

## WEEK: EIGHT

### CLASS: JSS TWO (2)

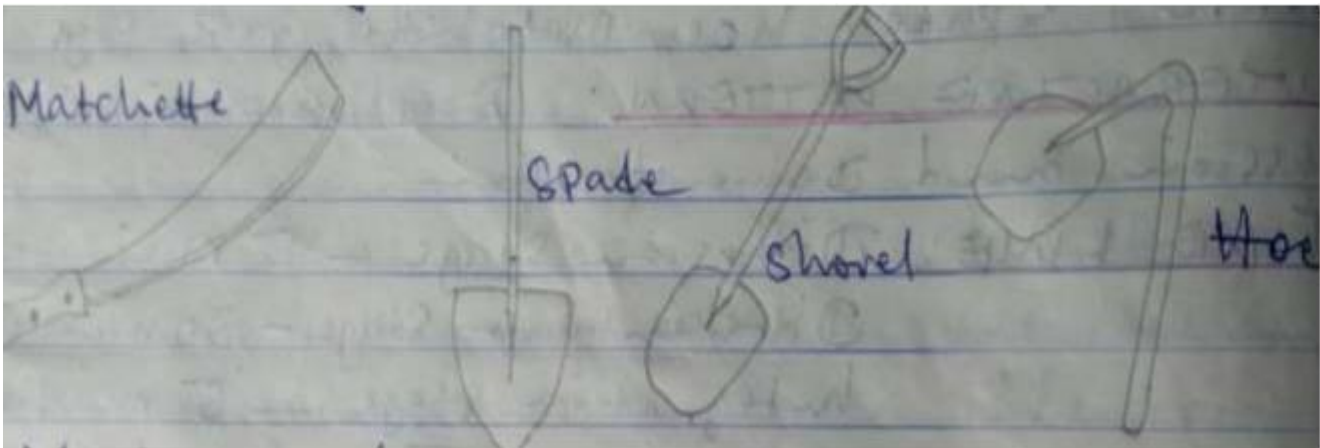
#### TOPIC: SITE PREPARATION AND SETTING-OUT

##### SITE PREPARATION

Site preparation means the sum of all activities and operations performed on a proposed building site to get it ready for the actual building construction.

##### HAND TOOLS USED IN BUILDING SITE PREPARATION

1. **Spade:** This is used for digging (usually relatively) loose or soft earth.
2. **Shovel:** This is used for lifting and throwing loose materials (aggregate) or soft earth into another position and for spreading and levelling the earth.
3. **Matchette:** This is used for cutting grasses, trees and shrubs.
4. **Hoe:** This is used for digging usually about the surface of the ground. It is also used for removing grasses.
5. **Axe:** This is used for cutting bigger trees and branches.
6. **Chain saw:** This is a portable diesel or petrol operated motorized saw used in felling tree and cutting trunks into smaller lengths.



##### MECHANIZED TOOLS USED IN SITE PREPARATION

1. **Bulldozer:** This is a very powerful machine which can push down almost any obstacle on its way, such as; walls, buildings and trees and clears them from the site.
2. **Tractor shovel (pay loader):** It is used for lifting large quantities of loose materials at a time and loading them into trucks or tippers. It has a tipping bucket at its front.
3. **Grader:** This is used for trimming the banks or edges of roads. It is also used for cutting ditches and levelling the ground.

## TECHNIQUES OF SITE PREPARATION

The various techniques used in site preparation are as follows;

1. Removal of vegetable soil, small trees and shrubs.
2. Grubbing out roots and stumps
3. Levelling the site
4. Extermination of termites and their nest etc.

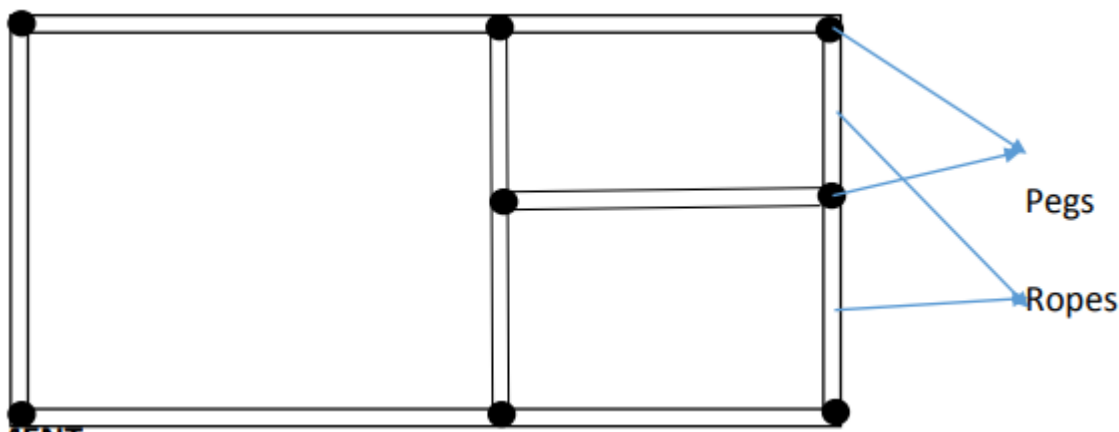
### SETTING-OUT

This implies the process of developing the physical position of corners and walls of a building, and its done by transferring dimensions from the layout plan to the ground.

#### MATERIALS USED IN SETTING-OUT

1. Builder's square: This is a wooden version of the steel square. The square template is made out of 150mm x 38mm timber, frame and braced and the arms should be about 2 meters or longer. It can give easier and more accurate setting out.
2. Theodolite: This is a survey instrument which among its other uses is used in setting out a building when greater accuracy is required. It is used to ensure that pegs are in straight line.
3. Steel Square: This is used for setting out the angles of small buildings, usually not larger than a 5-meter span.
4. Tape and pegs: This can be used in setting-out the square end of a building based on the Pythagoras' theorem which proves that any triangle whose sides are in the ratio of 3:4:5 is a right-angled triangle.

#### SETTING-OUT PROFILE



**ASSIGNMENT:**