

PERT & CPM

PERT

- ❖ P: Project
- ❖ E: Evaluation
- ❖ R: Review
- ❖ T: Technique

CPM

- ❖ C: Critical
- ❖ P: Path
- ❖ M: Method

PERT

- ❖ PERT is one of most important management tool to monitor and control any project.
- ❖ The said technique is also of use in day-to-day life for better time management.

Introduction to PERT

- ❖ Every project / activity involves number of sub-activities/jobs.
- ❖ These sub-activities are interrelated.
- ❖ Hence these sub-activities need to be monitored closely for timely completing the project.
- ❖ e.g. Construction of a building involves number of activities such as:
 - ❖ Plinth
 - ❖ Slab
 - ❖ Walls
 - ❖ Windows & doors
 - ❖ Plastering

- ❖ Piping
- ❖ Electrical
- ❖ Painting
- ❖ Drainage
- ❖ You can observe that some activities are interrelated. i.e. unless the previous job is completed, the next job cannot be undertaken. Plinth & Slab.
- ❖ Once two slabs are ready, brickwork, fitting of windows/ doors can be undertaken.
- ❖ Unless plastering is done, electrical work cannot be undertaken.

Steps involved in PERT

- ❖ List the various sub-activities.
- ❖ Decide the interrelation / dependence of jobs.
- ❖ Work out early completion / late completion chart.
- ❖ Exercise strict control on activities for which float is not available. These are the critical jobs on which timely completion of a project depends.

CPM

- ❖ The jobs on the Critical Path decide the timely completion of the project.
- ❖ Any delay in any of these activities will delay the project.
- ❖ Optimum utilization of resources is possible.