Project 1

Learn Unit 1   Chapters 1- 3.2

Directions: Part A : (20pts) Respond on your answer form to each of the following questions 1-10 (2 pts each)

1)	After inspecting all of the of meat stored at the Willy Fry Sausage Company, it was found that 45,000 kg out of a total of 55,000 kg of the meat had spoiled. The 55,000 kg represents which one of the following:	
	A	Statistic
	B	Stratified
	C	Parameter
	D	Random
2)	The average height of all freshmen entering NCC is 68.4 in. Identify the number as either:	
	A	Systematic
	B	Convenience
	C	Continuous
	D	Discrete
3)	What is the most important criteria for a sample to be considered unbiased?	
	A	Size
	B	Inferential
	C	Descriptive
	D	Representable

4)	One interval of a frequency table is determined to be 40 – 59. Find the midpoint for the interval.	
	A	49.0
	B	49.5
	C	48.5
	D	50.5
5	The standard deviation of a distribution is found to be 9. What is the value of the variance?	
	A	3
	B	9
	C	81
	D	12
6)	The total number of phone calls a sales person makes in a month is 413. Identify the number 413 as either:	
	A	Systematic
	B	Convenience
	C	Continuous
	D	Discrete
7)	One interval of a frequency table is determined to be 16-20. Find the Class Boundaries for the interval.	
	A	16 - 20
	B	15.5 – 20.5
	C	16.5 – 20.5
	D	15 - 21
8)	If an income distribution is negatively skewed then, which measure of central tendency would be the largest.	
	A	Mode
	B	Median
	C	Mean
	D	Range

9)	The popular student Romance has attended NCC for three semesters. For each semester Romance calculated the Grade Point Average (GPA). In a summer semester for 4 credits the GPA was 3.8 In a Fall semester for 14 credits the GPA was 3.2 and in a Spring semester for 12 credits the GPA was 3.6 Overall what was Romance's GPA for these semesters.	
	A	3.53
	B	3.60
	C	3.44
	D	3.20
10)	Which measure of central tendency would be used to summarize the wood color preference of 40 people?	
	A	Mode
	B	Median
	C	Mean
	D	Range

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Part B Directions: (10 pts)

Twenty years ago, two questions were asked of 50 community college students in the Northeast. (You DO NOT answer these two questions.)

A)   What is your age?

B)   What is your gender?

The responses for the 50 students are in the Table 1 Female and Table 2 Male below. The numbers 1-25 correspond to female students and 26-50 correspond to male students.

Table 1 Female and Table 2 Male Below

The FEMALE responses to the questions were the following

#F	Age		#F	Age		#F	Age
1	18		11	27		21	26
2	25		12	25		22	21
3	17		13	24		23	19
4	27		14	20		24	18
5	27		15	27		**25**	27
6	18		16	27			
7	22		17	24			
8	22		18	23			
9	25		19	25			
10	21		20	24			

The MALE responses to the questions were the following

#M	Age		# M	Age		#M	Age
26	17		36	24		46	22
27	21		37	20		47	18
28	21		38	19		48	19
29	18		39	27		49	18
30	19		40	17		50	21
31	25		41	18			
32	26		42	19			
33	22		43	17			
34	18		44	21			
35	18		45	20			

Complete the stem and leaf diagram on the Answer form in the given Space. Also answer the following questions 11-15 on the Answer form.

11) What was the Target population of this survey?

12) What is a possible Label for Left Column?

13) What is a possible Label for Right Column?

14) What is a possible Label for middle column?

15) Which Gender appears to be the older group?

Problem C: Questions 16 – 25 (20 pts – 2pts each)

Use the variable of all Ages, (regardless of gender) compute the values for Statistics 16 – 25. (30pts)

Round all answers to 3 decimal places.

16	Mean	17	Median	18	Mode
19	Range	20	Sample Standard Deviation	21	Sample Variance
22	$$\dfrac{\sum x^2 - \frac{\Sigma x}{n}}{}$$	23	$$\dfrac{\sum(x - mean)}{}$$	24	$$\left(\sum x\right)^2$$
25	$$\left(\sum x^2\right)$$				