Started on	Sunday, July 19, 2020, 8:30 PM
State	Finished
Completed on	Sunday, July 19, 2020, 8:37 PM
Time taken	7 mins 31 secs
Grade	**5.00** out of 6.00 (**83**%)

Information

Resorts & Spas, a magazine devoted to upscale vacations and accommodations, published its Reader's Choice List of the top 20 independent beachfront boutique hotels in the world. The data shown are the scores received by these hotels based on the results from Resorts & Spas' annual Readers' Choice Survey. Each score represents the percentage of respondents who rated a hotel as excellent or very good on one of three criteria (comfort, amenities, and in-house dining). An overall score was also reported and used to rank the hotels. The highest-ranked hotel, the Muri Beach Odyssey, has an overall score of 94.3, the highest component of which is 97.7 for in-house dining. The following DATAFile provides the data.

DATAfile BeachFrontHotels

Using the Excel Multiple Regression model answer the following questions.

Question 1

Incorrect

0.00 points out of 1.00

How much of the variation in the sample values of the overall score does the model explain? (Hint: Remember the statistic that you should use for this. Also, do not remove any variables for this question.)

Select one:

- a. 0.750 ✖
- b. .138
- c. 0.703
- d. 0.005
- e. 0.866

Question 2

Correct

1.00 points out of 1.00

Test whether there is ***multicollinearity***, and if so, which independent variables should be eliminated.

Select one:

- a. There is no multicollinearity. ✔
- b. There is multicollinearity. In-House Dining and Amenities should both be eliminated.
- c. There is multicollinearity. Comfort should be eliminated.
- d. There is multicollinearity. In-House Dining should be eliminated.
- e. There is multicollinearity. Amenities should be eliminated.

Question 3

Correct

1.00 points out of 1.00

Use your regressed equation to predict the overall score given that Amenities is 85, and In-House Dining is 85, assuming that Comfort is removed.

Select one:

- a. 86.71

b. 30.31
c. 68.23
d. 89.18
e. 87.72 ✔

Question 4
Correct
1.00 points out of 1.00

Determine the estimated ***multiple linear regression equation*** that can be used to predict the overall score given the scores for comfort, amenities, and in-house dining based on the original data.

Select one:
a. Overall = 35.697 + 0.109(Comfort) + 0.244(Amenities) + 0.247(In-House Dining) ✔
b. Overall = 40.258 + 0.244(Comfort) + 0.109(Amenities) + 0.888(In-House Dining)
c. Overall = 5.697 + 0.109(Comfort) + 0.444(Amenities) + 0.777(In-House Dining)
d. Overall = .697 + 0.218(Comfort) + 0.355(Amenities) + 0.358(In-House Dining)
e. Overall = 1.157 + 0.558(Trade Price) + 0.637(Speed)

Question 5
Correct
1.00 points out of 1.00

Test whether the regression coefficients are all equal to zero at a 0.01 level of significance using the global test.

Select one:
a. Do not reject null. There is not a relationship.
b. Accept the null. There is not a relationship.
c. Reject the null. There is not a relationship.
d. Accept the null. There is a relationship.
e. Reject the null. There is a relationship. ✔

Question 6
Correct
1.00 points out of 1.00

Test whether each of the regression coefficients should remain in the model. Which independent variable(s) should be removed. Eliminate the appropriate variable(s) and rerun the analysis. What is the multiple regressed equation?

Select one:
a. None of these variables should be removed.
b. Comfort should be removed. The new equation is Overall = 45.146 + 0.253(Amenities) + 0.248(In-House Dining) ✔
c. In-House Dining should be removed. The new equation is Overall = 59.001 + 0.118(Comfort) + 0.226(Amenities)
d. Amenities should be removed. The new equation is Overall = 44.189 + 0.276(Comfort) + 0.209(In-House Dining)

◄ T10 Ch14 Problems Self-Assessment
T10 "One-Shot" DATAFile Problem (1 Attempt) ►