UNIT-I

2 Marks:

1. Define python. Who developed it?
2. How to accept user input? Give example.
3. How to declare single & multiline comments in python?
4. State any two differences between type & list.
5. Define variable. State rules for defining a variable.
6. State the significance of range() in python.
7. Name data types in python with examples.
8. Define variable. Give example.
9. What is range() .
10. Define IDEs of python.
11. List applications of python.
12. Define identifier. List rules for defining an identifier.
13. What are reserved words? Give example.
14. Define statement & expression.
15. Define operator. List operators in python.
16. Mention logical & relation operators.
17. Define operator Precedence and Association.
18. What are comments? Mention single line and multiline comments.
19. What are built-in functions? Mention any 5.
20. Give the syntax of print() and input().
21. What is type conversion? Give syntax.
22. List any five type conversion functions.
23. What is python library? List popular libraries of python.
24. How do you import library? Give example.
25. Explain range() and exit().

5 Marks:

1. Explain features of python.(APR 2021/MAR 2022/SEP 2022/MAR 2021)
2. Explain various conditional statements with syntax and example.(SEP 2022)
3. Explain if and if-else statement in python.(Mar 2021)
4. Explain branching in python.
5. Explain iteration. Give program example.
6. List and explain data types in python.
7. Explain while and for loop in python.
8. Define identifier. List rules for defining an identifier.
9. What are statements? Explain.
10. Define operator. List & explain operators in python.
11. List and explain logical and comparison operators.
12. What are built-in functions? List and explain.
13. Explain print() & input() function.
14. Explain break & continue.

Note: Refer all python Lab journal programs on this unit.

UNIT-II

2 Marks:
1. Define string? Give syntax.(mar-21)
2. What is exception? (nov-19)
3. Mention built-in exceptions in python.
4. Write the use of try, except, else and finally block.
5. Write the syntax of user defined function.
6. What is the use of return statement in functions.
7. What is default & command line arguments?
8. What are keyword arguments?
9. What is scoping? Mention types of scoping.
10. What is local & global scope.
11. Define string. Give the syntax to create a string.
12. What is str()? List operations on strings.
13. What is indexing & slicing?
14. Give the syntax of slicing with example.
15. What is negative indexing?
16. What are escape sequences? List them.
17. What is the use of raise statement.
18. List the techniques for string characters.

5 Marks:
1. Describe various string operations.(sep-2022)
2. What is function? Demonstrate defining and calling user defined function with syntax and example.(sep-22)
3. Write a python program to calculate factorial of a number using user defined function.(sep-22)
4. Explain keywords used in handling exceptions. Demonstrate with a program(sep-22).
5. Explain scoping wih example. (mar-22)
6. Explain any 5 string built-in functions with examples.(mar-22, mar-21, nov-19)
7. Explain recursion with an example.(mar-22)
8. Explain exception handling in python.(mar-22, sep-20)
9. What is exception handling? Write a program to demonstrate exception zandling.(mar-21)
10. What is recursion? Write a program to find factorial of a number using ecursion.(mar21).
11. Write a syntax to define functions in python. Write a python program to find largest of two numbers using function.(nov-19).
12. What is recursion? Explain with a program.(nov-19).
13. Explain exception handling mechanism in python(nov-19).
14. Write a python program to demonstrate try, except and finally block(nov-19).
15. Explain different types of arguments in functions of python.
16. What are default arguments? Explain with an example.
17. What are command line arguments? Explain with a program.
18. Define keyword arguments. Explain with a program.
    Note: Refer all python Lab journal programs on this unit.

UNIT-III

2 Marks:
1. What is list? Give examples. .(sep-2022)
2. State any two differences between tuple & list. .(sep-2022)
3. Define tuples. Give examples. (Mar-2022)
4. Differentiate list and dictionary.(Mar 2022)
5. Define list, dictionary & tuple with example.(Mar 2022)
6. What is mutable & immutable? Give examples(Nov 2019)
7. What is set?
8. List any 5 set operations.
9. Differences between list, tuple, dictionary & set.
10. How do create list?
11. List any 4 operations on list.
12. What is slicing? Give example.
13. What is slice operator? Give the syntax.
14. What is nested list? How do you create?
15. What is dictionary? List 4 methods of dictionary.
16. How do you traverse dictionary?
17. List built in functions of list.
18. List built in functions of tuples.

