

- Q.20 How can you create graphical user interfaces (GUIs) in Python? Describe the role of the Tkinter module.
- Q.21 Describe the use of keys and constraints in database design.
- Q.22 Explain with example the various types of IF statements.

### SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)
- Q.23 What do you mean by a file. What are various file access modes. Explain with example of how to perform read and write operations on file.
- Q.24 What do you mean by module. Explain with example of how we can create and use a module in python.
- Q.25 What do you mean by database in python. Explain with example the process on inserting, updating and deleting data in the database.

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### 3rd Sem / Automation & Robotics

### Subject : Python Programming

Time : 3 Hrs.

M.M. : 60

### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 What is the purpose of the return statement in python?
- a) To print a value to the console
  - b) To terminate the program
  - c) To exit a loop
  - d) To return a value from a function
- Q.2 Which data structure is immutable in Python?
- a) List
  - b) Tuple
  - c) String
  - d) Dictionary
- Q.3 What is the primary purpose of the open() function in Python?
- a) To create a new Python file
  - b) To open a text editor
  - c) To open a file for reading or writing
  - d) To execute a Python script

- Q.4 In Python, what is a namespace ?
- a) A specific memory location for variables
  - b) A module that contains functions
  - c) A keyword used for naming variables
  - d) A container for variable names
- Q.5 Which module is commonly used in Python for creating graphical user interfaces (GUI)?
- a) tkinter                      b) matplotlib
  - c) pygame                      d) pandas
- Q.6 In Python, what is the typical approach to reading the contents of a file line-by-line?
- a) Using the read method
  - b) Using a for loop with the file object
  - c) Using the readlines method.
  - d) Using the split function.

### SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 Bitwise operators are used to combine Boolean values and expressions. (True/False)
- Q.8 Linear search is generally faster than binary search for finding an element in a sorted list. (True/False)

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- Q.9 The \_\_\_\_\_ clause in a try statement is executed regardless of whether an exception is raised or not.
- Q.10 List can contain elements of different data types in Python. (True/False)
- Q.11 What are keys and constraints in databases?
- Q.12 \_\_\_\_\_ values are used for missing data in database tables.

### SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Explain various types of errors with example in Python.
- Q.14 Explain formatted output and input with example in python.
- Q.15 Explain any five string functions with example.
- Q.16 What do you mean by List. Give example of any four List operations.
- Q.17 Explain binary search operation on List with example.
- Q.18 What are the exceptions in python. What the finally clause of the try statement does in exception handling.
- Q.19 Differentiate between for loop and while loop in python.

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