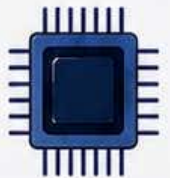
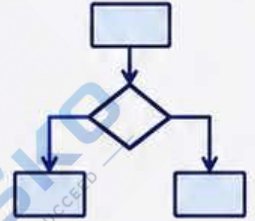


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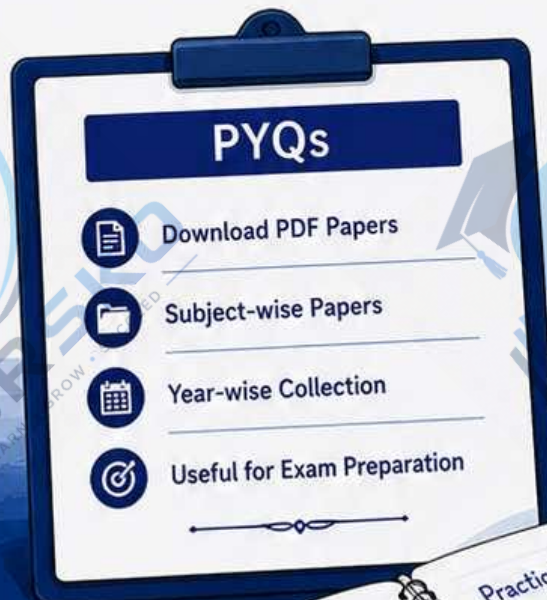
PYQs

(Previous Year Questions)

Access and practice previous year
university question papers.



10110
01001
10101



B.Sc. (Part-II) Third Semester (NEP) Summer 2026
**DSC-III(T) Major 204 - Computer Science (112204) / Computer Application
(Regular / Vocational) (109204 / 110204) / Data Analytics (134204) / Data Science
and Analysis (135204) / Information Technology (123204) - Data Structure
Technology - Data Structure**

P. Pages : 2

Time : Two Hours



* 1 8 8 6 *

AJ - 4880

Max. Marks : 30

- Notes :
1. Question No. 1 is compulsory.
 2. Draw well labeled diagrams whenever necessary.
 3. Students may use various colors to signify answers.

1. Write answers in one or two lines: Solve any six.

1x6
=6

- i) What is Complete Binary Tree?
- ii) What is Liners searching?
- iii) Define an Array?
- iv) What are the examples of Stack?
- v) What is a Circular Queue?
- vi) What is a node in a Linked List?
- vii) What is Binary Search Tree?
- vii) What is Insertion?

Answers in short any two of the following.

- A) Differentiate between primitive and non-primitive data structures.
- B) What is memory representation of an array?
- C) List any three basic operations on data structures and explain.
- D) Explain linear and non-linear data structures with examples.

Explain in detail any one of the following.

- A) Describe the PUSH and POP operations with an example.
- B) Define a queue. Explain circular queue with example.

4. Answers in short **any two** of the following.

- | | | |
|----|--|---|
| A) | Define a linked list and explain any one types. With example. | 3 |
| B) | Explain the memory representation of a linked list with a example. | 3 |
| C) | Define a tree. Explain the three key terminologies used in trees. | 3 |
| D) | Define and explain Inorder, Preorder, and Postorder Traversals. | 3 |

5. Explain in detail **any one** of the following.

- | | | |
|----|--|---|
| A) | What is Binary Search? Explain Binary Search algorithms with suitable example. | 6 |
| B) | What is sorting? Explain quick sort with algorithm and suitable example. | 6 |

