

DE-226

14

DISTANCE EDUCATION

B.Sc. (Computer Science) DEGREE EXAMINATION,
DECEMBER 2014

DATA STRUCTURES USING 'C'

(2007 onwards)

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

(5 × 20 = 100)

1. (a) Explain the various operators available in 'C' with example. (10)
- (b) What are the various control statements? Explain. (10)
2. (a) Define Function. Explain the concept of passing arguments to a function. (10)
- (b) Briefly explain the various string functions in 'C'. (10)
3. (a) What is Preprocessor? Explain the various preprocessor statements with example. (10)
- (b) Explain the various library functions available in 'C'. (10)
4. (a) Define Pointer. Explain dynamic memory allocation with example. (10)
- (b) Explain array of pointers with example. (10)
5. (a) Write a 'C' program for creating student file. (10)
- (b) Explain the differences between union and structure. (10)

6. (a) Define linked list. How to insert item in a singly linked list? Explain. (10)
(b) Explain the applications of tree. (10)
7. (a) Explain the evaluation of expression with stack. (10)
(b) Explain the procedure for deleting a data item in a stack. (10)
8. (a) Define Array. Write a 'C' program for multiplying two matrices. (10)
(b) What is Recursion? Explain with an example. (10)

