

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2021-COURSE)
B. Tech. Sem - II Electronic & Communication : WINTER- 2022
SUBJECT : PYTHON PROGRAMMING

Day : Wednesday

Time : 10:00 AM-01:00 PM

Date : 30-11-2022

W-24092-2022

Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Draw neat diagram **WHEREVER** necessary.

Q.1 Define Python and Explain the different types of data types of Python each with an example. (10)

OR

Q.1 Explain Relational operators, Bitwise operators, Logical operators, List and Tuple. (10)

Q.2 Explain following control-loop with an example (10)

- i) if-else
- ii) if-else-else
- iii) while

OR

Q.2 Write a Python program to perform arithmetic and relational operations (10)
(+, -, /, //, *, **, %, >, <, >=, <=).

Q.3 What is meant by Exception? Explain different types of Exception with their Hierarchy Diagram. (10)

OR

Q.3 Define Exception Handling-TRY, CATCH, FINALLY, Raising an Exception., User-Defined Exceptions. (10)

Q.4 Explain Class, Object, Abstraction, Inheritance and Encapsulation. (10)

OR

Q.4 What is meant by Object Oriented Programming? Explain in detail Object Oriented Analysis and Design. (10)

Q.5 What are the different types of threads in python? Explain the difference between i) Kernel Threads and ii) User Space with its advantages and disadvantages. (10)

OR

Q.5 Explain in detail the Life Cycle of a Thread with Threading Modules, Forking and Synchronizing Threads. (10)

Q.6 What is NumPy? Explain the different features of NumPy. (10)

OR

Q.6 Explain in detail Sharing Data using Sockets. Also state different applications of Python. (10)
