



## OBJECTIVES

(6<sup>th</sup> Dean Committee Syllabus)

Course No.: AGRO-111 (New)

Course Title: Fundamentals of Agronomy

- 
- All Important Definitions are shortlisted in this file for the convenience of the students.
  - Students are required to take a print of this file to study at the time of exam.
  - Join our Telegram Channel: [@AgroMind](#) (Click the Blue link to join the Channel.)
- 

### AGRO-111 IMP Definitions

**Seed dormancy-** It is an internal condition of viable seed which does not allow its actual germination, although suitable temperature, moisture and aeration etc, are provided.

**Puddling-** Puddling operation consists of ploughing repeatedly in standing water until the soil becomes soft and muddy.

**Nutrient use efficiency-** Nutrient (fertilizer) use efficiency indicates yield of crops (biomass or economic yield) in kg of nutrient applied.

Or

The extent recovery of applied fertilizer nutrient by crop indicate the nutrient (fertilizer) use efficiency.

Top dressing of fertilizers- The application of fertilizers in standing crop is known as top dressing.

**Threshing-** The process of separating grains/economic part from plants after harvest is known as threshing.

**Tilth-** It is the physical condition of the soil resulting from tillage.

[CLICK HERE to Join AgroMind Telegram Channel](#)

Physiological maturity- When the translocation of photosynthates to the economic part stopped.

Or

When fruit growth is complete and photosynthate are no longer translocated to fruits known as physiological maturity.

**Plant ideotype-** Plant ideotype is a biological model which is expected to perform or behave particular manner within a defined environment.

**Planting Geometry-** The arrangement of the plants in different rows & columns in an area to utilize the natural resources efficiently is called crop geometry.

**Tillage-** Tillage is Mechanical manipulation of the soil for preparing soil for growing and raising the crops.

**Seed-** Seed is a fertilized ripened ovule consisting of three main parts namely seed coat, endosperm & embryo, which in due course give rise new plants.

**Growth-** Growth in living organisms may be defined as irreversible increase in the number and size of a cell , organ or whole organism.

**Development-** Development is a term that includes all changes that an organism goes through during its life cycle from germination of the seed to senescence

**Fertilizer-** Fertilizers are synthetic (commercially manufactured) or naturally occurring chemical compounds either dry solid or liquid that added to the soil to supply one or more plant nutrients for crop growth.

**Agronomy-** Agronomy is branch of agricultural science which deals with principles & practices of soil, water & crop management.

**Crop rotation-** The cultivation of different crops in succession on the same piece of land one after another is known as crop rotation.

**Plant nutrients-** Plant nutrients are the chemical elements that are essential to nourishment of plant health.

**Weed-** Weed is an unwanted plant a plant out of place.

**Manures-** Manures are plant & animals wastes that are used as a source of plant nutrients.

**Fertilizer -** Fertilizers are essential industrially manufactured chemical containing plant nutrients.

**Soil amendment-** Soil Amendment is any substance which is intended to change the chemical or physical characteristics soil.

**Agriculture-** Agriculture is an art science & business of crop production & Livestock management for economic purpose.

**Ephemerals-** The crops having a short growing season to be called as ephemerals.

**Drought-** A prolonged period without rainfall is called as drought.

**Mulching-** Mulching is the practice of covering the soil surface with organic or other materials such as straw, grass, stones, plastic etc. to reduce evaporation, weed density and also to moderate diurnal soil temperature.

**Intercropping-** Growing of two or more crops on same piece of land with distinct row pattern is called Intercropping.

**Rainfed agriculture-** It is defined as management of soil and crops under natural precipitation or rainfall without any irrigation.

**Cropping system-** Cropping system may be defined as 'the order in which the crops are cultivated on a piece of land over a fixed period'.

OR

It is an important component of farming system. It represents cropping pattern used on a farm and their interaction with farm resources, other farm enterprises and available technology which determine their make-up.

**Irrigation Scheduling-** Irrigation scheduling is deciding when to irrigate & how much water to apply.

**Irrigation-** The application of water to soil to assist in the production of crops, especially during stress period.

**Water management-** Water management can be defined as the integrated process of intake, regulation, conveyance, measurement, distribution, application of irrigation water to the field at right times.

**PET-** The amount of water transpired in a unit time by short green crop of uniform height, completely covering the ground and never short of water.

**Water requirement-** It is defined as the quantity of water regardless of its source, required by a crop or diversified pattern of crops in a given period of time for its normal growth & development under field conditions at a given place.

**Hygroscopic water-** The water held tightly in thin films of 4-5 milli microns thickness on the surface of soil colloidal particles at 31 bars tension (-3100 kPa) and above is termed as hygroscopic water.

[CLICK HERE to Join AgroMind Telegram Channel](#)

**Effective rainfall-** It is that portion of the total annual or seasonal rainfall which is useful directly and/or indirectly for meeting the crop water needs in crop production at the site where it falls but without pumping.

**Infiltration-** The process of water entry into the soil generally through the soil surface and vertically downwards.

**Irrigation interval-** It is interval or period in day can be safely allotted in between two successive irrigations.

**Consumptive use-** The quantity of water lost in evapotranspiration and that used by plant for its metabolic activities.

**Percolation-** Movement of water vertically downward from surface in to the soil due to gravitational force is known as percolation.

**Net irrigation requirement-** The quantity of water required to bring soil moisture content in to field capacity condition is called as Net Irrigation requirement.

**Seepage-** Slow movement of water through small cracks pores, interstices etc. in the surface of unsaturated material in to or out of a body of surface or sub-surface water.



Join [@AgroMind](#) Telegram Channel.  
(Click the blue link to subscribe the channel.)

[CLICK HERE to Join AgroMind Telegram Channel](#)