جامعة أم القرى
قسم العلوم الرياضية

مبادئ الاحصاء والاحتمالات
الاختبار الدورى الأول

التاريخ ١٤٣٩/٣/١٦
مدة الامتحان ساعة ونصف

Answer ALL the following Questions (20 Marks):

اسم الطالب:	رقمه في كشف التوقيع:	رقمه الجامعى:

I. Chose the correct answer(5 Marks)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

1. *The population's standard deviation is symbolized by*
a)SD b)μ **c)σ** d)PS

2. *The population for a survey given to 100 students from the new class at Umm Al-qura University is:*
a) University Students b) Faculty of Science students c)New Class students d)the 100 selected students

3. *A qualitative variable*
a)refers to arranged sample b)Is not numeric c)Has only two possible outcomes d)All of the above are correct

4. *The ordinal scale of measurement*
a)Has a meaningful zero point b)Is based on ranks c)Cannot assume negative values d)All of the above

5. *Which of the following are examples of continuous variables*
a)Birth weight of babies b)Distance between two cities c)Age of the students in a class d)All of the above

6. *The ratio scale of measurement*
a) involves ranking b)Cannot assume negative values c)Has a meaningful zero point d) based on counting

7. *width of the class in a frequency table is based on*
a)the range only b)Number of classes only c)range and number of classes only d)all of the above

8. *Correct examples of parameters are*
a)s and σ **b)μ and σ** **c)μ and s** d)none of the above

9. *The best central tendency measure for nominal data is*
a)mean b)median c)mode d)variance

10. *One of the advantageous of the median is*
a)based on the position b)equal to only one data memberc) not affected by outliers d) the balance of the distribution

11. *Outliers have the greatest effect on the*
a)mean b)mode c)median d)quartiles

12. *The simplest (and least useful) measure of variability is the*
a)variance b)Standard Deviation c)mode d)range

13. *It is possible that a distribution of scores could have more than one:*
a)mode b)variance c)Range d)Lower Quartile

14. *To compute the variance of a sample, the sum of the squared deviations is divided by*
a)N b)n c)n-1 d)N-1

15. *Given the following data set, what is the value of the median? [2, 4, 3, 6, 1, 8, 9, 2, 5, 7]*
a)2 b)4.5 c)4.7 d)10

16. *Given the following set of data, what is the range? [12, 23, 34, 54, 21, 7, 9, 67]*
a)60 b)56 c)58 d)59

17. *In a distribution that is left skewed*
a) mean is larger than the median b)mean is smaller than the median
c)mean is equal to the median d)mean is close to the median

18. *Ogives is used to graphically represent*
a)Frequency Distribution b)Tally Marks c)Relative Frequency Distribution d)Cumulative Frequency Distribution

19. *sturge's rule is used to*
a) width of a class b) upper and lower limits of a class c) number of classes d) frequency for each class

20. *stem and leaf plot is used to*
a)summarize the data b)preserve and reduce the data c)represent the data graphically d)all of the above

II. Determine the correct and false statements (5 Marks)

(1) is the average of the squared deviations from the mean.	
Because it uses every score in a distribution and is easy to interpret, the (2) is the most common measure of variability.	
Statistical Measures based on samples referred to as (3) while Statistical Measures based on populations referred to as (4)	
For the data set 12,7,8,4,9,5,6,4,9,10 the median would be (5)	
If the distribution is skewed, the best central tendency measure is (6)	
If the distribution is symmetric, the best central tendency measure is (7)	
If the mean for 1, 2, 4, 5, 6, 6, 7, 8, 9, 10, 12 and x. is 8.00, then the value of x is equal to (8)	
Ogives is used to represent the (9)	
Pie chart is best used to represent the(10)	

III. Given The following data(10 Marks)

4	8	0	3	2	2	5	0	7	3	3	3	2	4	12
11	6	8	9	6	8	2	9	4	8	13	10	11	4	5
8	6	0	5	3	4	5	6	2	1	11	12	10	0	3

1) Fill in the following table (**use 6 classes**),

class	Tally	Frequency	Relative F	Cumulative F			
Sum							

2) Draw a Histogram to represent the distribution,

3- Compute the mean, Variance, median