Abstract_ The purpose of this study was to determine the levels of statistical among students of the faculty of science of Al - Imam Muhammad Ibn Saud Islamic University.

To achieve this goal, the test preparation in statistical thinking included 25 questions dealing with four dimensions namely data describing, data organizing and summarizing, data representing by graphs and data analyzing and interpreting.

The findings showed that: there were statistically significant differences between (first group and third group) and (second group and third group) in favor of the third group in statistical thinking levels; also there were low levels of statistical thinking skills for all students.

The researcher recommended with great interest to statistical thinking skills in teaching and learning of statistics, also suggested a set of recommendations such as: introducing educational and training programs for statistics specialists and determining the quality of teaching, assessment, and contents of statistics courses.

Keywords: Statistics learning, statistical thinking, students of Faculty of Sciences, and Al - Imam Muhammad Ibn Saud Islamic University.