The LNM Institute of Information Technology
Quiz-2 –2016 Computer Programming(CP)
Time:30 Minute   **Course Code :   CSE104**   **Max Marks: 15**

Q1. Find the output of the following program segments (Show the workout in the Box given)   [1.5X10]

<table>
<tr>
<td>

(a) #include<stdio.h>
```
int main()
{
   char *p;
   p="hello";
   printf("%c\n", **&*&p);
   return 0;
}
```
</td>
<td></td>
</tr>
<tr>
<td>

(b)   void main()
```
{  int a[5] = {50, 100, 150, 200, 250};
   int i, j, m;
   i = ++a[2];
   j = a[2]+ a[1]++;
   m = a[0]+a[1];
   printf("%d, %d, %d", i, j, m);
 }
```
</td>
<td></td>
</tr>
<tr>
<td>

 (c)
```
void fun(int **ptr)
{
   **ptr=100;
}
void main()
{  int num=50;
   int *pp=&num;
   fun(&pp);
   printf("%d,%d",num,*pp);
  }
```
</td>
<td></td>
</tr>
<tr>
<td>

(d)
```
#include <stdio.h>
 void main()
   {
     char *s= "hello";
     char *p = s;
     printf("%c\t%c", *(p + 3),  s[1]);
   }
```
</td>
<td></td>
</tr>
<tr>
<td>

(e)
```
#include <stdio.h>
int main()
{
   char   *str="IncludeHelp";
   printf("%c\n", *str);
   return 0;
}
```
</td>
<td></td>
</tr>
</table>

(f)
```
int check (int, int);
void main()
{   int c;
    c = check(10, 20);
    printf("c=%d\n", c);
 }
int check(int i, int j)
{
    int *p, *q;
    p=&i;
    q=&j;
    return  i<=45 ? *p : *q;
}
```

(g)
```
#include <stdio.h>
    int main()
    {
        int ary[4] = {1, 2, 3, 4};
        int *p = ary + 3;
        printf("%d\n", p[-2]);
    }
```

(h)
```
    #include <stdio.h>
      void main()
      {
        char *s= "hello";
        char *p = s;
        printf("%c\t%c", 1[p], s[1]);

      }
```

(i)
```
void main()
{
    int fun(int);
    int i = fun(50);
    printf("%d\n", --i);
}
int fun(int i)
{
    return (i--);
}
```

(j)
```
#include<stdio.h>
int main()
{
    int a[] = {1,2,3,4,5};
    printf("%d, %d, %d\n", sizeof(int), sizeof(arr), sizeof(arr[0]));
    return 0;
}
```

Q2. Find errors in given code and give proper justification for same.

(a)
``c
#include<stdio.h>
   void main()
 {
     int c=- -2;
     printf("c=%d",c);
 }
``	

(b)
``c
#include<stdio.h>
 	
      void main()
      {
          i=65;
          printf("%c",i);
      }
``	

(c)
``c
#include<stdio.h>
void main()
{
   int i = 10, j = 20;
    if(i = 5) && if(j = 10)
     printf("Have a nice day");
 }
``	

Q3. Complete the program(given below) to display the following Pattern:

1	2	4	8	16	32
0	1	2	4	8	16
0	0	1	2	4	8
0	0	0	1	2	4
0	0	0	0	1	2
0	0	0	0	0	1

```c
#include <stdio.h>
#include <math.h>
void main()
{
   int i, j;

    for(i = ____  ;  i<= ____    ; i ____  )        // [  1 Mark]
       {
```

```c
    for( j= ____ ; j<= ____ ; j____ )        // [ 1 Mark]
       if( ____ )                            // [  1 Mark]
          printf("1 ");
       else
          if( ____ )                         // [  1 Mark]
             printf("0 ");
          else
             printf("%d ", pow(2, ____ ));    // [  1 Mark]
    printf("\n");                    // pow(2,i) means 2^i
  }

}
```