

R18

Code No: 157EY

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, February/March - 2022

PYTHON PROGRAMMING

(Electrical and Electronics Engineering)

Time: 3 Hours

Max. Marks: 75

**Answer any Five Questions
All Questions Carry Equal Marks**

- 1.a) What are the features of Python? Describe them briefly.
b) Discuss some commonly used built-in types, standard type operators, built-in functions in python. [6+9]
- 2.a) Explain various operators and built-in functions related to list and tuples in python.
b) What is a string? List and discuss in detail about the built-in functions for python strings. [7+8]
3. With an example script demonstrate the following methods of file object in python:
a) file.next() b) file.truncate() c) file.fileno() d) file.flush(). [15]
4. How various exceptions are detected and handled in python? Discuss various statements and methods used for exception handling in python using sample script. [15]
5. Explain the core functionality of the following pattern matching and string searching functions in python:
a) match() b) group() c) search() d) split() e) sub() [15]
- 6.a) Differentiate between procedures/processes and threads.
b) List and explain various methods available in Thread class of python. [5+10]
7. Describe the following Tkinter widgets using an illustrative python script.
a) Label b) Button c) Scale [5+5+5]
8. State the need of ORMs. Explain in detail about SQLAlchemy ORM by considering employee role database example. [15]

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