

## Section-3

Ques: Explain time estimates in PERT. Discuss the limitation of operation research.

Ans:  
①

TOPT-

This is the fastest time an activity can be completed. For this, the assumption is made that all the necessary resources are available and all predecessor activities are completed as planned.

## 2) LIKELY -

most of the times, project managers are asked only to submit one estimate. In that case, this is the estimate that goes to the upper management.

## 3) TPSS -

This is the max. time required to complete an activity. In this case, it is assumed that many things go wrong related to the activity. A lot of rework and resources unavailability are assumed when this estimation is derived.

## Limitations of OR

(i) Mathematical models which are essence of OR do not take into account qualitative factors or emotional factors.

(ii) Mathematical models are applicable to only specific categories of problems.

- (iii) Being a new field, there is a resistance from the employees the new proposals.
- (iv) Management may offer a lot of resistance due to conventional thinking.
- (v) OR is meant for men & not than man is meant for it.