

WEEK: EIGHT

CLASS: JSS TWO (2)

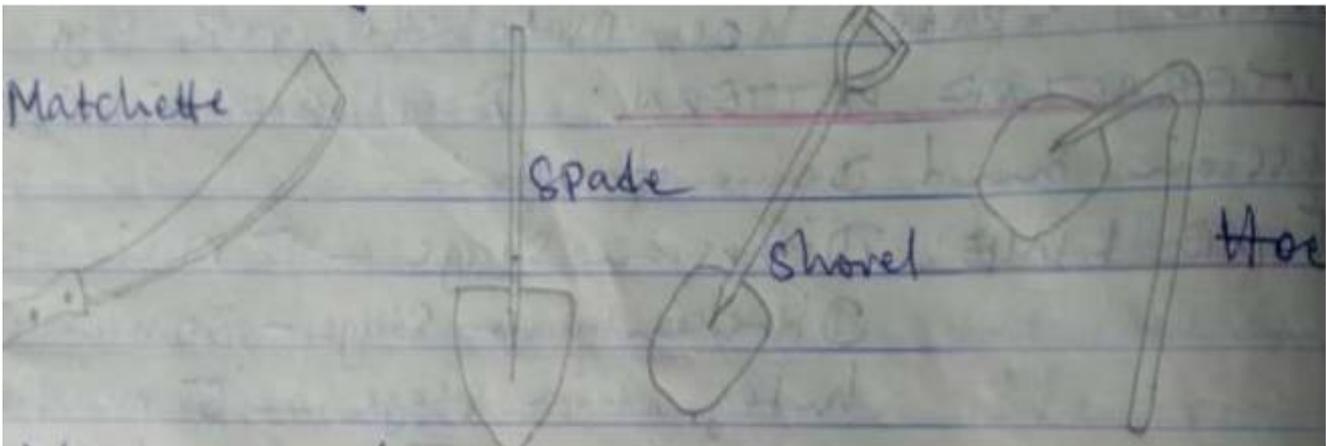
TOPIC: SITE PREPARATION AND SETTING-OUT

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.

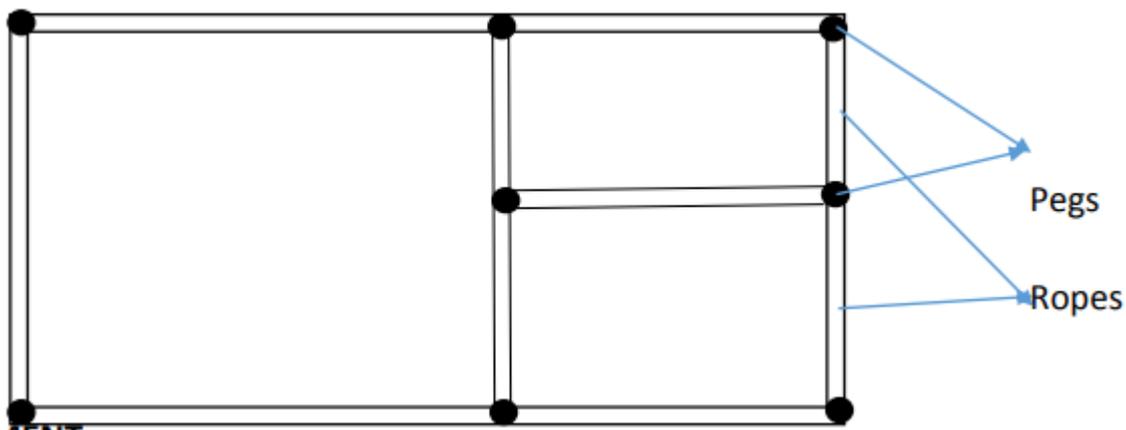
SETTING-OUT

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: