

Q.2 → Define a sequencing problem. What is the significance of utility as a basis of decision making.

Ans → Sequencing problem:- Sequencing is the process of deciding on the job order on some machine or at some work centre. In other words, the arrangement of the task which is necessary to be performed sequentially is job sequencing.

### Terminology and Notations

- ① Number of machine
- ② Processing time
- ③ Processing order
- ④ Idle time on a machine
- ⑤ Total elapsed time

Decision making:- Utility refers to the satisfaction that each choice provides to the decision maker. Utility theory assumes that any decision is made on the basis of the utility maximization principle.