

**INSTITUTE OF MANAGEMENT AND  
TECHNOLOGY (IMT) ENUGU**

**DEPARTMENT OF ESTATE MANAGEMENT**

**AN ASSIGNMENT PRESENTED**

**BY**

**DIVINE FAVOUR REAL ESTATE APPRAISAL**

**NAME: EGBO TENNISON .O.**

**REG NO: IMT/ESM/H2015/044**

**COURSE TITLE: REAL ESTATE APPRAISAL II**

**COURSE CODE: EST 425**

**LECTURER: MR. EWURUM NONSO**

**JULY 2017**

## QUESTION NO 1.

### How do you determine the critical path

- ❖ Planning
- ❖ Arranging and scheduling
- ❖ Controlling

#### 1. Planning:

In planning this involves three person leaving place A to arrive at place B in 5hr.

$P_1$   $P_2$   $P_3$  are the event the arrow are the task/activities.

#### Analysis

$P_1$  leaves event A to event C and then to event B.

$P_2$  Leaves event A to straight to event B.

$P_3$  leaves event A to C went to event D and goes to E. B

The project has 4 event (ABCD) three personnels are involved ( $P_1P_2P_3$ ) the project involves 6 activities (i.e 6 arrows).

#### 2. Arranging and Schedulling:

It ask the question how long we are goingto use and complete project in 5 hrs. Each of the task must be between 1 hr to 5 hrs.

Task 1- 2hrs

Task 2- 3 hrs

Task 3- 4hrs

Task 4- 1hr

Task 5 - 1hr

Task 6 - 2hrs

$P_1 \rightarrow T_1 T_2 = 5 \text{ hrs} \rightarrow \text{chart float}$

$P_3 - T_3 T_4 T_5 = 4 \text{ hrs}$

$P_2 \rightarrow T_6 = 2 \text{ hrs} = 3 \text{ hr float}$

### **Controlling**

This means identifying the path that has no float and then taking and allocating extra time in the other path to it.

According to the diagram

$P_1$  has 0hr float it is the critical path

$P_2$  join  $P_1 = 3 \text{ hrs}$

$P_3$  join  $P_1 = 1 \text{ hr}$

More so the critical path has no float.

This is because the critical path has the longest irreducible sequence of event it has no extra time therefore it has no float.

### **QUESTION 2**

Discuss the relevance of critical path analysis in construction of a project.

### **Answer**

Critical path analysis has many role to play in handling a project.

1. it made it possible to discover or detect the highest last longing task on any project where by making it possible to meet up to date.
2. It grant easy access to the contractors handling any project to estimate date of completion on every aspect of the project
3. It help to checkmate the use of finance in handling any project where by avoiding extravagancy in the project.
4. We uses critical path analysis as equipment which the project manager use to determine the end of any project.
5. It also plays a very vital role in communicating and documenting plan and time factor of any project.

### **QUESTION 3**

From the pert chart

- a. Calculate the duration of each path
- b. Identify the critical path
- c. How would you approach the project to ensure timely delivery.

### **ANSWER 3A**

In path 1 the duration begins in and 5 day move to 3 days down to 3 days down to another 3 days plus 8 days in calculating it from  $5+3++3+8=19$ days

Path 1 is 19 days

Path 2: the duration of path 2 began with 5 days down to 3 days move to day 1 and involve to day 8.

Which summarises it mathematically

$$5+3+1+8=18\text{days}$$

Moreso path took 18 days to round up the project.

Path 3

In path 3 it began in day 5 to day 3 to day 4 move to day 6 and day 8.

Mathematically

$$5+3+4+6+8 = 26$$

It took path 3, 26days to round up the project.

Moreso, we see that path 3 is the longest in the project.

And also is the critical path analysis of the project so more concentration and seriousness should be apply in other to meet up with time.

### **QUESTION 3B**

Identify the critical path

## **ANSWER**

Path (3) is the critical path simple because it is longer than the other path (1) and (2) which it needs know further delay or time wasting in order to meet up the delivery time.

## **QUESTION 3C**

How to approach project to ensure timely delivery.

## **ANSWER**

When ever a project is been given by an individual or government agency it should be given to well qualified and skilled contractor. However a project should be equiped with standard materials not sub-standard wich may hinder the project not to meet up time of delivery. Moreso appropriate supervising shoud be put in place to enhance completion of the project on time. Moreso a project which is expected to meet up timely delivery should be well finance appropriately.

## **QUESTION 4**

Analyze this line of balance

## **ANSWER**

In this chart it indicate that plan time to round or get the project completed is up to 2 months but the resources available is 50%.

Moreso the actual time the project was rounded up was 4 months.  
To completed or round up the project.