

NAME: OGBODO EBERE JACINTA  
REG.NO: IMT/ESM/H2015/022  
FIRM: ANEKE AND ASSOCIATES  
GROUP: 13  
COURSE TITLE: REAL ESTATE APPRAISAL II  
COURSE CODE: EST425  
LEVEL: HND 11  
DEPT: ESTATE MANAGEMENT. OLD REF  
INSTITUTE OF MANAGEMENT AND TECHNOLOGY  
ENUGU

## QUIZ

1. How do you determine the critical path?

Critical path can be determined by following the multiple task steps which are;

- A. Planning
- B. Arranging and scheduling
- C. Controlling

A. Planning :In planning stage you make use of these variables,Plan,Test,Modify and Replan (P,T,M,R).

i. plan: In planing you first acquire land,contact the architecture and contractors etc.

ii.Test : In planning you just forecast into the future,the plan will also need to be tested using sensitivity test like checking whether the building plan matches the location, the design and also whether the contractor is competent.

iii. Modify: After testing if there is any faulflow if you choose a wrong contractor or design you have to modify the plan and replan.

B. Arranging and scheduling:

In this stage you make sure that each task or activity do not exceed it's time limit so that it will not affect the project time.

D. Controlling: In this stage you can identify the longest irreducible sequence of event, that is the path that has no float(no free time) which is the critical path.

2. Discuss the relevance of critical path analysis in construction projects

A. it can be used in a large project like in road construction, in building of houses and industries etc.

- B. it help us to identify a project that has no float and how to allocate float to it from those that has float.
- C. it helps to control cost to prevent exceeding the project budget
- D. Critical path is the path that justifies the final project time line.
- E. It helps in keeping the project's completion on track.
- F. It helps to minimize project time in order to meet a desirable project completion date.

3. From the given PERT chart.

A. Calculate the duration of each path.

Path 1; purchase plot =5days  
 Select design = 3days  
 Purchase wood = 3days  
 Assemble shed =8days  
 Total = 19days

Path 2: Purchase plot =5days  
 Select design =3days  
 Purchase paint =1day  
 Assemble shed =8days  
 Total =17days

Path 3: Purchase plot =5days  
 Select design =3days  
 Hire workers =4days  
 Dig foundation =4days  
 Lay foundation =6days  
 Foundation cement =8days  
 Assemble shed =8days  
 Total =38days

B. Identify the critical path.

Path1: 19days =19days float  
 Path2: 17days=21days float  
 Path3: 38days=0 float

However, path3 is the critical path because it has no float and it is the highest irreducible sequence of event.

C. How will you approach a project to ensure timely delivery?

We can approach a project to ensure timely delivery by allocating extra days from the ones that have floats to give the one that has no float.

Illustration;

Path 3 has 0 float

Path 1 join path 3 with 19days

Path 2 join path 3 with 21days

Path 3 will now be helped with 40days for timely delivery

4. Analyze the LOB chart.

P 4m/100%

E 2m/50%

The project is a positive one because it was planned that in 4months the project will be completed by 100% but it was letter completed in 2months by 50% which is the earned value.