

Roll No.....

Total Pages : 3
1889

BCA/M-17
ADVANCED PROGRAMMING IN 'C'
Paper: BCA-121

Time: Three Hours

Maximum Marks: 80

Note: Attempt five questions in all, selecting one question from each Unit. Q. No.1 is compulsory. All questions carry equal marks.

Compulsory Question

1. Explain the following:

- (a) Function is lower() and to lower()
- (b) Calloc()
- (c) Puts()
- (d) Union of structures
- (e) Enumerated data type
- (f) Pointer arithmetic
- (g) #define directive
- (h) Command line arguments.

Unit-I

- 2. (a) Write a program to sort the list of names of employees in alphabetic order.
- (b) What is the difference between a string and character array? Explain with examples.
- 3. (a) Differentiate between structure and union.
- (b) Define structure and also write rules for declaring and accessing the structure with an example.

Unit-II

- 4. What is a pointer? How would you declare and initialize a pointer variable? Write a simple program to show usage of pointer.
- 5. (a) What do you mean by pointer to pointer? Explain it with the help of example.
- (b) Explain the concept of dynamic memory management using pointer.

Unit-III

6. (a) What is a file? Explain various operations performed on a file.
(b) How will you open a file? What are various file opening modes?
7. (a) What are various errors that may occur during I/O operations on a file? How will you handle them?
(b) What are the functions performed by fseek() and ftell() function?

Unit-IV

8. (a) What is a macro and how will you define it? What are the advantages of using a macro? Explain with suitable example.
(b) Explain the use #error, #ifdef, #ifndef and #include with some suitable examples.
9. (a) What is Recursion? Illustrate it with suitable example.
(b) Explain the usage of command line arguments with the help of a program.