5 Marks:
1. Discuss various operations performed on list.(sep-2022)
2. Write a python program to demonstrate any 5 dictionary methods.(Sep 2022)
3. Explain any 5 built in functions of dictionary with example. (Mar 2022).
4. What is tuple? Explain any 5 built in functions of tuple with example.(Mar 2022)
5. Differentiate list, tuple & dictionary.IMP
6. Explain list & tuple. (Sep 2020)
7. Discuss dictionaries in python(Sep 2020).
8. Explain list creation techniques.
9. List and explain list built in functions.
10. How do you implement stack using list, write a python program to demonstrate.
11. Write a python program implement sequence using list.
12. List and explain tuple methods.
13. List and explain set operations.
14. List and explain set built in functions of set.
15. Write a program to demonstrate List.
16. Write a program to demonstrate Tuple.
17. Write a program to demonstrate Dictionary.
18. Write a program to demonstrate Set.

Note: Refer all python Lab journal programs on this unit.

UNIT-IV

2 Marks:

1. What is __init()___? (SEP 2022)
2. What is inheritance? Give a syntax to derive child class from parent class. (SEP 2022)
3. Define inheritance & encapsulation.(MAR 2022)
4. What is file, write syntax?
5. Define 2 types of files.
6. What is encapsulation?
7. Define polymorphism.
8. Define class with syntax.
9. Define an object with its syntax.
10. Define init () Constructor.
11. Define Inheritance in python. list types of it.
12. Define objects with syntax.
13. What are file modes, list.
14. Write the syntax to create file object.
15. What is format operator.?
16. Write the advantages of OOPs.
17. Write the syntax to create class & objects.
18. Define self.
19. Explain types of constructor methods.
20. What are instance variables and class variables?
21. Define single & multiple inheritance.
22. Define multilevel & multipath inheritance.
23. What is operator overloading?
24. Define private instance variable.

5 Marks:

1. Write a short note on   (SEP 2022)
    a.   File Operations.
2. Explain with respect to python (MAR 2021)
    a.   Class and object b. Inheritance c. encapsulation d. Information Hiding.
3. Explain inheritance and encapsulation properties of python.(SEP 2020).
4. What is file.? Explain any five methods of file.(NOV 2019).
5. List & explain the access mode of files
6. List and explain operations on file.
7. Write a python program to read data from a file.
8. Write a python program to write data into file.
9. List & explain the object-oriented programming features.
10. Differentiate instance variables and class variables?
11. Explain objects as arguments & return types.
12. What is inheritance? Explain types of inheritance with examples.
13. What is operator overloading? Explain.

   Note: Refer all python Lab journal programs on this unit.

UNIT-V

2 Marks:

1. Write the uses of any two functions used in GUI layout management.
2. What is cursor? (sep-2022, Mar 2022, Mar 2021)
3. Name any 5 Tkinter widgets with examples(Mar 2022,Mar 2021)
4. Define commit and rollback. (Mar 2021)
5. Define database.(Sep 2020, non 2019)
6. Define single line query.(Sep 2020).
7. Define connect and fetchone, fetchall.(Sep 2020)
8. Define window and widget.
9. Define layout manager? List layout managers.
10. What pack(), grid & place()?
11. Define python SQLite.
12. Name the module for database connectivity.
13. Define Numpy.
14. List any two features of Numpy.
15. List any 4 operations on array using Numpy.
16. Name the data structures used in pandas.
17. Define pandas.
18. Define series and dataframe.
19. List any 4 operations on DataFrames.
20. Name the module for data visualization.
21. Name the types of chrarts used in matplotlib pyplot.
22. What is matplotlib & pyplot.

5 Marks:

1. Explain the functions used for reading single line & multiline query execution.(sep-2022)
2. Explain the working of any 5 GUI widgets with example. (sep-2022)
3. Explain in detail the steps for database connectivity with an example. (sep-2022,Mar 2022, Mar 2021, sep 2020, NOV 2019).
4. Explain any 5 widgets related to GUI.(Mar 2022,Mar 2021, sep 2020)
5. Explain the following terms
      1. Commit 2. Alter table 3. Update 4. Fetchall 5. Delete (Mar 2022)
6. Write a python program to insert and display employee details in the database.(emp_name, empid, empaddres) (Mar 2021)
7. Discuss Tkinter GUI in python. (Sep 2020)
8. Explain any 10 widgets related to GUI.(Nov-19) 10 Marrks.
9. Write a program to draw shapes using canvas.
10. Write a python program to create, insert, update, select, delete and drop table.
11. Lis and explain any 5 features of Numpy.
12. How do you create an array using Numpy? Explain.
13. List and explain operations on array using Numpy.
14. Write a python program to create DataFrames using excel sheet.

15. Write a python program to create DataFrames using csv file.
16. Write a python program to create DataFrames using dictionary,
17. Write a python program to create DataFrames using tuples.
18. List and explain operations on DataFrames.
19. Write a python program to draw line chart.
20. Write a python program to draw bar chart.
21. Write a python program to draw pie chart.
22. Write a python program to draw histogram.

Note: Refer all python Lab journal programs on this unit.