Business Statistics
DUE DATE: 23 March 2021

Required
Answer the questions below and submit to MOODLE by the deadline provided

1. The following shows the temperature (high, low) and weather conditions in a given Sunday for some selected towns in Namibia. For the weather conditions, the following notations are used: =clear; cl= cloudy; sh=showers; pc=partly cloudy.

City	Hi	Lo	Condition
Helao Nafidi	99	77	pc
Ondangwa	92	78	pc
Maltahohe	77	57	sh
Rundu	72	56	pc
Katima Mulilo	77	58	c
Swakopmund	88	68	cl
Gobabis	78	61	c

   a. How many elements are in these data set
      [2]
   b. How many variables are in this data set   [2]
   c. How many observations are in this data set
      [2]
   d. Name the variables and indicate whether they are qualitative or quantitative
      [3]
   e. What measurement scale is used for each variable
      [1]

                                                Total 10 Marks

2. Summarize the differences among nominal, ordinal, interval and ratio levels of measurement, with an example of each.   [15]

3. Make a frequency distribution of the following values :
52;56;57;64;68;70;71;71;73;77;78;79;81;82;82;82;83;85;87;89;93;94;95;97;98, include classes, frequencies , percent frequency and cumulative frequencies
                                                [20]

4. Consider the following data : 120;
230;110;115;160;130;150;105;105;360;120;120;140;100;115;
   Required: Compute the 90th and 60th percentile and IQR   [10]

5. A bowler's scores for six games were 182; 168;184;190;170;174, using these data as a sample, compute the following descriptive statistics (a) range (b) variance (c) standard deviation (d) coefficient of variation   [15]

6. The following frequency distribution (assume the data represent a sample)

   Class   frequency
   70 - 79   5
   80 – 89   9
   90 – 99   11
   100 -109   9
   110- 119   6
   Required:
   Compute the mean and standard deviation   [15]

7. Use the following data to make several of these types of graphs: Height measurements for a group of people were taken. The results, in inches, are recorded below
   66,68,63,71,68,69,65,70,73,67,62,59,63,68,71,63,63,60,64,66,58

   i)   Construct a DOT PLOT
   ii)   Make a STEM AND LEAF PLOT
   iii)   Make a SPLIT STEM AND LEAF PLOT
   iv)   Create a HISTOGRAM

8. Create a bar graph and pie chart for the following categorical data

EDUCATIONAL LEVEL	NUMBER OF STUDENTS
High School diploma	2
Some college credit, no degree	6
Bachelor's degree	12
Honour's degree	15
Master's degree	8
Doctorate degree	2
TOTAL	45