### Assignment 11

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment. Due on 2019-04-17, 23:59 IST.

1) What type of data do you need for a chi-square test?  
   - a) Interval  
   - b) Scale  
   - c) Categorical  
   - d) Ratio  

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
   - c) Categorical

2) Given the 5 rows, 4 columns dimension for the contingency table, how many degrees of freedom will the chi-square statistics have?  
   - a) 12  
   - b) 16  
   - c) 20  
   - d) 6  

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
   - a) 12

3) An advertising firm is trying to determine the demographics for a new product. They have randomly selected 75 people in each of 5 different age groups and introduced the product to them. The result of the survey are given below: Calculate the sample chi-square value.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Purchase Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seldom</td>
<td>12</td>
</tr>
<tr>
<td>Never</td>
<td>15</td>
</tr>
</tbody>
</table>

| a) 32.27  
| b) 40.28

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4) What is the purpose of a goodness of fit test

- a) To analyze probabilities of multinomial distribution trials along a single dimension.
- b) To extract factors from the data
- c) To assess whether there is a significant difference between a collection of categorical data
- d) To identify significant effect

No, the answer is incorrect.
Score: 0
Accepted Answers:
a) To analyze probabilities of multinomial distribution trials along a single dimension.

5) What other name is used for a contingency table?

- a) A cross classification table
- b) An ANOVA table
- c) A histogram
- d) None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
a) A cross classification table

6) Santosh Anand, a hospital administrator, has examined past records from 210 randomly selected 8-hour shifts to determine the frequency with which the hospital treats fractures. The no of days in which zero, one, two, three, four, or five or more patients with broken bones were treated were 25, 55, 65, 35, 20 and 10 respectively. Calculate the sample chi-square value.

- a) 3.95
- b) 3.35
- c) 2.03
- d) 6.57

No, the answer is incorrect.
Score: 0
Accepted Answers:
c) 2.03

7) The chi-square goodness-of-fit test can be used to test for:

- a) significance of sample statistics
- b) difference between population means
- c) normality
- d) probability

No, the answer is incorrect.
Score: 0
Accepted Answers:
c) normality

8) The chi-square test is not very effective if the sample is:

- a) small
- b) large
- c) irregular
- d) heterogeneous

No, the answer is incorrect.
Score: 0
Accepted Answers:
- a) small

9) In a factorial design, an __________ between independent variables indicates that the effect of one independent variable is different at different levels of the other independent variable.

- a) Main effect
- b) Factorial effect
- c) Interaction
- d) Moderation

No, the answer is incorrect.
Score: 0
Accepted Answers:
- c) Interaction

10) Factorial experiments...

- a) Include two or more dependent variable
- b) Include two or more independent variable
- c) Focus on unmeasured factors
- d) Focus on organismic factors

No, the answer is incorrect.
Score: 0
Accepted Answers:
- b) Include two or more independent variable