**a) Name all phases, which are applied during the development and specify (1 2 sentences) the result of each phase As the waterfall model is to restrict, the team of KOA tries to update the process to the V Model.**

Answer:

**Requirement gathering and documentation.**
All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.

**System design.**
The requirement specifications from the first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.

**Implementation**
With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.

**Integration and Testing**
All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.

**Deployment of system**
Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.

**Maintenance**
There are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

b) Name the additional phases of the V Model and argue
the pros
**Test Stage**
**Deployment stage**
**Maintenance stage**
**Advantages of V-model:**
Simple and easy to use.
Testing activities like planning, test designing happens well before coding. ...
Proactive defect tracking – that is defects are found at an early stage.
Avoids the downward flow of the defects.
Works well for small projects where requirements are easily understood