

Seat No. : _____

XV-106

Five Years M.Sc. (CA & IT) Integrated (K.S.)
2nd Sem. F.Y. M.Sc.
April-2013

ACP (Advanced 'C' Programming)

Time : 3 Hours]

[Max. Marks : 100

1. (A) Explain any **three** : 15
- (1) Explain string Handling function with example.
 - (2) List all category of function and explain any two with example.
 - (3) Write a function if number is prime then return I else return zero.
 - (4) Write a program to delete all the vowels from the string.
- (B) Attempt any **five** : 5
- (1) Specify the output

```
printf ("%d", strcmp ("push", "pop"));
```
 - (2) What is static variable ?
 - (3) Functions returns _____ value of default.
 - (4) To use the function atol in a program we must include the Header file _____.
 - (5) What will be the output of the following :

```
X = 'A' - 5;
```
 - (6) Specify the output.

```
char name [25] = "ksschool of business";  
printf ("% -20.8s", name);
```
2. (A) Explain any **three** : 18
- (1) Explain the concept of structure with code.
 - (2) Explain structures within structures.
 - (3) Define a structure that can describe a Hotel. It should have members that include the name, address, grade, average charge and number of rooms.
Write functions to perform the following :
*) To print hotels with room charges less than a given value.
 - (4) Define Arrays of structures.
- (B) Give the difference between structure and union with code. 2
3. Attempt any **five** : 20
- (1) Write a function using pointer to concate two string.
 - (2) Define pointer. Explain how Integer array is assign to the pointer.

- (3) Give the difference between call by value and call by reference with example.
- (4) What is the value of the following :

```
int X=10, Y=10; int *P1=&x, %P2 = & y;
```

 (a) (%P1)++
 (b) -- (%P2)
 (c) %P1 + (%P2) --
 (d) ++ (%P2) – % P1
- (5) Give the output of the following :

```
int a=12, b=4; int %P1, %P2;
P1 = &a;
P2 = &b;
X = % P1 & %P2 –6;
Y = 4% – %P2/%P1 + 10;
%P2 = %P2 + 3;
%P1 = %P2 – 5;
```

 What is the value of a, b, P1, P2.
- (6) Write a program to find maximum number from the two number using pointer.

4. (A) Explain any **three** : **18**
- (1) Explain getw() and putw() function with example.
 - (2) Explain ftell() and fseek() function with example.
 - (3) Write a program to read the Data from the files then write all the ‘odd’ number to a file “odd.txt” and write all even number to a file “even.txt”.
 - (4) Write a program that append the data to the file test.txt using command line argument.
- (B) Define argC and argV. **2**
5. (A) Explain any **one** : **6**
- (1) Write a program to create and display link list.
 - (2) Explain implementation of link list.
- (B) Define the following : **14**
- (1) What is Dynamic memory allocation.
 - (2) Define Malloc.
 - (3) Give the difference between Array & Structure.
 - (4) List out different link list.
 - (5) Explain free() and realloc() function.
 - (6) What is Stack and Heap.
 - (7) Give the idea how new node is insert in the singly link list.