Distinguish, differentiate, compare and explain what is the difference between Conventional and Virtual Instrumentation. Comparison and Differences.

## **Difference between Conventional and Virtual Instrumentation**

- 1. Conventional Instrumentation has pre-defined hardware components. Virtual Instrumentation has a user-defined measurement system.
- 2. Conventional Instrumentation has limited functionality due to hardcoded functions. Virtual Instrumentation has versatile functionality using customizable software.
- 3. Conventional Instrumentation has complex and expensive hardware. Virtual Instrumentation has complex hardware functionality implemented in software.
- 4. In conventional instrumentation re-calibration is required. Re-calibration is not required in virtual instrumentation.
- 5. Conventional Instrumentation is bulky and stimulus specific. Virtual Instrumentation is compact and portable.