



11428(New)

B.Sc. IV Semester Degree Examination, April/May- 2019

COMPUTER SCIENCE
DATA STRUCTURES USING 'C'

PAPER - BSC 404 CS

(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

All sections are compulsory.

Section- A

I. Answer any **Ten** of the following questions.

(10×2=20)

1. Define data structure.
2. Name the various operations that can be performed on data structure.
3. Mention the classification of data structure.
4. How to access the address of a variable in pointer?
5. What is Malloc () and Calloc ()?
6. What do you mean by Stack?
7. Name the operations on Stack and write any one algorithm.
8. Write the prefix expression.
9. What do you mean by deck?
10. What is linked list?
11. Define tree.
12. Name different types of sortings.



Section - B

(6/5=30)

II. Answer any Six of the following questions.

1. Write a note on Pointer.
2. Briefly explain the Static and dynamic memory allocation.
3. Explain Array representation of Stack.
4. Explain any one queue operation.
5. Write a note on Basic terms in tree.
6. Explain searching.
7. Explain Bubble sorting.
8. Write a 'C' program to Reverse a given Array of N elements.

Section - C

(3×10=30)

III. Answer any Three of the following questions.

1. Explain circular Queue.
 2. Explain any one application of Stack.
 3. Explain operations on single linked list in brief.
 4. Write a 'C' program for multiplication of two, 2 - d matrices.
 5. Explain Merge sorting.
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