1)   Grain contains two kinds of kernels – licensed and unlicensed. In a particular population **95%** of all kernels are licensed. A sample of 300 kernels is selected from the population and is found to contain **240** licensed kernels, i.e., **80%** of the kernels in the sample are licensed.

In the above, state whether each boldface number (in order of appearance) is a parameter or a statistic.

a) parameter, statistic, parameter
b) statistic, parameter, statistic
c) statistic, parameter, parameter
d) parameter, statistic, statistic
e) parameter, parameter, parameter

2)Consider the following data

               5 6 8 10 11 11 12   13   16   17   18   21   22 22 23 25 26 27 29 30
Calculate the mean, quartiles, variance and standard deviation.

3)   Using the data in 2 above, break the data into 5 categories.

3a) Construct a bar graph of the data by categories.

3b) Construct a pie chart of the data by categories.