

Seat No. : _____

XO-104

April-2013

BCA, Sem. II

(CC-108) ADVANCED 'C' PROGRAMMING

Time : 3 Hours]

[Max. Marks : 70

- Instructions :** (1) All questions are compulsory.
(2) Figures to the right indicate full marks.
(3) Begin new question on new page.
(4) Draw figures whenever needed.

1. (A) What is user defined function ? How can we define function ? **6**

OR

What is call-by-reference ? What is the need of it ? Show it with an example.

(B) What is Recursion ? Explain it with an example. **4**

OR

Write a short note on "Life time of variable".

(C) Show the use of 'Return' statement. **4**

OR

Explain 'Register' Storage Class.

2. (A) What is Pointer ? How pointer works with an array ? **6**

OR

What is structure ? How can we initialize structure by using pointer ?

(B) What is Union ? How it differs from the structure ? **4**

OR

Show the use of 'Void' pointer.

(C) Can function return multiple values ? If we want to return multiple values from the function, what we have to do ? **4**

OR

What is nesting of the structure ? Show with an example.

3. (A) Show the use of following dynamic memory allocation functions. 6
- (1) calloc()
 - (2) free()
 - (3) malloc()

OR

Explain the concept of the Link List. Draw and explain circular linked list.

- (B) Explain the difference between Singly and Doubly linked lists with an example. 4

OR

What is Dynamic memory allocation ? How it differs from the Static memory allocation ?

- (C) Write a function to insert the value at the end of the link list. 4

OR

Write a function to delete the value from the link list.

4. (A) Explain fseek(), ftell() and ferror() functions with example. 6

OR

Explain command line argument and feof() function with example.

- (B) List Pre-Processor directives and explain any two of them. 4

OR

Explain how to define macro and conditional definition of macro with example.

- (C) Give difference between text mode and binary mode of opening file with example. 4

OR

Explain fprintf() and rewind() function with example.

5. Answer the following multiple choice questions : 14

(1) Pointer is _____.

- (a) Derived data type
- (b) Primitive data type
- (c) Both (A) and (B)
- (d) None of the above

(2) _____ function is used to write integer values in the file.

- (a) putc()
- (b) putw()
- (c) getw()
- (d) putint()

