

**Definitions :**

1. **Soil** : Soil is a natural body composed of mineral and organic constituents, having a definite genesis and a distinct nature of its own. **(V. V. Dokuchaev)**

**OR**

A dynamic natural body on the surface of the earth in which plants grow, composed of mineral and organic materials and living forms. **(Buckman and Brady)**

2. **Soil Science** : Soil science deals with soil considered as natural body and as an important medium for crop growth. A Study of soil science includes soil fertility, soil chemistry, soil physics, soil microbiology, soil conservation, pedology.
3. **Pedology** : The study of genesis, survey, classification and geological distributions of soils.
4. **Edaphology** : Study of soil from stand point of higher plants. **Or** Edaphology is the study of soil in relation to plant growth and crop production.
5. **Soil Fertility** : It refers to the nutrients supplying properties of soil, nutrient requirement of plant nutrient losses from the soil and maintenance and restoring fertility of soil.
6. **Soil Physics** : It refers to the study of physical properties of soil viz., density, infiltration rate, water holding capacity, texture, structure, etc.
7. **Soil Chemistry** : It is the study of chemical composition, chemical reactions and chemical properties of soil in relation to crop needs.
8. **Soil Microbiology** : It is the branch of soil science which deals with the microorganism population of soil.
9. **Soil Conservation** : It deals with the process of soil against soil loss due to erosion, chemical deterioration as management of soil and method of conservation of soil.
10. **Weathering** : The process of disintegration and decomposition of rocks and minerals.  
**Or** Weathering is a physical disintegration and chemical decomposition of rocks and minerals resulting in the formation of parent material.
11. **Physical Weathering** : Physical weathering is mechanical process causing disintegration of consolidated massive rocks into small pieces.
12. **Chemical Weathering** : Decomposition of rocks and minerals brought about by chemical reaction called as chemical weathering.
13. **Mineral** : An mineral is a naturally occurring inorganic substance having a definite chemical composition and distinct physical properties. **Or** Naturally occurring, homogeneous element or inorganic (mostly crystalline) compound that a definite chemical composition and characteristic geometric form.
14. **Primary Minerals** : A mineral that forms a original component of a rock is known as primary mineral.
15. **Secondary Minerals** : A mineral which has been formed and deposited as a result of subsequent change in rock is known as secondary minerals.

- 16. Essential Minerals :** Minerals which forms the chief constituent of rock and which are regarded as the characteristics component of rock are known as essential minerals.
- 17. Accessory Minerals :** Mineral which occur only in small quantity and whose presence or absence is of no consequences as for the characteristics of rock is concerned are called as accessory minerals.
- 18. Soil formation :** The transformation of rocks into soil may be termed as soil formation.
- 19. Soil Profile :** A vertical section of soil which is showing all its horizon is called soil profile. **Or** The vertical section of the soil showing the various layers from the surface to unaffected parent material is known as soil profile.
- 20. Rock :** A rock may be defined as an aggregate of one or more minerals. **Or** A naturally occurring hard mass of mineral matter formed after the solidification of two or rock forming minerals.
- 21. Igneous Rocks :** Igneous rocks may be defined as the solidification of molten magma from the interior of the earth.
- 22. Sedimentary Rocks :** The rocks formed from the consolidation of sediments accumulated through wind or water action at the surface of the earth is called as sedimentary rocks.
- 23. Metamorphic Rocks :** When the change is considerable, the rock is said to have undergone metamorphosis and the new rock known as metamorphic rocks.
- 24. Soil formation :** The transformation of rocks into soil may be termed as soil formation.
- 25. Soil Texture :** The relative proportion of sand, silt and clay is called soil texture. **Or** The relative percentage of sand, silt and clay in soil is called as soil texture.
- 26. Soil Structure :** The arrangement and organization of primary and secondary particles in a soil mass is known as soil structure. **Or** The arrangement of primary and secondary soil particles in a certain structural pattern. **Or** The manner in which the individual grains and aggregates are arranged in the soil mass is known as soil structure.
- 27. Pore Space :** The empty space in soil not occupied by the soil solids is called pore space, and is filled with air or water.
- 28. Porosity of Soil :** Porosity refers to percentage of soil volume which is occupied by pore spaces.
- 29. Soil Moisture Constant :** The amount of water that contains at each of these equilibrium points is known as soil moisture constant.
- 30. Infiltration :** The downward entry or movement of water from the surface into soil.
- 31. Soil Colloids :** The soil colloid is a material made of organic and inorganic particles less than 0.001 mm in diameter possesses properties like typical colloidal substances are known as soil colloids.
- 32. Temperature :** Degree of hotness.

