

Note: - All Questions are Compulsory

- Q.1 Attempt the following questions (Any Three)** (15)
- What is Python? List and explain features of Python.
 - Explain type conversion of variables in python.
 - Explain the use of break statement in loop with example.
 - What is variable? What are the rules and conventions for declaring a variables?
 - Write a python program to print factorial of a number. Take input from user.
 - Write a python program to calculate area of triangle and circle and print result. Take input from user.
- Q.2. Attempt the following questions (Any Three)** (15)
- What is actual and formal parameter? Explain the difference along with an example.
 - Discuss difference between local and global variable.
 - Write a python program to check, whether a string is palindrome.
 - How function is defined and called in python?
 - Explain str.find() function with suitable example.
 - Write a function that takes single character and print character is vowel or not.
- Q.3. Attempt the following questions (Any Three)** (15)
- What is List? How to create list?
 - Explain various built-in list functions and Methods.
 - Explain the properties of dictionary keys.
 - How to create dictionary in python? Give Example.
 - Write a program to input any two tuples and interchange the tuple value.
 - Write a python program to access an integer number and use try/except to catch the exception if number is dividing by zero.
- Q.4. Attempt the following questions (Any Three)** (15)
- Explain math module with its any five functions.
 - How to import module? Explain time module.
 - Design a class that store the information of student and display the same.
 - What is regular expression? Explain various patterns of regular expression?
 - What is method overloading? Write an example.
 - What is module? What are the advantages of using module?
- Q.5. Attempt the following questions (Any Three)** (15)
- Explain check button widget with example.
 - What is layout management? Explain grid manager.
 - Write and explain the steps insert a row into Mysql database with example.
 - What is the use of list box widget? Give an example to add. Elements to list box.
 - Write a source code in python to read single and multiple results of query execution.
 - Write a python code to create the following GUI:

Tk	-	<input type="checkbox"/>	X
<input checked="" type="radio"/> Option 1 <input type="radio"/> Option 2 <input type="radio"/> Option 3 You selected the option 1			