



IQRA NATIONAL UNIVERSITY

Subject

Project Management

Instructor

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MBA (90)

Assignment

Project Management

Date

30th May 2020

Assignment

Q1

Exercise Use the data in this table to answer the questions that follow:

Activity	Preceding Activity	Estimate in Months
Start		0
D	Start	4
A	Start	6
F	D, A	7
E	D	8
G	F, E	5
B	F	5
H	G	7
C	H	8
End	C, B	0

1. What is the duration of the critical path?

Solution

As we have given the duration of all the activities, and we have to find the Critical path of all the activities leading to the end of the project.

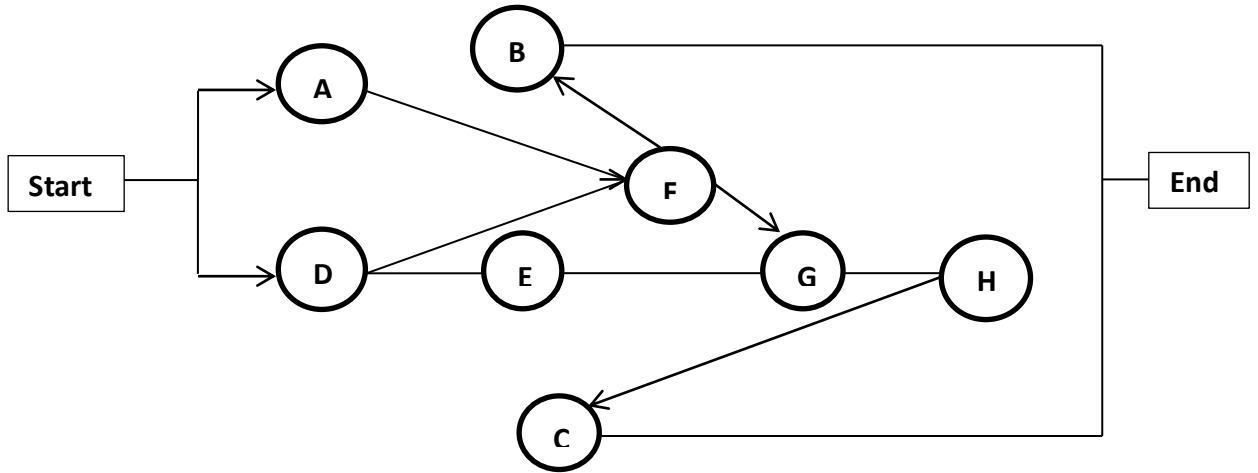
Critical path

The path followed by the preceding activities, which cannot be delayed, otherwise the duration of the project led to failure.

Step1

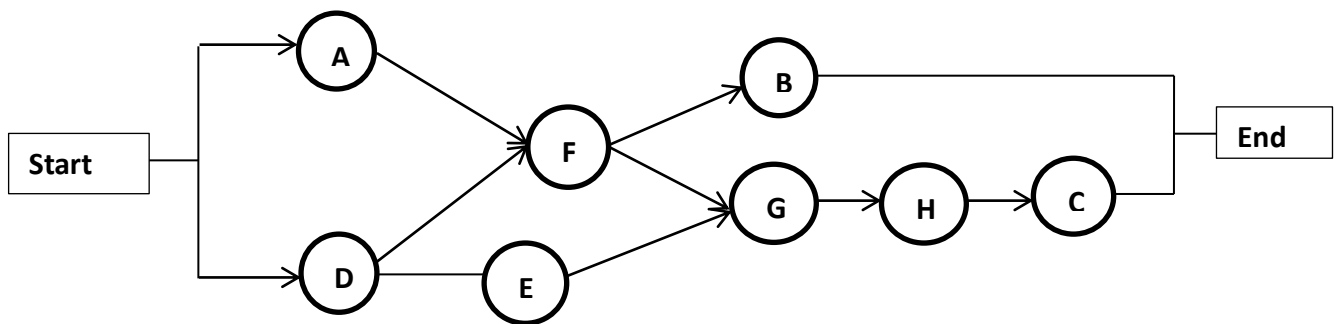
Draw sketch diagram of all activities of the project, using AON (activity on Node) method;

