



## B.Tech II Semester Regular/Supplementary Examinations, June 2024

### PROBLEM SOLVING USING PYTHON (INFORMATION TECHNOLOGY)

**Maximum Marks: 60**

Date: 24.06.2024 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 Tx
1.	a	Write any two advantages of flowchart?	CO1	L1
	b	Define Algorithm and write the characteristics.	CO1	L1
	c	What is python interpreter?	CO2	L1
	d	Define variable?	CO2	L1
	e	What is meant by conditional If?	CO3	L1
	f	Write the syntax of do-while loop in python.	CO3	L1
	g	Define dictionaries in Python?	CO4	L1
	h	How lists are updated in Python?	CO4	L2
	i	How to open a new file in Python?	CO5	L2
	j	Define an exception?	CO5	L1

#### Part-B

Answer All the following questions.		(5X10M=50 Marks)		
2	A.	What is pseudo code? Explain its guidelines and benefits. [5]	CO1	L2
	B.	Draw the flow chart for factorial number of n. [5]	CO1	L4
OR				
3	A.	Explain building blocks of an Algorithm. [5]	CO1	L2
	B.	Write the algorithm to find whether a number is prime or not. [5]	CO1	L3
4	A.	Illustrate interpreter and interactive mode in python with example. [5]	CO2	L4
	B.	Write the python program to find whether a given number is Armstrong number or not. [5]	CO2	L3
OR				
5	A.	Discuss about the types of operators in python. [5]	CO2	L6
	B.	Write the python program to convert Celsius to Fahrenheit. [5]	CO2	L3

6	A. What is String? How do you create a string in Python? [5] B. Define function and explain different types of functional arguments. [5]	CO3 CO3	L2 L2
	OR		
7	A. Explain about the conditional statements in python. [5] B. Classify Linear search with examples. [5]	CO3 CO3	L2 L4
8	A. Explain dictionary and its operations. [5] B. Write about the comparisons between Lists and Tuples? [5]	CO4 CO4	L4 L2
	OR		
9	Write a program on selection sort and merge sort with examples. [10]	CO4	L2
10	A. List out the modules in Python? [5] B. Define error and explain exceptional handling mechanism. [5]	CO5 CO5	L4 L2
	OR		
11	Explain in detail about Python Files & its types, functions and operations that can be performed on files with examples. [10]	CO5	L2