

Time: 2 ½ Hrs

Marks: 75 Marks

N.B.

- 1) All questions are compulsory.**
 - 2) Figures to the right indicate marks.**
 - 3) Illustrations, in-depth answers and diagrams will be appreciated.**
 - 4) Mixing of sub-questions is not allowed.**
 - 5) Each question carries 5 Marks.**
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Q.1 Attempt any four of the following: 20 Marks

- a) Write a short note on exception handling in Python.
- b) Write a Python program that matches a word at the beginning of a string using regular expression.
- c) Explain in detail python file functions for reading, writing, positioning, and seeking within file contents?
- d) Explain how to create a directory, how to change a directory and how to remove a directory in python.
- e) Explain any five metacharacters used in regular expression in detail. Give examples for each.
- f) What is the use of Iterator? Explain with examples.

Q.2 Attempt any four of the following: 20 Marks

- a) What is the grid layout? Give a suitable example.
- b) Write a python program to display fave graphical shapes on Canvas.
- c) Explain any five event handling formats.
- d) Explain GUI in python and state its advantages and disadvantages.
- e) What are the different types of messagebox available in the message widget of the tkinter module?
- f) List the widgets which are provided by the tkinter module. Explain any five.

Q.3 Attempt any four of the following: 20 Marks

- a) Establish a connection between python and database and write a python to display all records from the Employee table(Empno, Empname, Dept, Salary).
Assume records are already inserted in the table.
- b) Write a python program to create a connection oriented server program.
- c) What is database connectivity in Python? Explain.
- d) Give a short note on SMTP. Explain how to create SMTP objects in python.
- e) Explain transaction with rollback and commit in python.
- f) How to execute different types of statements on a database table? Explain with examples.

Q.4 Attempt any three of the following: 15 Marks

- a) Explain :
 - 1. the UPDATE Command
 - 2. the DELETE Command
 - 3. the INSERT Command
- b) Explain PanedWindow and Toplevel widget in detail. Give an example.
- c) Write a program for addition and multiplication of two numbers using GUI.
- d) Write a program for the factorial of a given number using tkinter.
- e) Explain color and font in GUI.Give an example.
- f) Write a simple program to implement exception handling.Explain the code.
