

TILAK MAHARASHTRA VIDYAPEETH, PUNE
BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)/
BACHELOR OF COMPUTER APPLICATIONS (CYBER SECURITY)/
BACHELOR OF SCIENCE (CYBER SECURITY)
EXAMINATION : DECEMBER-2025
SEMESTER - V

Sub: Python/Python Programming (BCA-541-20/BCA23-501/BCAC23-501/BCA-CS-541-20)

Date : 23/12/2025

Total Marks : 60

Time: 10.00 am to 12.30 pm

Instructions:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labeled diagrams wherever necessary.

Q.1. Fill in the blanks.

(05)

- Maximum length of a Python identifier is
 - 128
 - 16
 - 32
 - No fixed length is specified.
- function removes a set's first and the last element from a list.
 - pop()
 - remove()
 - del()
 - push()
- Python files containing Python definitions and statements are
 - Algorithms
 - Module
 - Sequences
 - None
- The _____ keyword is used to define a function in Python.
 - Class
 - def
 - import
 - return
- A _____ in Python stores data in key-value pairs.
 - list
 - tuple
 - set
 - dictionary

Q.2. State True/False

(05)

1. Variable names in Python are case-sensitive.
2. You can change the elements of a tuple after it has been created.
3. Tuples in Python are defined using curly braces `{}`
4. Python uses indentation to define code blocks.
5. Lists in Python are mutable

Q.3. Answer the following. (Solve any 5)

(10)

1. Define package and module in python.
2. What is pass statement in python?

3. What is slicing in Python?
4. What is use of Python indentation?
5. List key features of Python programming.
6. What are the common built-in data types in Python?

Q. 4. Answer the following in detail. (Solve any 6) (30)

1. Explain following tuple functions in python with example: a) len() b) tuple()
2. Define Set. Explain Set intersection and union operation in python with example.
3. Explain control statements in python with example.
4. Write Python program to find the largest and smallest number among the three input numbers.
5. Describe input() and raw_input() functions in python with example.
6. Define Exception. Explain user defined exceptions in python with suitable example.
7. Explain how to write information into a file using python with suitable example.

Q. 5. Answer the following in detail. (Solve any 1) (10)

1. Explain in detail the steps of database connectivity in python with suitable example.
 2. What are dictionaries in Python? Explain Traversing, appending, dictionary Elements.
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