 Assignment 3

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Due on 2020-02-19, 23:59 IST.

1) We are testing the effect of a new drug to reduce the body weight of rats with reference to an existing drug using same rats. The differences in reduction in weight with old and new drugs are 2, -3, 6, 8, -5, 4 gms., at p=0.05
   - new drug is better
   - cannot judge
   - new drug is worse
   - both are equal

No, the answer is incorrect.
Score: 0
Accepted Answers:
new drug is better

2) In a clinical trial I a Drug X was tested with placebo and it was found to be better than the placebo with a p<0.05. In clinical trial II a Drug Y was tested with placebo and it was found to be better than the placebo with a p<0.01. Pick the right answer
   - Drug Y is better than drug X
   - We can say with more confidence that drug Y is better than the placebo
   - Drug X is effective 95% of the time and Drug Y is effective 90% of the time
   - Drug X fails in the treatment 5% of the time

No, the answer is incorrect.
Score: 0
Accepted Answers:
We can say with more confidence that drug Y is better than the placebo

3) We are using two FDA approved polymers for drug encapsulation and the results (in mg/gm encapsulated) are given below

<table>
<thead>
<tr>
<th>PCL, PLA</th>
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<tbody>
<tr>
<td>19, 18</td>
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<tr>
<td>19, 17</td>
</tr>
<tr>
<td>20, 19</td>
</tr>
<tr>
<td>22, 19</td>
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<tr>
<td>19, 19</td>
</tr>
</tbody>
</table>

What is the total sum of squares?

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type Range) 14.8,16.0

4) With respect to Q 3, what is the mean total sum of squares?

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 1.66

5) With respect to Q 3, how many degrees of freedom error has?

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 8

6) With respect to Q 3, The results indicate that (at 95%)
   - PLA is better than PCL
   - Both the polymers behave in the same way
   - It is difficult to conclude based on this data
   - PCL is better than PLA

No, the answer is incorrect.
Score: 0
Accepted Answers:
PCL is better than PLA