- 33. Soil Biology** : Soil Biology is the study of microbial and faunal activity and ecology in soil.
- 34. Soil Erosion** : Soil Erosion may be defined as the detachment, transportation and deposition of soil particles from one place to another under the influence of wind, water or gravity forces.
- 35. Land Capability Classification** : Land capability classification is a system of grouping soils primarily on the basis of their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time.
- 36. Humus** : Humus is complex and rather resistant mixture of brown or dark brown amorphous and colloidal substance modified from the original tissues or synthesized by the various soil organisms.
- 37. Humification** : The process of decomposition of organic matter material in soil is called humification. **Or** Humification is a process of transformation of raw organic matter into humus.
- 38. Eluviations** : Eluviations (wash out) is a process of removal of constituents by percolating water from upper layer to lower layer, this layer of loss called as eluviations.
- 39. CEC (Cation Exchange Capacity)** : CEC is defined as the sum of positive (+) charges of the adsorbed cations that a soil can adsorb at a specific pH. **Or** The capacity of solid (clay) to adsorb and exchange cations is called cation exchange capacity.
- 40. Drainage** : It is defined as removal of excess gravitational water from the soil surface or below the surface to create favourable condition for plant growth by providing surface and subsurface drainage.
- 41. Field Capacity** : The percentage of moisture retains by soil in micro or capillary pores at tension of  $1/3$  atmospheres or 2.51 PF or 33 kpa is called field capacity.
- 42. Flocculation** : The phenomenon of coalesce and formation of flocs is known as Flocculation.
- 43. Particle Density** : The mass per unit volume of soil particles is called as particle density. **Or** The weight per unit volume of the solid portion of soil is called particle density.
- 44. Bulk Density** : The oven dry weight of a unit volume of soil inclusive pore spaces is called bulk density.
- 45. Soil Classification** : Soil specification is the systematic arrangement of cells into groups or categories on the basis of their characteristics.
- 46. Soil Survey** : it is systematic examination, description, classification and mapping of soil of an area. **Or** It is a study and mapping of soil in their natural environment.
- 47. Soil Taxonomy** : Soil taxonomy is a classification of soils according to natural relationships among the soil characteristics.
- 48. C:N Ratio** : The ratio of the weight of organic carbon (C) to the weight of total nitrogen (N) in soil (or organic material), is known as C:N ratio.

- 49. Soil Aeration** : The constant movement or circulation of air in the soil mass resulting in the renewal of its components gases is known as soil aeration.
- 50. pF** : pF may be defined as the logarithm of the height in centrimetre of a water column that is necessary to produce desired suction.
- 51. Adhesion** :
- 52. Cohesion** :
- 53. Ion Exchange** : Ion exchange is defined as a reversible process by which cations and anions are exchanged between solid and liquid phases between solid phase it in close contact with each other. For the exchange of cations and anions the term is used as cation and anion exchange respectively.
- 54. Adsorption** : Adsorption is defined as facts by which an increased in concentration or accumulation of an ion species on a solid occurs due to ion exchange or other reaction.
- 55. Desorption** : Desorption is fact by which the replacement or release of an absorbed ion species occurs.
- 56. Hydration** : Chemical combination of water molecule with mineral is known as hydration.
- 57. Hydrolysis** : It is a decomposition reaction as  $H^+$  ion of water tends to change place with the cations of mineral.
- 58. Luster** : The reflection of light from the surface of mineral.
- 59. Stokes Law** : The velocity of falling particle is proportional to the radius square and not to its surface.
- 60. Streak** : It is the colour of the powder of mineral.