Diagram 1



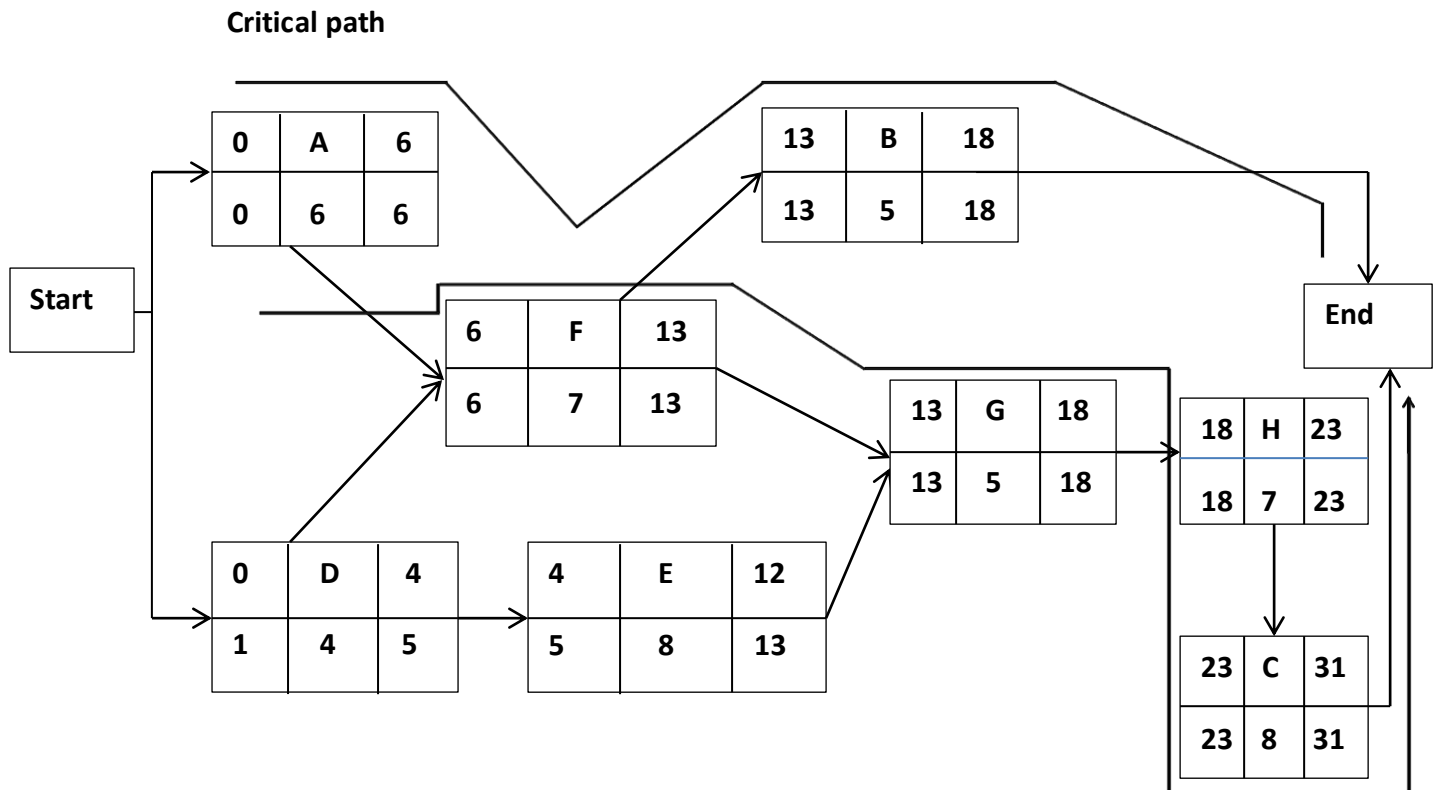
❖ That is what we follow the alphabetic sequence of the activities.

Diagram 2



❖ That is what we have given the sequence of activities to be performed in order.

❖ Now we have to find the duration of a project and critical path, using AON method.



❖ Activities having $Es=Ls$ and $EF=LF$ or the same is the critical path.

So we have 2 No's of critical path here.

1. Path A + F + B → Same Es, Ls, EF, LF.
2. Path A + F + G + H + C

Path 2 also have same Es, Ls, EF, LF and also follows the longest path.

Project duration

$A + F + G + H + C \rightarrow 6 + 7 + 5 + 7 + 8 = 33$ months.