Question # 1 Revisit

Which standard library function will you use to find the last occurrence of a character in a string in C?

[1 Marks]

Question # 2 Revisit

Write a program in C that take two strings from the user and then checked whether both are same or not.

[2 marks]

Question # 3 Revisit

Write a malloc() function expression to initialize the float array of size 100 elements.
[1 marks]

Question # 4

Revisit ×

What is the output of the following program?

```
#include <stdio.h>
void main()
{
char* arr[3];
int i;
arr[0] = "This is";
arr[1] = "the new";
arr[2] = "message";
for (i = 0; i < 3; i++)
printf("%c", *arr[i]);
}
```

[1 Marks]

Question # 5 Revisit

What is the output of the following program?

```c
#include <stdio.h>
struct course
{
int courseno;
char coursename[25];
};
int main()
{
struct course c[] = { {102, "Java"},
{103, "PHP"},
{104, "DotNet"}
};
printf("%d ", c[1].courseno);
printf("%s\n", (*(c+2)).coursename);
return 0;
}
```

[2 Marks]

Question # 6

Revisit ×

What is the output of following program?

```
#include <stdio.h>
int main()
{
char str[] = "HelloDear";
printf("%s %s %s\n", &str[5], &5[str], str+5);
printf("%c %c %c\n", *(str+6), str[6], 6[str]);
return 0;
}
```

[2 Marks]

Question # 7 Revisit

Write C statement to do the following:

A.Declare a struct called courseRec with four components: (i) a string containing the subject code, exactly 5 characters, e.g., IT105, (ii) a string containing the subject title, max 30 characters, e.g., Introduction to Programming, (iii) a int containing the subject credit, e.g., 4, and (iv) an int containing the no of students enrolled, e.g., 380

B. Declare a variable SUBJ01 of the struct type as declared in (A) and take input from user using scanf() function.

C. Print out the components of SUBJ01, as shown in the example below

TITLE: Introduction to Programming

CODE: IT105

CREDIT: 4

NO. of Students: 347

[5 Marks]

Question # 8

Revisit ×

What is the output of following program?

```
#include <stdio.h>
int main()
{
int a='5';
char b=5;
printf("%c, %d",a+1,b+1);
return 0;
}
```

[1 Marks]

Question # 9

Revisit ×

What is the output of following program?

```
#include <stdio.h>

int counter_0();
int counter_1();
int counter_2();

int var0 = 0;

int main()
{
        for (int i=0; i<3 ; ++i)
        {
        printf("%d,  %d,  %d\n",  counter_0(),
        counter_1(), counter_2());
         }
return 0;
}
```

```
int counter_0()
{
   return ++var0;
}

int counter_1()
{
   int var1=0;
   return ++var1;
}

int counter_2()
{
   static int var2=0;
   return ++var2;
}
```

[2 Marks]

Question # 10 Revisit

Write a C program as per following instruction

A.Define array in main(), int Arr[]={1,3,4,5,6,8,9,11,12,13,16,18}

B. Define a one integer variable X that take value from the user

C. Create a function let's say SearchArray(). If X is present in Arr, then function will return the index of X in the Arr; if X in not present in Arr then function will return -1.

[4 marks]

Question # 10 Revisit

Write a C program as per following instruction

A.Define array in main(), int Arr[]={1,3,4,5,6,8,9,11,12,13,16,18}

B. Define a one integer variable X that take value from the user

C. Create a function let's say SearchArray(). If X is present in Arr, then function will return the index of X in the Arr; if X in not present in Arr then function will return -1.

