

16/07/2021  
III Semester

CBCS-OLD R16

BSC/351/21J/ET

FACULTY OF SCIENCES  
B.Sc (II YEAR) III Sem (CBCS-OLD R 16) EXAMINATION (BLG), JUL (M) 2021  
COMPUTER SCIENCE 3  
PAPER- DSC-3  
DATA STRUCTURES WITH JAVA

Time: 2 hours]

[Max.Marks:80

Answer any Four of the following (4 x 20=80 Marks)

- 1 Discuss in detail the data types used in JAVA. Write about variables.
- 2 Explain the principles of Object Oriented Programming. Write about StringBuffer Class.
- 3 What is Linear Data Structure? How to implement with arrays? Write applications of Stack.
- 4 Explain Arithmetic Expressions. How to convert from one notation to another using Stack? Explain.
- 5 What is Recursion? Explain with factorial of a number.
- 6 What is List? Explain Circular Linked List ADT. How it different from Linear list.
- 7 What is Graph? Explain Graph Traversal Techniques.
- 8 What is Sorting? Explain Insertion Sort and Merge Sort.