**RollNo:**

**The LNM Institute of Information Technology**

**Mid Term Exam –2016**

**Computer Programming(CP)**

**B.Tech ECE/CSE/CCE/ME/MME Odd Semester**

**Time:1.5 Hr Course Code : CSE104 Max Marks: 25**

**Q1. Find the output of the following program segments (Show the workout in the Box given) [1X9]**

|  |  |
| --- | --- |
| **(a)**  #include <stdio.h>  void main()  {  int i, j=5,k;  i = j++;  k = i\* ++j;  printf(“%d %d %d”,I,j,k);  } |  |
| **(b)**  #include<stdio.h>  void main()  {  int i=-3, j=2, k=0, m;  m = ++i && ++j && ++k;  printf("%d, %d, %d, %d\n", i, j, k, m);    } |  |
| **(c)** #include <stdio.h>  void main()  { int a = 2, b = 0;  int y = (b == 0) ? a :(a > b) ? (b = 1): a;  printf("%d\n", y);  } |  |
| **(d)**  int main()  {      int x,y=2,z = 1,a;      if ( x = y%2)           z =2;      a=2;      printf("x= %d, y= %d, z = %d", x, y, z);      return 0;  } |  |
| **(e)**  #include <stdio.h>  void main()  {  int i,j,k;  for(i=1;i<=3;i++)  for(j=1;j<=3;j++)  for(k=1;k<=3;k++)  if(i==j &&j!=k)  printf(“%d %d %d”,I,j,k);  } |  |
| **(f)**  # include <stdio.h>  void main()  { int i=0;      for(i=0; i<20; i++)      { switch(i)        { case 0: i+=5;          case 1: i+=2;          case 5: i+=5;          default:    i+=4;         }        printf("%d  ", i)  }  } |  |
| **(g)**  #include <stdio.h>  void main()  { int i=13;  switch(i)  {  default:printf("zero");  case 1: printf("one");  break;  case 2:printf("two");  break;  case 3: printf("three");  break;  }  } |  |
| **(h)**  #include <stdio.h>  void main()  {  int i=10;  i=!i>14;  printf ("i=%d",i);  } |  |
| **(I)**  #include<stdio.h>  void main()  {      int x=1,y=2;      if (--x && --y)           printf ("x=%d  y=%d", x,y);      else           printf ("%d %d", x,y);  } |  |

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

|  |  |
| --- | --- |
| **(a)**  #include<stdio.h>  void main()  {  int c=- -2;  printf("c=%d",c);  } |  |
| **(b)**  **#**include<stdio.h>  void main()  {  i=65;  printf("%c",i);  } |  |
| **(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 |

#include <stdio.h>

#include <math.h>

void main()

{

int i, j;

for(i = \_\_\_\_ ; i<= \_\_\_\_ ; i \_\_\_\_ ) // [ 1 Mark]

{

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 **2i**

}

}