**CBA 2018: Assignment II**

**Q4 –**

Z = 38.920 (0,0,5.5,0) using LP relaxation

X1 = 1 X1 = 0

Z = 21.76 (1,0,1.68,0) Same solution

X2 = 0 X2 = 1 X2 = 0 X2 = 1

Z = 14.8 Same Z = 31.96(0,1,4.2,0)

Q5 -- Node 0 Using LP relaxation , Z = 17 and (1,0.5,0.5,.5)

X1 = 0 X1 = 1

Z = 14 (0,1,1,1) -> incumbent solution Z = 17 - Same solution

X2 = 0 X2 = 1 X2 = 0 X2 = 1

(1,0,1,0) Z =17 (1,1,0,0)Z = 12

X3 = 0 X3 = 1

Z= 15(1,0,0,1) Z = 17

(1,0,1,0)

Z = 17 (1,0,1,0) Infeasible Solution

Using LP relaxation – Z = 320 (3.6 , 1.4)

X1 <= 3 X1 >=4

Z= 500 Z = 333.33

(3, 3.5) ( 4, 1.33)

X2<= 1 X2>=2

33 Z= 400 z = 400

(6,1) (4,2)