

## FYCS/SEM II/EXT/Advanced Python Programming

Time: 2½ hrs.

Marks:75

- Note:
1. All questions are compulsory with internal choice.
  2. Draw neat diagrams wherever necessary.
  3. Figures to the right indicate full marks.

**Q.1 Answer the following (any FOUR) (20)**

- (a) Explain any five methods in OS Module.
- (b) Write a short note on date time module.
- (c) Differentiate between process and thread.
- (d) Explain various file opening modes in Python.
- (e) What is regular expression? State and explain any five regular expression patterns.
- (f) Write a Python program to Count the total number of uppercase characters in a file.

**Q.2 Answer the following (any FOUR) (20)**

- (a) Compare and contrast TCP and UDP.
- (b) Explain any five built-in exceptions in Python.
- (c) Write a short note on Layout Manager in tkinter.
- (d) Explain Entry widget provided by tkinter module.
- (e) What is the use of a raise statement? Write a code to accept two numbers and display the quotient. Appropriate exception should be raised if the user enters the second number (denominator) as zero.
- (f) Write a Python code to create a table in MySQL.

**Q.3 Answer the following (any FOUR) (20)**

- (a) Define Inheritance. Explain types of Inheritance in Python with syntax of each type.
- (b) Write a note on operator overloading in Python.
- (c) What is abstract method and abstract class? How to define abstract method in Python?
- (d) Explain different access modifiers in Python.
- (e) Write a Python program to create a calculator class. Include methods for basic arithmetic operations.
- (f) Write a Python class which has two methods `get_String` and `print_String`. `get_String` accepts a string from the user and `print_String` prints the string in upper case.

**Q.4 Answer the following (any FIVE) (15)**

- (a) Write a note on seek and tell method.
- (b) What is dead lock in threading?
- (c) Explain any three socket methods in Python.
- (d) What is assert statement and how it is used in Python?
- (e) Write a Python program to demonstrate constructor.
- (f) Write a note on Destructor in Python.

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