**Answer in One Sentence :**

- 1. What is soil consistence?** – Soil consistence is defined as “the resistance of a soil at various moisture contents to mechanical stresses or manipulations”.
- 2. What is Hue?** – It is the dominant spectral colour.
- 3. Name the scientist who is known as the Father of Soil Science** – V. V. Dokuchaev.
- 4. Name two reference books along with author's used for SSAC 111 –**
  - ISSS. 2009. Fundamentals of Soil Science. 2nd Ed. Indian Society of Soil Science, New Delhi- 110 012. pp. 728.
  - Das D. K. 2011. Introductory Soil Science, 3rd revised and Enlarged Ed, Kalyani Publisher, Ludhiana. pp. 645.
- 5. Give the mineral composition of marble** – Limestone.
- 6. What is streak of mineral?** – It is the colour powder of a mineral.
- 7. Name the cementing agent in soil structure** – Silica, Lime and Iron oxide.

8. Name the rocks in which the vesicles are filled up with mineral crystals –
9. What is streak of hematite ? – Hematite is black in colour.
10. What is principle law behind mechanical analysis of soil? – According to size, the soil particles grouped into gravels, sand, silt and clay which is termed as soil separates, the process of determine amounts of individual soil separates below 2 mm in diameter.
11. Which is the accepted hypothesis of origin of earth? – Nebular Hypothesis.
12. What is dyke? – It is a sheet of rock that formed crack in a pre-existing rock body.
13. Name the store house of the plant nutrients in soil –
14. Give the two examples of cementing agents in soil – Silica, Lime and Iron oxide.
15. State Universal Soil Loss Equation –
16. Give volumetric composition of soil –
17. Which is the most abundant element in the earth's crust? –
18. Give the content of Carbon dioxide in soil air –
19. Define specific heat capacity of soil – It is the amount of heat required to raise the temperature of one gram of substance by 1 °C. The values for most minerals present in the soil are between 0.18 to 0.20 cal/gm.
20. Give one example of 2:1 type of clay mineral – Montmorillonite.
21. The study of soil from stand point of higher plants is called? – Edaphology.
22. Planetesimal hypothesis was developed by? – Chamberlin and Moulton.
23. The study of soil genesis, survey, classification and geological distributions of the soils is called? – Pedology.
24. Nebular hypothesis was proposed by? – Kant and Laplace.
25. The study of earth crust is called? – Geology.
26. The study of rock is called? – Petrology.
27. The description of rocks is called? – Petrography.
28. The study about origin of rocks is called? – Petrogenesis.
29. Dominant rocks in the earth crust? – Igneous Rock.
30. Stratification is main feature of rock? – Sedimentary Rock.
31. Banded and laminated character is feature of rock? – Metamorphic Rock.
32. Example for monomineralic mineral? – Olivine and Dunite.
33. Softest mineral is? – Talc.
34. Hardest mineral known? – Diamond.
35. Transformation of unconsolidated sediments to hard rocks is called? – Diagenesis.
36. Chief constituent of sand fraction is? – Quartz .
37. Who defines parent material is initial stage of soil system? – Jenny.
38. First phase of soil formation is? – Weathering.
39. Soil formation factors initially developed by Dokuchaev –  $S = f(P, Cl, O)$ .
40. Which equation is formulated for soil formation by Jenny? –  $S = f(Cl, B, R, P, T)$ .
41. Active factors of soil formation? – Climate and Biosphere.
42. Passive factors of soil formation? – Relief or Topography, Parent Material, Time.

