Unit 7 - Week 6

Assignment 6

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

Due on 2020-03-11, 23:59 IST.

1) In a completely randomized design, a random sample of Salesmen would be assigned to each shop alternatively. However, salesmen are believed to differ substantially in their ability to handle the number of customers. What is the high surge of customers to one salesman might be only moderate or even low surge to another? A study measuring the efficiency of the salesmen resulted in proposals for modification and redesign of the salesmen's work schedule. After consideration of several schedules for the work, three specific alternatives are selected as having the best potential for increasing the efficiency of the salesmen. Check To what extent does the three alternatives differ in terms of their effect on the efficiency of the salesmen? *1 point*

Salesman	Schedule1	Schedule2	Schedule3
1	75	76	78
2	74	74	74
3	70	71	75
4	73	72	77
5	76	73	76
6	73	73	73

After performing one way ANOVA on the above problem we will

- Accept the null hypothesis
- Reject the null hypothesis
- Can't state any conclusion
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
Accept the null hypothesis

2) In a completely randomized design, a random sample of Salesmen would be assigned to each shop alternatively. However, salesmen are believed to differ substantially in their ability to handle the number of customers. What is the high surge of customers to one salesman might be only moderate or even low surge to another? A study measuring the efficiency of the salesmen resulted in proposals for modification and redesign of the salesmen's work schedule. After consideration of several schedules for the work, three specific alternatives are selected as having the best potential for increasing the efficiency of the salesmen. Check To what extent does the three alternatives differ in terms of their effect on the efficiency of the salesmen? *1 point*

Salesman	Schedule1	Schedule2	Schedule3
1	75	76	78
2	74	74	74
3	70	71	75
4	73	72	77
5	76	73	76
6	73	73	73

After performing one way RBD on the above problem we will

- Accept the null hypothesis
- Reject the null hypothesis
- Can't state any conclusion
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
Reject the null hypothesis

3) In a completely randomized design, a random sample of Salesmen would be assigned to each shop alternatively. However, salesmen are believed to differ substantially in their ability to handle the number of customers. What is the high surge of customers to one salesman might be only moderate or even low surge to another? A study measuring the efficiency of the salesmen resulted in proposals for modification and redesign of the salesmen's work schedule. After consideration of several schedules for the work, three specific alternatives are selected as having the best potential for increasing the efficiency of the salesmen. Check To what extent does the three alternatives differ in terms of their effect on the efficiency of the salesmen? *1 point*

Salesman	Schedule1	Schedule2	Schedule3
1	75	76	78
2	74	74	74
3	70	71	75
4	73	72	77
5	76	73	76
6	73	73	73

State true or false:
Statement: There is a difference between Mean Square treatment when the above question is solved with the help of ANOVA and that of when solved with RBD

- True
- False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

4) The value of MSE when problem 1 is solved by ANOVA is: *1 point*

- 1.955
- 9.555
- 6.855
- 3.588

No, the answer is incorrect.
Score: 0
Accepted Answers:
3.588

5) The value of MSE when problem 2 is solved by RBD is: *1 point*

- 1.955
- 9.555
- 6.855
- 3.588

No, the answer is incorrect.
Score: 0
Accepted Answers:
1.955

6) In the following Python code "ols" function is imported from to which module? *1 point*

```
model = ols('value ~ C(blocks)+ C(treatments)', data=data).fit()
anova_table = sm.stats.anova_lm(model, typ=1)
anova_table
```

- scipy
- statsmodels.api
- statsmodels.formula.api
- LinerRegression

No, the answer is incorrect.
Score: 0
Accepted Answers:
statsmodels.formula.api

7) For the given data determine the R2 value *1 point*

Data:

Miles travel	Petrol Consumption in litre
20	1
45	3
56	5
34	2
28	1.6
49	3.7

- 0.887
- 0.956
- 0.945
- 0.932

No, the answer is incorrect.
Score: 0
Accepted Answers:
0.956

8) In question no. 7 we will: *1 point*

- Accept the null hypothesis
- Reject the null hypothesis
- Can't state any conclusion
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
Reject the null hypothesis

9) State True or False *1 point*
Statement: The variance of error, is same for all values of the independent variable

- True
- False

No, the answer is incorrect.
Score: 0
Accepted Answers:
True

10) In Ques7 determine a 95% confidence interval for b1 to test the hypotheses *1 point*

- (0.045, 0.138)
- (0.055, 0.148)
- (0.065, 0.158)
- (0.075, 0.138)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(0.075, 0.138)