

BCA/M-16
ADVANCED PROGRAMMING-C
PAPER-BCA-121

Time Allowed: 3 Hours

Maximum Marks: 80

Note: Attempt five questions in all. Question No. 1 is compulsory. All questions carry equal marks.

1. Compulsory Question

1. (a) Differentiate between structure and union
- (b) Briefly explain enumerated type data.
- (c) How is pointer to pointer declared? Give example.
- (d) How members of structure are referenced using pointer?
- (e) What is difference between text file and binary file?
- (f) What are command line arguments?

Unit-I

2. Explain the functions available for manipulating strings. Give examples.
3. (a) How is the structure declared? How structure type variables are created and assignment is made to members of the structure?
- (b) Write a program in C to find total salary of employee using structure.
Take structure members as Employee-no, name, Basic pay
Total salary=basic pay+DA+HRA
DA=107% of Basic pay
HRA=10% OF Basic pay

Unit-II

4. (a) How is the pointer declared? How address is stored in pointer variable and pointer is dereferenced?
- (b) Write a program in C to interchange the value of two variables by passing address of variables to pointer variables in function.
5. (a) How is one dimensional array is referenced using pointers? Give example.
- (b) Write a program to sum the elements of Linear array in which elements are referenced by pointer.

Unit-III

6. (a) How is the file pointer declared? How file is opened and closed using file pointer?
(b) Explain the different modes of accessing the file.
7. (a) Explain the functions available for reading and writing character by character from the file.
(b) Write a C program to count the number of words in a file.

Unit-IV

8. (a) Explain the purpose of Preprocessor.
(b) What is Macro? Explain simple macro, Parametrized macro and Nested macro giving example.
9. What are the directives used for conditional compilation? Explain giving examples.