

Summary

10. a) Network analysis is used for the planning and control of large, complex projects.
- b) Networks comprise activities (represented thus \longrightarrow) and events (represented by \bigcirc). Activities consume time and resources, events are points in time.
- c) Networks have one start event and one end event. An event is not complete until activities leading into it are complete.
- d) The length of the arrows representing activities is not important because networks are not drawn to scale.
- e) Dummy activities (represented thus $---\longrightarrow$) are necessary to show logical relationships. They do not consume time or resources. They become necessary as a network is drawn.

Points to note

11. a) Network analysis is a popular type of examination question.
- b) Network analysis is an important management tool and in some industries such as civil engineering and construction, is used on a day by day basis.
- c) Rarely does one draw a network in a neat, orderly fashion at the first attempt. Accordingly it is a useful examination technique to do a draft and copy the network neatly for the official answer.

Self review questions

Numbers in brackets refer to paragraph numbers

1. What is Network Analysis? (2)
2. What are activities and events? (4)
3. What are the basic rules for drawing networks? (5)
4. Does the length of an activity arrow represent the time taken? (6)
5. What is a dummy activity? (8)

Exercises with answers

1. Draw the network for the following problem.

Activity	Preceding activity
1	—
2, 3, 4	1
5	2
6	3
7	5
8	6
9	7, 8
10	3
11	4
12	9, 10, 11

2. Draw the network in question 1 except that Activity 8 is preceded by 6 and 2.