2nd Sem.

Roll No. ..... Total Pages : 03

BCA/M-23 1864

ADVANCED PROGRAMMING IN C

BCA-121

Time : Three Hours] [Maximum Marks : 80

Note : Q. No. **1** is compulsory. In addition Q. No. **1**, attempt *four* more questions, selecting *one* question from each Unit. All questions carry equal marks.

1. Explain the following with example : **4×4=16**

(a) Structure

(b) Union

(c) Preprocessor

(d) malloc() and calloc().

Unit I

2. Explain standard library functions to handle strings in C with suitable examples. **16**

3. Explain the following with suitable example : **4×4=16**

(a) Structure within structures

(b) Typedef

(c) Enumeration

(d) Union of Structures.

Unit II

4. What is pointer ? How would you declare and initia a pointer variable ? Explain the concept of pointer pointer with suitable example.

5. (a) Differentiate between pointer to an array and arra of pointers with example.

(b) What do you mean by static and dynamic memory allocation in C ? Explain with example. 8

Unit III

6. Explain the following functions in C using suitable examples : **4×4=16**

(a) Fseek()

(b) fgets()

(c) rewind()

(d) ftell()

7. What are different file opening modes in C ? Write a program in C that merges the contents of two files and write result into a new file.

Unit IV

8. Explain the following using suitable example in C : 4×4=16

   (a) #error

   (b) #ifdef

   (c) #undef

   (d) #define

9. (a) Differentiate between macro and functions with example. 8

   (b) Explain command line arguments with example. 8