
| 20. b. Explain on the try, except and finally in error handling concepts.             | CO5K2 |

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