c) Time units. Time estimates may be given in any unit i.e. minutes, hours, days, weeks, depending on the project. All times estimates within a project must be in the same units otherwise confusion is bound to occur.

Basic time analysis – critical path

3. However sophisticated the time analysis becomes, a basic feature is always the calculation of the project duration which is the duration of the critical path.

Critical path. The critical path of a network gives the shortest time in which the whole project can be completed. It is the chain of activities with the longest duration times. There may be more than one critical path in a network and it is possible for the critical path to run through a dummy. The following paragraphs give step by step, the procedure for establishing the critical path.

Earliest start times (EST), Once the activities have been timed it is possible to assess the total project time by calculating the EST's for each activity. The EST is the earliest possible time at which a succeeding activity can start and the method of calculation will be apparent from the following example.

Assume the following network has been drawn and the activity times estimated in days.

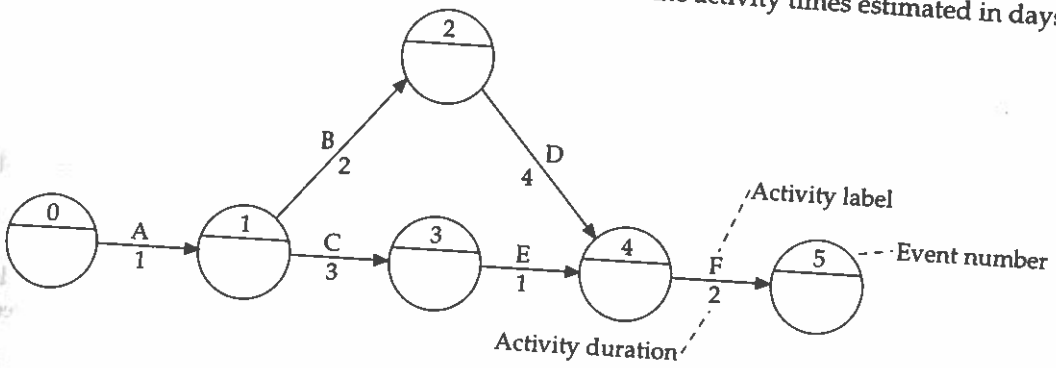

Figure 23/1

The EST's can be inserted as follows.

EST (Day No)

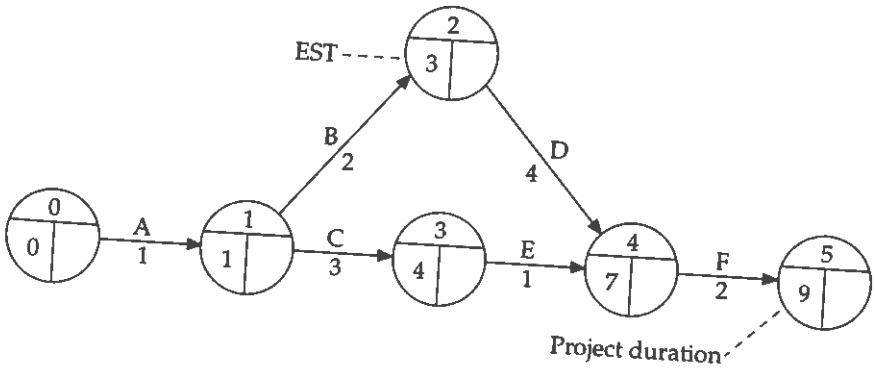

Figure 23/2