[4 marks]

Question # 11

Revisit

True and false based question
char CC[10];
A. The array CC have 11 elements.
B. CC[5] is the sixth element of the CC array.
C. Int *ptr ; ptr=CC; then *(ptr+5) is equivalent to CC[5]
D. Int *ptr; ptr=&CC[3]; then *(--ptr) is equivalent to CC[2].
In answer box, write True or False for respective questions.
[2 marks]

Question # 12

Revisit

What is the output of following program?

```
#include <stdio.h>

void swap_A(int , int );
void swap_B(int *,int *);

int main()
{
 int a=5, b=10;
 int c=50, d=100;
 swap_A(a,b);
 printf("%d,%d\n",a,b);
 swap_B(&c,&d);
 printf("%d,%d\n",c,d);
 return 0;
}
```

```
void swap_A(int a, int b)
{
   a=b;
   b=a;
}
void swap_B(int *c,int *d)
{
   *c=*d;
   *d=*c;
}
```

[2 Marks]

Question # 1

Revis

What do you mean by “call by value” and “call by reference” in reference to function?
[2 Marks]

Question # 2

What is ternary operator in C? Give one example.

[1 Marks]

Question # 3

Revisit ×

What is the recursion in reference to function?

[1 Marks]

Question # 4 Revisit

What are the important differences between the array and link list?
[2 Marks]

Question # 5

Revisit ×

Give C expression for using typedef with structure.

[1 Marks]

Question # 6

Revisit

What is the output of the following program?

```
#include <stdio.h>
void fun(int *a, int b)
{
(*a) *= 2; b *= 2;
}
void main()
{
int i[] = { 10,10 };
fun(i, i[1]);
printf("%d,%d", i[0], i[1]);
}
```

[2 Marks]

Question # 8

Revisit

What is the output of following program?

```
#include <stdio.h>
void main()
{
int *ptr, sum, arr[5] = { 1,2,3,4,5};
sum = 0;
for (ptr = arr; ptr <= arr + 4; ptr++)
{
--*ptr;
sum += *ptr;
}
printf("%d", sum);
}
```

[2 Marks]

Question # 9 Revisit

What is the difference between scanf(), sscanf() and fscanf(). Write the expression for each of it.

[2 Marks]

Question # 10

Revisit

What is the output of following program?

```
#include <stdio.h>
void fun(int *p, int *q)
{
p = q;
*p = 2;
}
int i = 0, j = 1;
int main()
{
fun(&i, &j);
printf("%d %d \n", i, j);
getchar();
return 0;
}
```

[1 Marks]

Question # 11 Revisit

What is the output of following program?

```
1 int main()
2 {
3 char *str1 = "India";
4 char *str2 = "Love";
5 char *str3;
6 str3 = strcat(str1, str2);
7 printf("%s %s\n", str3, str1);
8 return 0;
9 }
```

[1 Marks]

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Question # 12 Revisit

True and false based question

A. NULL and '\0' are same.

B. char *a="A" ; printf("*%c",*a); will print *A

C. extern keyword is used along with global variable

D. static variable is not stored at stack memory segment of memory layout

You can be sure that it will not be allocated on stack or heap.

E. malloc() function allocate memory at heap memory segment of memory layout

F. variable with local scope to function reside at stack memory segment of memory layout

In answer box, write **True or False** for respective questions.

[3 marks]

Question # 13

Revisit ×

Write a C expression for main () function that accepting command line argument.
[1 Marks]

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Question # 14

Revisit

What is the output of statement
printf("%05.2f", 6.333333).
[1 Marks]

06.33
*****

Width = 5 *

Question # 15 Revisit ×

True and false based question

A.A linked list is a linear collection of data elements.

B. A pre-processor is executed before the actual compilation of program code begins.

C. it is mandatory to close all files before exiting the program.

D.A nested structure contains another structure as its member

E. The dereference operator is used to select a particular member of a structure.

F. Adding 1 to a pointer variable will make it point 1 byte ahead of the memory location to which it is currently pointing.

G. The calling function must pass parameters to the called function

H. If there are fewer initializers in an initializer list than the number of elements in the array, the remaining elements will contain garbage values

In answer box, write **True or False** for respective questions.

[4 Marks]