43. Who given active and passive factors of soil formation? – Joffe.
44. The soil forming factor that has no relevance after soil reaches its maturity? – Time.
45. Most important factor for soil formation is? – Climate.
46. Alkalization also called? – Solonization.
47. Dealkalization also called? – Solodization.
48. Transformation of organic matter into humus is called? – Humification.
49. Immigration also called? – Illuviation.
50. Emigration also called? – Eluviation.
51. A vertical section of soil body which shows different layers is called? – Soil Profile.
52. Five master horizons are recognized by capital letters? – OAEBC.
53. Dark coloured horizon in soil is? – A Horizon.
54. Top most mineral horizon in soil profile is? – A Horizon.
55. The horizon which is called organic horizon in soil profile? – O Horizon.
56. O horizon present in? – Forest land.
57. O horizon absent in? – Arable land.
58. In soil profile “Solum” means? – A+B Horizons.
59. The horizons contain properties of one master horizon and possess subordinate properties of horizon is called? – Transitional Zone.
60. Soil components are? – Mineral matter, Organic matter, Soil air, Soil water.
61. Father of Soil Physics? – Hillel.
62. The relative proportion of sand, silt and clay is called? – Texture.
63. The arrangement of primary soil particles into definite pattern is called? – Structure.
64. Oxidising material used in the mechanical analysis for humus destruction? – Hydrogen Peroxide.
65. The survey which is using for watershed and village development? – Detailed Survey.
66. The survey which is using for district planning? – Semi-detailed Survey.
67. The survey used for large areas (Regional Level)? – Reconnaissance Survey.

**Fill in the blanks.**

1. At wilting coefficient water is held at 15 atmospheres.
2. The original material from which soil develops is called \_\_\_\_\_.
3. Topaz is the example of transparent mineral.
4. The scale of detailed soil survey is \_\_\_\_\_.
5. Pedogenic process in which removal of silica and accumulation of Al and Fertilizer oxides takes place known as \_\_\_\_\_.
6. Law of minimum is stated by Carl Sprengel.
7. Horizon A and B collectively known as Solum.
8. The irregular and narrow cracks are deposited by molten material and which consolidated is known as \_\_\_\_\_.

9. The dynamometmorphosis is due to pressure which brought about by folding of rocks due to crust movement of earth.
10. Soil air contains much greater proportion of carbon dioxide than Atmospheric air.
11. The gaseous envelop that covers the earth surface is the Atmosphere.
12. The amount of heat required to produce given change in the temperature of a body is the Heat Capacity of the body.
13. Jenny formulated the equation of soil forming factors as  $S = f(c, l, o, r, p, t)$ .
14. The intrusive rocks consolidated in vertical cracks and formed wall like masses are called Dykes.
15. The material transported and deposited by the wind is known as Lords.
16. Pedology is the science dealing with the genesis, survey and classification of soils in nature.
17. The process of aggregation is combine process of flocculation and cementation.
18. Marble is the product of thermo metamorphism of limestone.
19. The first scientific classification of soil was proposed in 1886 by Russian V. V. Dokuchaev.
20. In most mineral soils the mean density of particle is about 2.65  $\text{mgm}^{-3}$ .
21. The process of transportation of weathered material is known as deposition.
22. Basalt is igneous type of rock.
23. Parent material formed in situ is called residual.
24. The microbial theory of plant nutrition is put forth by \_\_\_\_\_.

## EXTN 111

### Definitions :

1. **Rural Sociology** : Rural sociology is the sociology of rural life in the rural environment.(Anderson)
2. **Social Group** : A social group is a unit of two or more persons in reciprocal interaction or communication with each other.
3. **Educational Psychology** : the psychology is the science of human behaviour and human experience. The systematic study of the development of the individual within educational setting is called as educational psychology.
4. **Learning** : learning is a process of progressive behaviour adaptation.
5. **Intelligence** : Intelligence can be defined as the capacity of solving the problems by using past experience.
6. **Family** : it is a biological source unit composed of husband, wife and childrens are called as family.
7. **Personality** : personality is the quality of an individuals total behaviour.
8. **Sociology** : sociology is defined as the study of ways in which social experience function of developing maturing repressing human beings through interpersonal situation.
9. **Caste** : caste is defined as the hereditary endogamous usually localised group having some traditional occupation and decides particular status in social hierarchy.
10. **Social institutions** : a social institution is an organised system of social relationship which embodies certain values and procedures and meet certain basic needs of the society.
11. **Leadership** : leadership is the process of influencing the behaviour of the individual in a given situation.
12. **Culture** : culture may be defined as the pattern of behaviour shared by the members of a society.
13. **Mores** : Mores are the patterns of behaviour considered essential and deal with moral aspects.
14. **Social Stratification** : social stratification is the division of society in permanent groups or categories linked with other why relationships of superiority and subordination.
15. **Social Control** : social control is the pattern of influence the society exerts on individuals and groups to maintain order and establish rules in the society.
16. **Perception** : perception is the process of understanding sensations or attaching meanings based on past experience to signs.
17. **Motivation** : motivation is the process of initiating conscious and purposeful actions.



