R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, December - 2019
PYTHON PROGRAMMING
(Common to CSE, IT)

Time: 3 Hours   Max. Marks: 75

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A
(25 Marks)

1.a)	State any four applications where python is more popular.	[2]
b)	List out the main differences between lists and tuples.	[3]
c)	What are the uses of File object?	[2]
d)	Give a brief description of several Built-in attributes related to File objects.	[3]
e)	Summarize the purpose of pipe and dot symbols used for pattern matching.	[2]
f)	Explain the basic functionality of match( ) function.	[3]
g)	What is the need of Tkinter module in python?	[2]
h)	How to create Label widget in Python?	[3]
i)	State the need of persistent storage.	[2]
j)	Discuss the SQL commands/statements used for creating, using and dropping a database.	[3]

PART – B
(50 Marks)

2.a) How to declare and call functions in Python programs? Illustrate with an example script.
   b) List and explain few most commonly used built-in types in python.   [5+5]

OR

3. Summarize various operators, built-in functions and standard library modules that deals with Python's numeric type.   [10]

4. Explain the following file built-in functions and method with clear syntax, description and illustration:
   a) open( )   b) file( )   c) seek( )   d) tell( )   e) read( )   [10]

OR

5.a) How does try-except statement work? Demonstrate with an example python code.
   b) Illustrate the concept of importing module attributes in python scripts.   [5+5]

6. Examine how python supports regular expressions through the 're' module with brief introduction and various built-in methods related to it.   [10]

OR

7.a) What is the motivation behind parallelism and state how python achieves parallelism?
   b) Explain briefly about thread and threading module objects in Python.   [3+7]

8. Consider a Python GUI program that produces a window with the following widgets using python code:
a) A button to retrieve the next value in that list(if there is one).This button is displayed if there is no next value in the list
b) A label to display the number of the items being displayed and the total number of items
[10]

OR

9. Give an overview and demonstration of building web applications using python's cgi module. [10]

10.a) What is a cursor object? Explain various methods and attributes of cursor object.
b) What do you mean by a constructor? List and describe various constructors used for converting to different data types. [5+5]

OR

11. Describe in detail about Python SQLAlchemy ORM with a case study of Employee role database. [10]

--ooOoo--