

KAMARAJ COLLEGE (Autonomous)

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(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

(3 Pages)

Reg. No:.....

Question Code: 26E01115

Course Code : 25UMCS21

UG Degree - End Semester Examinations, April 2026

Second Semester

B.Sc., COMPUTER SCIENCE

Python Programming

(For those who joined in June 2025 onwards)

Time : 3Hours

Maximum : 75 Marks

PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer :

CO:1 1. Which of the following is a built-in data type in Python?

- K:1
- | | |
|---------------|---------------|
| (a) character | (b) float |
| (c) pointer | (d) structure |

CO:1 2. Indentation in Python is used to _____.

- K:2
- | | |
|----------------------------|-----------------------|
| (a) improve speed | (b) reduce memory |
| (c) define block structure | (d) declare variables |

CO:2 3. Which statement is used for decision making in Python?

- K:1
- | | |
|-----------|-----------|
| (a) for | (b) while |
| (c) break | (d) if |

CO:2 4. The pass statement is used to _____.

- K:2
- | | |
|--------------------------|--------------------|
| (a) terminate the loop | (b) skip iteration |
| (c) act as a placeholder | (d) print output |

CO:3 5. Which statement is used to return a value from a function?

- K:1
- | | |
|------------|--------------|
| (a) return | (b) break |
| (c) pass | (d) continue |

CO:3 6. The dir() function is used to _____.

- K:2
- | | |
|--------------------|--------------------------|
| (a) execute module | (b) list module contents |
| (c) delete module | (d) rename module |

CO:4 7. Lists in Python are enclosed within _____.

- K:1 (a) { } (b) ()
(c) [] (d) <>

CO:4 8. Dictionaries provide faster access because

- K:2 (a) they are ordered (b) they store duplicates
(c) they use indexes (d) they use keys

CO:5 9. Which mode is used to read a file?

- K:1 (a) w (b) a
(c) r (d) rw

CO:5 10. File pointer indicates _____.

- K:2 (a) current position in file (b) file name
(c) file type (d) file size

PART - B (5 X 5 = 25 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 250 words.

CO:1 11. (a) Analyze the difference between variables and constants in
K:4 Python with an example.

(OR)

(b) Write a Python statement to read two numbers and print their sum.

CO:2 12. (a) Write a short note on nested if statement with example.

K:3 **(OR)**

(b) Describe break statement with appropriate example.

CO:3 13. (a) Give the concept of variable scope and its lifetime.

K:4 **(OR)**

(b) Examine the role of modules in program reusability.

CO:4 14. (a) Compare nested lists and nested tuples with examples.

K:4 **(OR)**

(b) How do dictionaries function and methods are implemented in python? Explain.

CO:5 15. (a) Write a Python program to create a file and write a line into it.

K:3

(OR)

- (b) List the steps involved in renaming and deleting a file safely in Python.

PART - C (5 X 8 = 40 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 500 words.

- CO:1 16. (a) List and describe the features of Python that make it a
K:4 beginner-friendly and versatile programming language.

(OR)

- (b) Explain in detail about the arrays in python using appropriate example.

- CO:2 17. (a) Evaluate the effectiveness of conditional branching
K:5 statements in solving real-time decision-making problems.

(OR)

- (b) Give a note on the impact of iterative statements on program complexity and performance.

- CO:3 18. (a) Explain the working of recursive functions and identify their
K:6 advantages and limitations.

(OR)

- (b) Create a Python program that performs various string operations using user-defined functions.

- CO:4 19. (a) Give a brief note on lists and assess the advantages and
K:5 limitations.

(OR)

- (b) Describe dictionary data structures and analyze their efficiency in data retrieval.

- CO:5 20. (a) Brief the different file modes and their appropriate usage
K:6 scenarios.

(OR)

- (b) Design and develop a Python program to copy contents from one file to another.