



Hambale

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 Examination – November 2025

V Semester

Class : III UG

Major : Computer Applications

Time: 3 Hours

Max. Marks: 100

23BCAC10 Programming in Python

Course Outcomes:

CO1: Learn the basics of python programming constructs.

CO2: Develop program using control statements in Python.

CO3: Express the concept of function, strings and modules.

CO4: Illustrate with List, tuples and dictionary.

CO5: Usage of File handlings concepts in Python.

Part A

10 x 1 = 10

Choose the Correct Answer

1. The _____ developed Python programming language. CO1 K1
a. Dennis Ritchie b. James Gosling
c. Guido van Rossum d. Bjarne Stroustrup
2. Python is _____ typed language. CO1 K2
a. weakly b. statically
c. dynamically d. strongly
3. elif is called as _____ type of statement. CO2 K1
a. Loop statement b. Conditional statement
c. Function definition d. Exception handling
4. To skip the current iteration in a loop _____ statement is used. CO2 K2
a. stop b. break
c. skip d. continue
5. The _____ is a built-in module in Python. CO3 K1
a. math b. calc
c. algebra d. number
6. To import a module in Python _____ keyword is used. CO3 K2
a. include b. require
c. use d. import
7. The _____ data structure stores data as key-value pairs. CO4 K1
a. List b. Set
c. Dictionary d. Tuple
8. The result of converting a list [1, 2, 2, 3] into a set is _____. CO4 K2
a. [1, 2, 2, 3] b. {1, 2, 3}
c. (1, 2, 2, 3) d. {1, 2, 2, 3}
9. To open a file in Python _____ function is used. CO5 K1
a. file_open() b. open()
c. fopen() d. openfile()
10. To read the entire content of a file _____ method is used. CO5 K2
a. read() b. readline()
c. readlines() d. fetch()

Part B

5 x 6 = 30

Answer ALL questions

Each answer should not exceed 400 words or two pages

11. a. List the main features of Python programming language. CO1 K1
(or)
11.b. Examine the concept of type conversions. CO1 K2
12. a. Classify the different types of if-control statements. CO2 K1
(or)
12.b. Demonstrate the use of both while-loop and for-loop in Python. CO2 K2
13. a. Discuss the purpose and usage of the return statement. CO3 K1
(or)
13.b. Interpret how string comparison works. CO3 K2
14. a. Identify and explain commonly used list methods. CO4 K1
(or)
14.b. Differentiate lists and dictionaries with suitable example. CO4 K2
15. a. Discover the types of files in python. CO5 K1
(or)
15.b. Enumerate the steps to split a sentence into individual words. CO5 K2

Part C

5 x 12 = 60

Answer ALL Questions

Each answer should not exceed 800 words or four pages

16. a. Analyze the built-in data types in Python. Explain their categories with suitable examples. CO1 K1
(or)
16.b. Design a Python program that demonstrates the creation, traversal, and basic operations on arrays using the array module. CO1 K2
17. a. Create a Python program that uses control statements to categorize a list of numbers into even and odd numbers. CO2 K1
(or)
17.b. Express how jump statements like break, continue, and pass are used in Python programming with suitable examples. CO2 K2
18. a. Justify the use of different types of function arguments. CO3 K1
(or)
18.b. Write a Python program that demonstrates the use of modules and explains how namespaces help in organizing code and avoiding name conflicts. CO3 K2
19. a. Examine the properties and uses of tuples. CO4 K1
(or)
19.b. Discriminate between the methods used for updating and deleting elements in a Python dictionary. CO4 K2
20. a. Summarize the process of opening and closing files. CO5 K1
(or)
20.b. Illustrate how file positions work in Python using the tell() and seek() methods. CO5 K2
