LEADING UNIVERSITY

Course Code: DSP-3214

Course Title: Digital Signal Processing Sessional

DEPARTMENT OF CSE LU 50th BATCH

SUMMER – 2022

SUBMITTED TO:

Mohammad Shoaib Rahman

Lecturer

Computer Science & Engineering,

Leading University

Submitted By:

Emad Ahmed

Id No: 1912020106

Section: 11(C)

Submission Date: 06.12..2022

Problem: y(t) = r(t+3) - r(t+2) - r(t-2) + r(t-3)

Solution:

Code:

```matlab
1  clc
2  clear all
3  close all
4
5  a = -20 : 20;
6
7
8  u1 = (a+3).*((a+3)>=0);
9  u2 = (a+2).*((a+2)>=0);
10 u3 = (a-2).*((a-2)>=0);
11 u4 = (a-3).*((a-3)>=0);
12 ans = u1-u2-u3+u4;
13 |
14
15 subplot(5,1,1);
16 plot(a,u1);
17
18
19 subplot(5,1,2);
20 plot(a,u2);
21
22 subplot(5,1,3);
23 plot(a,u3);
24
25 subplot(5,1,4);
26 plot(a,u4);
27
28 subplot(5,1,5);
29 plot(a,ans);
30 axis([-16 16 -2 2]);
31
```

Output: