

MASTER OF COMPUTER APPLICATIONS (CBCS - 2020 COURSE)

M.C.A. Sem-II : WINTER- 2022

SUBJECT : DATA STRUCTURES USING PYTHON

Day : Saturday

Time : 02:00 PM-05:00 PM

Date : 3/12/2022

W-22731-2022

Max. Marks : 60

N.B.:

- 1) **Q. No. 4 is COMPULSORY.**
- 2) Attempt any **TWO** questions from **Q. No. 1, 2 and 3.**
- 3) Attempt any **TWO** questions from **Q. No. 5, 6 and 7.**
- 4) Figures to the right indicate **FULL** marks.
- 5) Answer to both the sections should be written in **SAME** answer book.
- 6) Draw neat labelled diagrams **WHEREVER** necessary.

SECTION-I

- Q.1** a) Explain if –else statement with example. (06)
b) Explain def with example. (06)
- Q.2** a) Explain Dictionaries with example. (06)
b) Explain Exception Handling. (06)
- Q.3** a) What is ADT? Give examples. (06)
b) Explain different applications of Linked List. (06)
- Q.4** Write short notes on any **THREE** of the following: (12)
a) In - order Tree traversal
b) Arrays
c) Big- Oh notation
d) Arithmetic Operators
e) Python

SECTION -II

- Q.5** Write a program in Python to search 79 value from a given list using Binary Search technique. (12)
11, 55, 67, 78, 79, 83, 90, 92, 95, 99.
- Q.6** a) Explain Stack as an ADT. (06)
b) Explain different Data Types in Python. (06)
- Q.7** a) Explain different variable scopes with example. (06)
b) Explain Binary Search Tree. (06)

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