

PUNE VIDHYARTHI GRIHA'S
COLLEGE OF SCIENCE AND TECHNOLOGY
S.Y. B.SC (INFORMATION TECHNOLOGY) - SEM-III
SUB: PYTHON PROGRAMMING
SET: A

Q.P CODE: USIT302

(TIME :2 ½ Hrs.)

TOTAL MARKS :75

N.B

1. All questions are compulsory.
2. Figures to the right indicate marks.
3. Answer to the same question must be written together.
4. Draw neat and labelled diagrams whenever necessary.
5. Illustrations, in-depth answers and diagrams will be appreciated.
6. Mixing of sub-questions is not allowed.

Q.1 Attempt any three of the following (15M)

- a. Distinguish between Compiler & Interpreter.
- b. Which are the two basic mode in Python? Explain in detail.
- c. Explain if...else with multiple elif Statement with example.
- d. Explain the use of range function using for loop along with an example.
- e. List the different core datatypes in Python. Explain how to create Dictionary and access value of dictionary from it.
- f. Explain features of Python programming?

Q.2 Attempt any three of the following (15M)

- a. What are functions? How to create function and call the function?
- b. Differentiate between fruitful function & void function.
- c. What are different arguments and parameters used to create functions.
- d. Explain any five methods of string in Python with example.
- e. Explain the concept of forward and backward Indexing using string with Example.
- f. List and Explain different string functions to remove spaces with example

Q.3 Attempt any three of the following (15M)

- a. What is List? How to define and access the elements of list.
- b. Differentiate between mutable & immutable datatypes in Python.
- c. Explain the following functions with syntax.
 - i. append()
 - ii. extend
 - iii. insert()
 - iv. remove()
- d. Explain the properties of Dictionary Keys with example program.
- e. What is tuple? Explain different Operations performed on Tuple with example.
- f. Explain any five methods of Dictionary with example.

Q.4 Attempt any three of the following

(15M)

- a. How to create class and objects in python? Explain with example.
- b. Write a short note for creating constructor in Python?
- c. What is module? What are different ways to use modules in Python?
- d. Explain the various functions of Math module.
- e. What is inheritance? Explain the types of inheritance.
- f. What are the modes of file object? Explain How to use it with open().

Q.5 Attempt any three of the following

(15M)

- a. List and Explain any five functions of tkinter module in detail with example.
- b. What is Layout Management? Explain pack() and grid() of Layout Management?
- c. Write short note on Entry and Radiobutton widget.
- d. Write a program to create table in MySQL database using Python GUI application.
- e. What are the steps to connect Python with MySQL database.
- f. Write a program to draw the following form using GUI

Select your gender

Male

Female

Transgender