Objectives

1. After studying this chapter you will
   - understand the principles of Resource Scheduling
   - know how to draw a Gantt chart
   - be able to prepare a Resource Aggregation Profile
   - know how to use Resource Levelling
   - be able to prepare a Resource Allocation Profile.

Resources and networks

2. The usefulness of networks is not confined only to the time and cost factors whic been discussed so far. Considerable assistance in planning and controlling the resources can be given to management by appropriate development of the basic r techniques.

   Project resources. The resources (men of varying skills, machines of all ty required materials, finance, and space) used in a project are subject to varying d and loadings as the project proceeds. Management need to know what activi what resources are critical to the project duration and if resource limitatic shortage of materials, limited number of skilled craftsmen) might delay the proje also wish to ensure, as far as possible, constant work rates to avoid paying ove one stage of a project and having short time working at another stage.

Resource scheduling requirements

3. To be able to schedule the resource requirements for a project the following d required.
   a) The customary activity times, descriptions and sequences as previously des
   b) The resource requirements for each activity showing the classification of the and the quantity required.
   c) The resources in each classification that are available to the project. If var availability are likely during the project life, these must also be specified.
   d) Any management restrictions that need to be considered e.g. which activiti may not be split or any limitations on labour mobility.

Resources scheduling example, using a Gantt chart

4. A simple project has the following time and resource data (for simplicity, on resource of labour is considered but similar principles would apply to othe inter-changeable resources).