



KY-1401

Seat No. _____

B. C. A. (Sem. II) Examination

April/May – 2013

BCA-201 : Advance Programming

Language 'C'

(New Course)

Time : 3 Hours]

[Total Marks : 70

1 (a) Do as directed : 4

- (i) A variable declared inside a function is called _____.
- (ii) By default _____ is the return type of a C function_____.
- (iii) C function can return only one value under their function name (T/F)
- (iv) Find errors if any in the following function definition

```
void abc (int a, int b)
{
    int C;
    .....
    return (C);
}
```

(b) Answer the following questions : (any two) 8

- (i) What is Recursion ? Explain recursion in detail with example.
- (ii) Describe list of different category of UDF and explain any two category in detail with example.

- (iii) Discuss about the following :
 - (a) Static variable
 - (b) External variable
 - (c) User define function
 - (d) Register variable

- 2** (a) Do as directed : **4**
- (i) The name of structure is referred to as _____
 - (ii) The tag name of a structure is optional. (T/F)
 - (iii) What is the difference between Array and structure ?
 - (iv) The keyword typeset is used to define a new data type. (T/F)
- (b) Answer the following question : (any two) **8**
- (i) How does a structure differ from an union.
 - (ii) Explain the structure within structure in detail.
 - (iii) Describe arrays within structures in detail.
- 3** (a) Do as directed : **1**
- (i) A pointer variable contains as it's value the _____ of another variable. **2**
 - (ii) What is the output of the following code ? _____
- ```
int m [2];
int *p = m;
m[0] = 100;
m [1] = 200;
printf ("%d %d", ++*p, *p)
```

- (iii) An integer can be added to a pointer. 1  
(T/F)
- (b) Answer the following question : (any two) 8
  - (i) What is pointer ? Give the advantages of pointer.
  - (ii) Describe the pointer and arrays in detail.
  - (iii) Describe the pointer and structure with appropriate example.
  
- 4 (a) State the purpose of following questions : 4
  - (i) getw() and putw ()
  - (ii) malloc and calloc
  - (iii) fprintf ()
  - (iv) fscanf ()
- (b) Answer the following questions : (any two) 8
  - (i) Explain fseek (), ftell () and rewind () in detail.
  - (ii) Write a short note on command line argument.
  - (iii) What is preprocessor ? Explain macro substitution.
  
- 5 (a) Attempt any two : 10
  - (i) Write a C program to find factorial of accepted number using recursion.
  - (ii) Write a C program to swap values of two integers using user defined function.
  - (iii) Write a C program to design structure type struct personal that would contains person name, data of joining and salary using this structure to read this information of 5 people and print the same on screen.

(b) Attempt any two :

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- (i) Write a program using pointer to determine the length of a character string.
  - (ii) Write a C program to read data from keyboard, write it to a file called input and display data of input file on the screen.
  - (iii) Write a program to work as a dos copy con command using command line argument.
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