

R18

Code No: 157EY

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, January/February - 2023

PYTHON PROGRAMMING

(Common to CE, ME, ECE, EIE, MCT)

Time: 3 Hours

Max.Marks:75

Note: i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART - A

(25 Marks)

- 1.a) How does a computer run a python program? [2]
- b) Explain Running python commands using the REPL. [3]
- c) What is the sys module in Python? [2]
- d) What is file object attribute in Python? Explain. [3]
- e) What are regular expressions in Python? [2]
- f) Explain the special symbols in Python. [3]
- g) How to make a web browser in Python? [2]
- h) Discuss the Web (HTTP) Servers. [3]
- i) Which database is best for Python programming? [2]
- j) Which is the best ORM for Python? [3]

PART - B

(50 Marks)

- 2.a) What is Python? Explain the history of Python.
 - b) Explain the Standard Type Built-in Functions. [5+5]
- OR**
- 3.a) Discuss Python Objects in detail.
 - b) List and explain the Other Built-in Types. [5+5]
4. Explain the Detecting and Handling of Exceptions. [10]
- OR**
- 5.a) What type of object are SYS modules? Explain.
 - b) Describe the Exceptions and the sys Module. [5+5]
6. Discuss the Thread Module and Threading Module. [10]
- OR**
7. Explain how the global interpreter lock works. [10]

8. Write a Python program that creates a GUI with a textbox, Ok button, and Quit button. On clicking Ok, the text entered in the textbox is to be printed in Python shell; on clicking Quit, the program should terminate. [10]

OR

9. Explain the reusable GUI components with classes. [10]

10.a) Give the differences between database programming and distributed database Programming.

b) How many modules are there in Python? Explain. [5+5]

OR

11. Explain the Object Relational Managers (ORMs). [10]

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Used papers 2023

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

PYTHON PROGRAMMING

(Common to CE, ME, ECE, EIE, MMT)

Time: 3 Hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

- 1.a) Does Python support multiple assignment? Justify your answer.
- b) List the basic style guidelines of Python. [7+8]
- 2.a) Discuss about complex numbers and operators for them.
- b) With the help of a flowchart discuss numeric coercion rules. [8+7]
3. Write a program to append the content of the first file to the second file. Read the file names as command line arguments. [15]
- 4.a) How to handle Zero Division Error? Explain with suitable code.
- b) What is a namespace? Compare it with variable scope, packages. [7+8]
5. Illustrate common regular expression symbols and special characters used in Python for string matching. [15]
- 6.a) How to access threads from Python?
- b) What is reentrant lock object? Discuss its use in a program. [7+8]
7. Write Python script to perform authentication for HTTP client request and explain working of your script. [15]
8. Write a Python program to access the bill details of a customer by accepting customer ID from user. Database table will have customer bill details along with customer ID. [15]

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B. Tech IV Year I Semester Examinations, July/August - 2022****PYTHON PROGRAMMING****(Common to CE, EEE, ME, ECE, EIE, MMT)****Time: 3 Hours****Max.Marks:75****Answer any five questions
All questions carry equal marks**

- 1.a) Describe the important features of Python.
- b) With examples illustrate augmented assignment and multiple assignment operators.[7+8]
- 2.a) How does garbage collector work in Python?
- b) Differentiate between lists and tuples.
- c) How to unify integers and long integers? [5+5+5]
- 3.a) Illustrate the following file methods:
readline, readlines, tell, seek.
- b) Write a program to append the content of first file to second file. Read two file names as command line arguments. [7+8]
- 4.a) How can programmers create their own exception classes in Python? Give example.
- b) What is a python module? Compare with functions.
- c) How do namespaces relate to variable scope? [5+5+5]
- 5.a) Does regular expression pattern enable matching of multiple strings? Justify your answer with illustrations.
- b) Describe the core functions and methods of re module of Python. [8+7]
- 6.a) Differentiate between process and thread. How to access threads from Python?
- b) Write a program to develop a multithreaded application using standard library modules related to threading. [7+8]
- 7.a) Discuss any eight Tk widgets used in GUI programming.
- b) What is a web crawler? Write Python code for a web crawler. [7+8]
- 8.a) Illustrate the use of DB-API module attributes.
- b) Make a comparison of the two well-known Python object relational managers – SQLAlchemy and SQLAlchemy. [7+8]

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