



**Name:**

**Q1:** The experiment was conducted to study the effect of (4) treatments using CRD. Complete ANOVA table and then compare between treatments using LSD. 0.01.

For information:  $\sum x_{ij}^2=1173$  **F tab. 0.01 = 5.95** **t tab. 0.01= 3.055** (40 marks)

Treatments	r1	r2	r3	r4
t1	9	8	9	10
t2	8	7	7	9
t3	7	5	6	6
t4	9	12	8	13

**Q2:** A study was conducted to compare between (3) types of meat on blood cholesterol, complete ANOVA table.

For information: **TSS==1078.9** **F tab. 0.01 = 8.02**

Types	1	2	3	4	5
Sheep	145	147	151	149	152
Turkey	130	129	133		
Fish	132	131	126	130	

(20 marks)

**Q3\** The experiment was conducted using RCBD to evaluate the effect of four level of probiotic (0,  $10^7$ ,  $10^8$  and  $10^9$  CFU/ kg) on counting of *Lactobacillus* spp. ( $\text{Log}_{10}$  CFU  $\text{mL}^{-1}$ ) of yogurt in one of the Erbil market:

<i>Lactobacillus</i> spp.		
8.1	8.6	8.5
9.1	9.4	8.9
8.9	8.7	8.4
9.4	9.9	9.8

**A)** Complete the ANOVA table?

**B)** Test by Duncan, which of these factors that affect more than other? Discuss the result?

For information: **SS Total = 3.47** **F Tab. 0.05 = 4.76**, **SSR=3.460, 3.586, 3.649** (40 marks)

With my best wishes