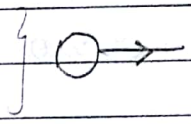
Lecture-3
SL

classmate
Date 30/01/18
Page

Project / network scheduling by PERT/CPM (Project management)

Project: It is defined as a combination of inter-related activities all of which must be executed in a certain order for its completion.

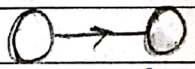
~~Activity~~ : **Network:** Network means a graphical representation of project operations in terms of activities and events that must be completed to reach the end objective of a project and showing the planning sequence of their accomplishment, their dependence and inter-relationship.

Event is represented by 
Activity is represented by 

Activity - It is a task or an item of work to be done, that consumes time, effort, money or other resources. It lies b/w two events.

Event - It represent the start or end of some activity, and such it ~~does~~ consumes no time and does not consume any resource.

Arranging money - event
Work done for that - activity

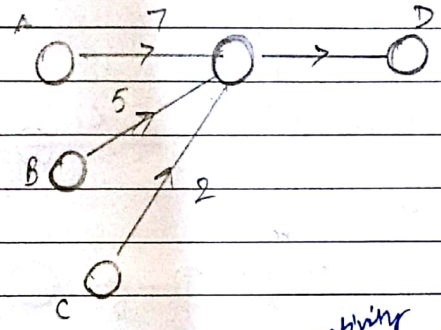


Scheduling -
Network / project scheduling is a technique used for planning, scheduling and controlling large project in the field of construction, maintainence, purchasing, etc.
It is method of minimising delay, interruption etc by determining critical factors and co-ordinating various part of overall job.

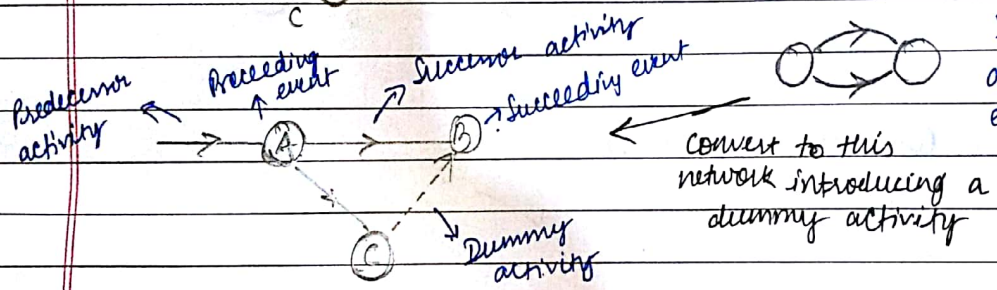
7 Time estimation

For planning, controlling and scheduling of project/networks, methods:
PERT : Program evaluation and review technique
CPM : Critical path method

The work involved in a project can be divided into phases corresponding to the management func^{n}:
- Planning
- Scheduling
- Controlling



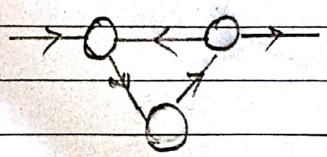
D will start after the completion of events A, B and C.



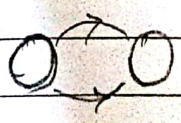
Dummy activity is inserted when two or more parallel activity have the same head and tail event.
It doesn't consume any resource or time.

* In ~~designing or~~ logical sequencing or designing a project network, three types of errors are most common -

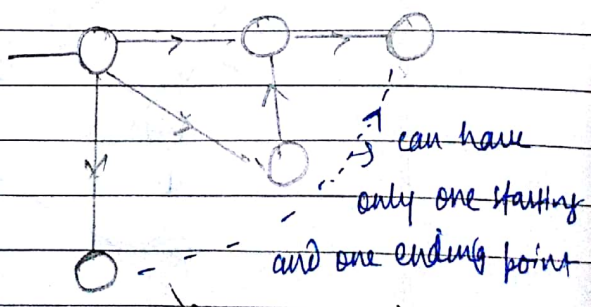
i) Looping



ii) Parallel activities

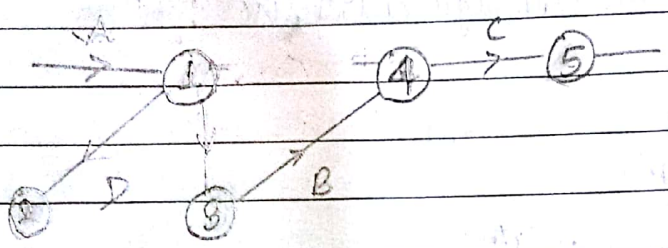


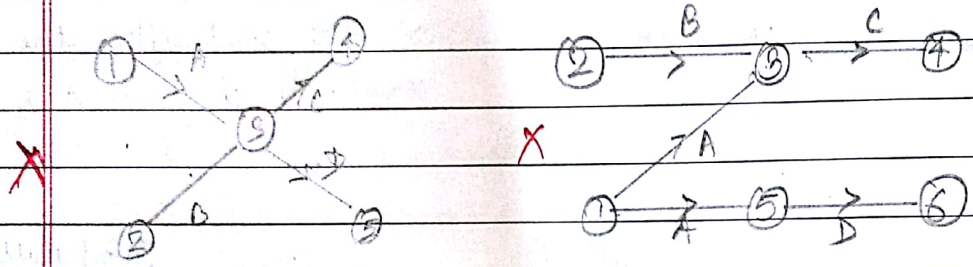
iii) ~~To~~ Dangling event

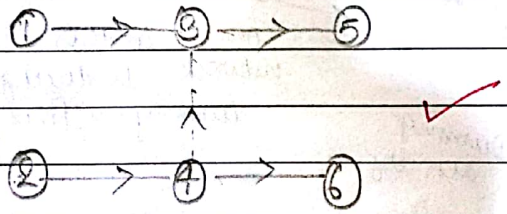


Dependency relationship

Q. Activity C is dependent on both activity A and B, and activity D is dependent on A alone.

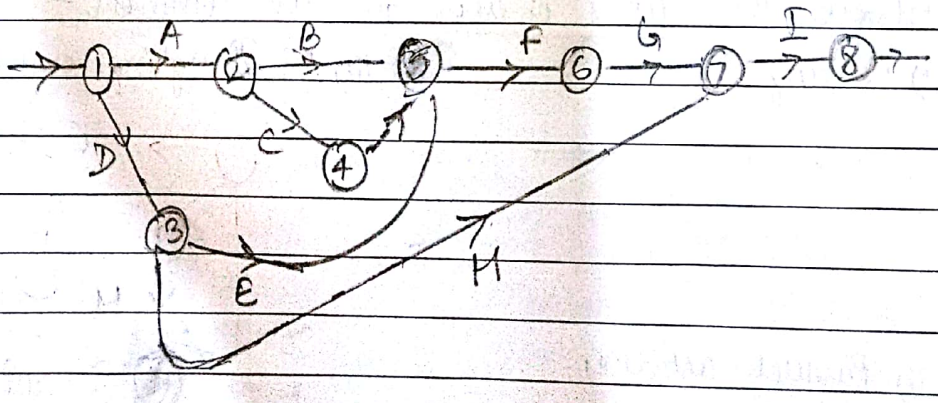






Q.

Activity	A	B	C	D	E	F	G	H	I
Immediate predecessor	–	A	A	–	D	B, C E	F	D	G, H



Activity	A	B	C	D	E	F	G	H	I	J	K
Immediate predecessor	–	–	–	A	B	B	C	D	E	H, I	F, G