PERT & CPM

Question

Explain clearly the difference between an activity and an event.

Answer

Activity - Activity stands for the time consuming part of a project. It represents a job. Activities are denoted by arrows.

Event - The event (also called node) is either the beginning or end of a job. Events are denoted by circles. Event does not consume time.

When all activities and events in a project are connected logically and sequentially, they form a network.

Question

In what ways does a CPM network differ from Pert network?

Answer

- PERT (Programme Evaluation & Review Technique) is event oriented whereas CPM (Critical Path Method) is activity oriented.
- In CPM based network analysis no allowance is made for the uncertainties in the duration of time involved.
- In CPM, times are related to costs.

Question

Give an example to distinguish between an activity and an event.

Answer

Event Foundation digging started Foundation is being dug Activity Foundation digging completed Event

PERT NETWORK

Question

Define, (i) predecessor event (ii) successor event

Answer

Event or events that immediately come before another event are called predecessor events to that event. Event or events that immediately follow another event are called successor events to that event.

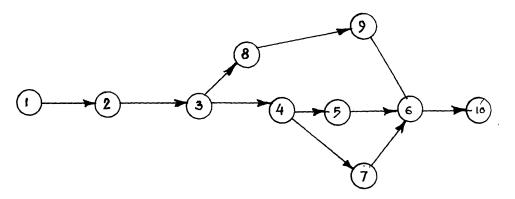
Question

Draw a PERT network of opening a new office. Assume that following events take place in some sequence.

- Event 1: Location of site started
- Event 2: Location of site completed
- Event 3: Building for office selected
- Event 4: Cleaning of the office building started
- Event 5: Interior decorator starts work
- Event 6: Interior decorator finishes work
- Event 7: Opening of new office advertised or announced
- Event 8: List of invitees for the opening day prepared
- Event 9: Invitations sent
- Event 10: Office opened

Answer

See figure



Question

What do you understand by "dummy activity"? Explain it wit the aid of an example.

Answer