

S.D.E.

B.C.A. (2004 COURSE SEM- II : SUMMER - 2018

SUBJECT: C PROGRAMMING & DATA STRUCTURES

Day: **Friday**

Time: **10.00 AM TO 1.00 PM**

Date: **01/06/2018**

S-2018-4346

Max Marks: 80

N.B:

- 1) Attempt any **FIVE** questions from Section-I. Each carries **10** marks.
 - 2) Attempt any **TWO** questions from Section-II. Each carries **15** marks.
 - 3) Answer to both the sections should be written in the **SEPARATE** answer books.
-

SECTION-I

- Q.1** a) Describe working of pointer variable with suitable examples. (10)
b) Explain various formatted input- output functions available in C.
- Q.2** a) What is ADT? Explain importance of ADT. (10)
b) Explain various character string handling functions.
- Q.3** Explain various storage classes available in C. (10)
- Q.4** Differentiate between: (10)
a) Structure and Union
b) DFS and BFS.
- Q.5** What is queue? Explain various applications of queue. (10)
- Q.6** Write a program to perform add and display operations on linked list. (10)
- Q.7** Write short notes on any **TWO** of the following: (10)
a) Union
b) Dynamic memory management
c) File handling

SECTION-II

- Q.8** Write a C program to perform PUSH & POP operation on stack. (15)
- Q.9** Write a program using recursion to print factorial of given number. (15)
- Q.10** Write a program using array of structures to store record of employee. (15)
Assume suitable data structure.

* * *