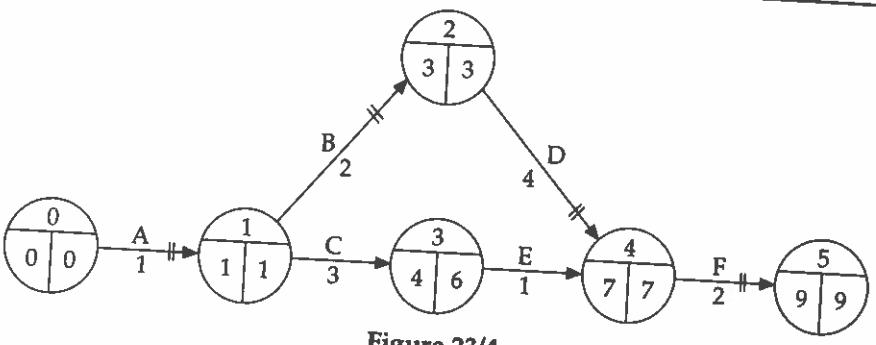


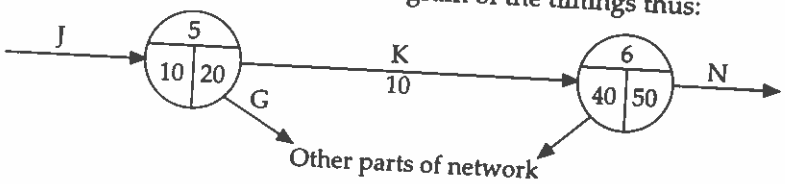
Figure 23/4

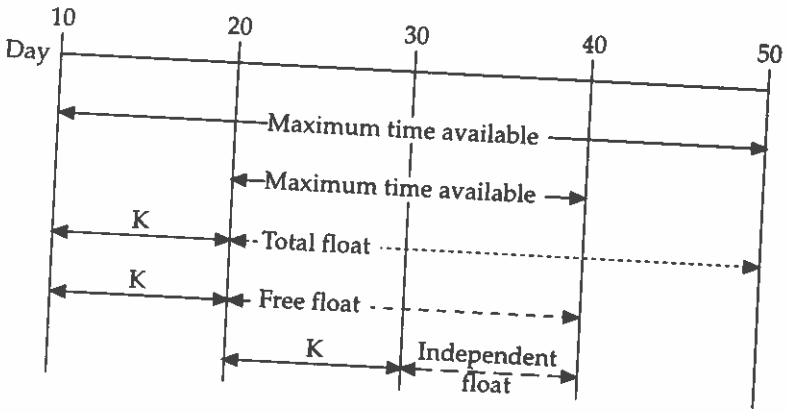
Critical path implications. The activities along the critical path are vital activities which must be completed by their EST's/LST's otherwise the project will be delayed. The non critical activities (in the example above, C and E) have spare time or ***float*** available i.e. C and/or E could take up to an additional 2 days in total without delaying the project duration. If it is required to reduce the overall project duration then the time of one or more of the activities on the critical path must be reduced perhaps by using more labour, or more or better equipment or some other method of reducing job times.

Note that for simple networks the critical path can be found by inspection i.e. looking for the longest route but the above procedure is necessary for larger projects and must be understood. The procedure is similar to that used by most computer programs dealing with network analysis.

Float

5. Float or spare time can only be associated with activities which are non-critical. By definition, activities on the critical path cannot have float. There are three types of float, Total Float, Free Float and Independent Float. To illustrate these types of float, part of a network will be used together with a bar diagram of the timings thus:





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