



**B.Tech II Semester Supplementary Examinations, January 2024**  
**PROBLEM SOLVING USING PYTHON**  
(IT)

**Maximum Marks: 60**

Date: 19.01.2024 Duration: 3 hours

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

**Part-A**

All the following questions carry equal marks

(10x1M=10 Marks)

	CO	Bloom
a List the various building blocks of Algorithms.		Tx
b What is the difference between iteration and recursion algorithm?	CO1	L1
c Define if-else statement.	CO1	L1
d What is Function?	CO2	L1
e What is extend() ?	CO2	L1
f Write the syntax of while loop.	CO3	L1
g Define Concatenation().	CO3	L1
h Define Array.	CO4	L1
i Define slicing of data from file.	CO4	L1
j How to import a module in Python	CO5	L1

**Part-B**

Answer All the following questions.

(5X10M=50Marks)

- 2 Write algorithm, pseudo code and flow chart for finding the biggest of n given numbers. (10) CO1  
L3

OR

- 3 Explain the logic of finding factorial of given number using the Iteration and Recursion methods. (10) CO1  
L3
- 4 List some features of Python. Briefly explain the input and output functions used in python. (10) CO2  
L2

OR

- 5 Define operator. Discuss about the arithmetic, assignment, comparison and bitwise operators with examples. (10) CO2  
L2
- 6 Explain the Python String Operators with Example. (10) CO3  
L2

OR

- 7 Write short notes on (2X5=10)  
 (i) Function Call  
 (ii) Formal and Actual arguments  
 (iii) Positional arguments  
 (iv) Recursive functions  
 (v) Powerful Lambda function
- 8 Define Tuple and explain its methods with an example? (10)  
 CO4 L3
- 9 A. Explain the concept of Lists, Tuples, dictionaries, set. (5)  
 B. How the other list methods index(), insert(), remove(), pop(), reverse() are implemented. (5)  
 CO4 L3
- 10 A. Explain in detail on File Handling. (6)  
 B. Explain the concept "append" and "write" with example. (4)  
 OR  
 CO5 L2
- 11 A. Explain briefly any one of the Python Modules. (7)  
 B. Draw a line in a diagram from position(0,0) to position(6,250) (3)  
 CO5 L3