Unit 1:

1. What is Python? List and Explain features of Python Programming.
2. What is variable? What are the rules and conventions for declaring variables?
3. Write a steps to install python? And also write a steps to run python program.
4. Explain different conditional statement with examples.
5. Explain use of break, continue and pass statement in python programming.
6. What are the different type conversion methods in python?
7. What is formal and natural language? Explain in details.
8. Explain different operators in python programming.
9. What is binary operator? Explain with examples.
10. What is debugging? Explain types of error in python programming.
11. Explain loops in python with examples.
12. Write a program to perform simple mathematical operation.
13. Write a program to reverse a number enter by user.
14. Write a program to find number is positive or negative. If positive find number entered by user is even or odd.
15. Write a program to find character enter by user is vowel or not, using if…..elif statement.

Unit 2:

1. Define function with proper syntax and example.
2. What is recursive functions? Explain with example.
3. What is fruitful function? Explain with suitable example,
4. Explain composition function with example.
5. What is string? Explain in details.
6. Explain traversal with string.
7. Write a note on math functions in details.
8. What are different operations performed on string? Explain with example.
9. Write a output for following:

   fruit = ‘banana’

   a. >>>fruit[:2]
   b. >>>fruit[2:]
   c. >>>fruit[:]
   d. >>>fruit[2:4]
   e. >>>fruit[2:4]*2

10. Write a program to check given string is palindrome or not.
11. Create a function to perform simple mathematical operations. Eg. Addition, subtraction, multiplication etc.
12. Write a recursive function to find factorial of number.
13. Write a function to find area of rectangle and area of circle using parameterized function.
14. Write a program to return True if number is divisible by 3.(Note:use fruitful function)
15. Explain types of functions.
16. Write a note on Slice in String.

Unit 3:

1. What is list? Explain different operation perform on list.
2. What is traversing with list? Explain with example,
3. Explain built in functions perform on list.
4. Different operators in list with example.
5. Write a program to find and make different list of odd number from given list [2, 4, 3, 5, 6, 8,11]
6. Write a program to find given string has vowel or not using list of vowels
7. Write a program to find and count given number enter by user is in list.
8. What is tuple? Explain different operations perform on tuple.
9. How we traversing with tuple explain with example.
10. List and explain different operators in tuple.
11. What are the built in functions are used in tuple? Explain with example.
12. Is it tuple is mutable? Explain with example why?
13. Write a program to find and make tuple which is divisible by 2 from given tuple [1, 2, 5, 4, 7, 8]
14. Write a program to find any single element is there in another tuple.
15. Write a program to find number divisible 2 and 3 from given tuple [2, 3, 4, 6, 8, 9, 12]
16. What is dictionaries? Explain with syntax.
17. Explain different operation perform on dictionaries.
18. Explain built in function perform on dictionaries with example.
19. Write a note on built in exception in files.
20. Explain different modes of opening a file.(Note: text / binary both)
21. Write a program to open and read a text file.
22. Write a program to add content in file.

Unit 4:

1. What is regular expression? Explain different types of Regular expression.
2. How to import a module? Explain time module.
3. Explain built in class attributes.
4. What is method overriding? Explain with example.
5. Explain various function in math module.
6. What is multithreading? Explain with example.
7. Design a class to store information of students and display the same.
8. Design a class to store information of Employee with name, address, DOB, designation
9. Write a program to create class for simple mathematical operation. It includes add(), sub() and mul()
10. Write a program to create user define module for area of triangle.
11. Write a program to create user define module for calculate volume of cube.
12. Write a note on inheritance in python with example.
13. What is class? Explain with suitable syntax.

Unit 5:

1. Explain checkbutton widget with example.
2. Write a note on tkMessageBox module.
3. Explain layout manager in details.
4. Write a note on cursor object in python.
5. Write a program to create login page.
6. Write a program to add radiobutton.
7. Write a program to add lable and textbox.
8. Write a program to create registration form with following details: Name, Address, Contact, Gender, Submit & cancel button.
9. Write a program to create listbox for five fruits.
10. Write a program to create menu bar for : file→ New
    Save
    Exit
11. Write a program to Insert, Update, Delete student record in database.
12. Write a program to display record of employee from database.
13. Explain different component / widget in python.