## Worksheet N°3: (Part I)

Exercise 1: In the following cases define sample, the variable studied and its type:

- 1. In the university of Biskra there are 30 thousand students, we must know the average level of students for this we draw at random only 150 students, and we make questionnaires.
- 2. Car speed (vitesse) (km/h): 60, 80, 60, 120, 100, 120.
- 3. The distribution of 20 bakeries in the city of Biskra according to the price at which they sell the baguette, we know that the total number of bakeries in the city of Biskra is 120.
- 4. Know the colors of the eyes of the 120 students among 1000 students.
- 5. Cholesterol level (mg/l): 2.10, 2.15, 2.10, 2.03, 2.40, 1.38, 1.15, 2.10.

Exercise 2: Given the following series of data on blood groupe analysis for 20 persons:

| $O^+$ |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| $A^+$ | $O^+$ | $O^-$ | $O^+$ | $O^+$ | $O^+$ | $A^+$ | $O^+$ | $A^+$ | $B^-$ |

- 1. Determine the variable studied and its nature.
- 2. Determine the sample size.
- 3. Fill the frequency table.
- 4. Construct the pie Chart (representing data as slices of a circle).

**Exercise 3**: A neighborhood is composed of 50 households, and the number of people per household is calculated each time. The values of the variable are:

| 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 8 | 8 |   |

- 1. Determine the variable, type of variable, modality.
- 2. Construct the table with frequency (calculate relative frequency, lesser than cumulative frequency), more than cumulative frequency.)
- 3. draw the bar charts (Bar diagram).