STATISTICS QUESTIONS

1. The term central tendency refers to
   a) a central statistic
   b) clusters towards the middle
   c) a tendency in a central area
   d) the middle of a dispersion

2. Another name for the bell curve is
   a) normal curve
   b) Z score
   c) standard deviation
   d) looped curve

3. A mean is
   a) a sample
   b) the most frequent number
   c) the average of all values
   d) histogram

4. When a curve has extreme scores on the right hand side of the distribution, it is said to be
   a) an intensity
   b) negatively skewed
   c) positively skewed
   d) a correlation

5. What does variability measure
   a) the amount of difference among observations in a distribution
   b) the amount of distance in a bell curve
   c) the amount of similarity between two observations
   d) the amount of difference between Z scores
6. What information does the standard deviation give you?
   a) it measures the difference between two means
   b) the difference from the mean
   c) the difference between a raw score and a Z score
   d) variability of observations

7. What is a Z score?
   a) a measure of the variability described by a bell curve
   b) the square root of the variance
   c) a way to covert real data in the world into a form that fits on a bell curve
   d) the average of all the values

8. What is a proportion?
   a) the relationship between two variables
   b) the comparison between the mean and the mode
   c) the difference between the Z score and the mode
   d) the area under a bell curve which tells you what percentage of ALL observations fall within that area

9. What is the relationship between two variables within a population?
   a) reliability
   b) proportion
   c) correlation
   d) standard deviation

10. Which statement is NOT true?
    a) a correlation in no way implies that the change in one causes the change in the other
    b) the skew of a distribution refers to how the curve leans
    c) 68% of observations fall within one standard deviation
    d) none of the above
STATISTICS QUESTIONS

1. Of the following, the formula which is used to calculate the arithmetic mean from data grouped in a frequency distribution is
   a) \[ M = \frac{N}{\sum fx} \]
   b) \[ M = N \frac{(fx)}{N} \]
   c) \[ M = \frac{\sum fx}{N} \]
   d) \[ M = \frac{x}{fN} \]

2. Arranging large groups of numbers in frequency distributions
   a) gives a more composite picture of the total group than a random listing
   b) is misleading in most cases
   c) is unnecessary in most instances
   d) presents the data in a form whereby further manipulation of the group is eliminated

3. The value of statistical records in MAINLY dependent upon the
   a) method of presenting the material
   b) number of items used
   c) range of cases sampled
   d) reliability of the information used

4. A set of ordered scores and their corresponding frequencies is called a
   a) frequency distribution
   b) a central tendency
   c) mean
   d) none of the above

5. The mean global temperature for the years that encompass 1970 through 1980 is ________.

6. The mean global temperature for the years that encompass 1980 through 1990 is ________.

7. The mean global temperature for the years that encompass 1990 through 2000 is ________.

8. The median of the below listed numbers is ______.
   24, 38, 39, 40, 42, 50, 55, 70, 80, 90

9. The median of the below listed numbers is ______.
   24, 38, 39, 40, 41, 42, 50, 55, 70, 71, 94

10. The median of the below listed numbers is ______.
    21, 23, 43, 45, 49, 53, 57, 61, 67, 73, 79, 85, 91
11. The mode of the below listed numbers is _____.

2, 2, 2, 2, 5, 5, 5, 5, 5, 7, 7, 7, 7, 7, 9, 9, 9, 9, 9

12. The term bimodal refers to

a) a frequency distribution which has two peaks
b) a histogram which has two peaks
c) a graph which has two separate concentrations
d) all of the above

13. In the formula for the mean, N is referred to as

a) the total number of scores
b) normal curve
c) the sum of the scores
d) the central tendency

14. An essay test was administered to 100 applicants and was then rated in multiples of 5. The results were as follows:

<table>
<thead>
<tr>
<th>score</th>
<th>number of applicants</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>85</td>
<td>10</td>
</tr>
<tr>
<td>80</td>
<td>25</td>
</tr>
<tr>
<td>75</td>
<td>30</td>
</tr>
<tr>
<td>70</td>
<td>15</td>
</tr>
<tr>
<td>65</td>
<td>10</td>
</tr>
</tbody>
</table>

The mean is

a) 75  b) 77  c) 80  d) 82

15. One could chart a frequency distribution by either using a

a) central tendency or a histogram
b) normal curve or a central tendency
c) line graph or a histogram
d) line graph or a normal curve

16. The point on the scale at which the concentration is greatest or that value which occurs the greatest number of times and which might be taken as typical of the entire distribution is called

a) mean
b) median
c) mode
d) bell curve