- 18.Leader** : an individual is a leader in any social situation in which has ideas and action influence the thoughts and behaviour of others.
- 19.Social Organization** : social organisation can be defined as the United of persons where in people purpose fully associate to achieve some common proposes or interests. It is a group of people to pursue a specific objective.
- 20.Extension** : extension is an education and its purpose is to change the attitudes and practices of the people with whom work is done. (Douglas Ensminger)
- 21.Formal Group** : when the groups are formed with certain rules and relations it is known as formal group.
- 22.Informal Group** : when there is no specific organisation and definite rules, procedures, then that group is known as informal group.
- 23.Reference Group** : reference group may be defined as AB group with which an individual themes identified the norms and objectives of which accepts.
- 24.Permanent Group** : if the relationship of the members last over long time, it is termed as permanent group.
- 25.Temporary Group** : when the group last for short duration it is known as temporary group
- 26.Class** : social classes are defined as abstract categories of persons arrange in levels according to the social status they possess.
- 27.Social Values** : social values are defined as the general enduring preferences that govern behaviour and decisions in daily life.
- 28.Attitude** : attitude is defined as a mental state of readiness organised through experience exerting a directive and dynamic influence upon the individuals response to all objects and situations with which it is related.
- 29.Religion** : religion is a set of beliefs regarding the relationship of man to the supernatural power called as god.
- 30.Ritual** : Ritual is the observance according to a prescribed manner of certain action.
- 31.Beliefs** : beliefs are acceptance of proposition about some life to be true.
- 32.Teaching** : teaching is the process of arranging situations that stimulate and guide learning activities in order to bring design changes in human behaviour.

### AHDS 111

1. **Breed** : It is groups of animal that are result of breeding & selection have certain distinguishable characteristics.  
**OR**  
A group of animals related by decent & which are similar in most of the characters like general appearance, size, colors, horns it is called breed.  
**OR**  
A breed may be defined as a cluster domestic animal of a species where individuals are homogenous in certain distinguishable characteristics which differ from one to other group of animals.
2. **Dam** : Female parent of the calf.
3. **Lactogenesis** : Lactogenesis is a series of cellular changes whereby mammary epithelial cells are converted from a nonsecretory state to a secretory state.
4. **Ovulation** : Ovulation is the process of discharge of egg from graafian follicle which occurs near the end of oestrus.
5. **Estrus** : Period of intense sexual desire or sexual excitement experienced by female.
6. **Drying off** : It is the process of making a lactating but pregnant cow to dry approximately 60 days before next calving.
7. **Grooming** : It is the careful brushing and combing of the body hair coat and dead hairs and scalp.
8. **Brooding** : The process of rearing the young chicks from the day-old stage to 4 to 6 weeks of age during which warmth is provided by artificial means.
9. **Culling** : Removal of undesirable or unproductive animals from herd.
10. **Colostrum** : Colostrum is a milky substance that is produced by the breasts of mammals before birth and during the first few days following birth.
11. **Species** : A group of individuals which have certain common characteristics that distinguish them from other group of individuals with in species the individuals are fertile when in different species they are not.
12. **Incubator** : Incubator is a device used to grow and maintain microbiological structures or cell structures.
13. **Milk** : Milk is the lacteal secretion of the mammary glands of animals.
14. **Fertility** : Fertility is an ability to reproduce maximum within the stipulated time as per as the norms of the species.
15. **Moulting** :
16. **Acute disease** : A disease or disorder that lasts for a short time, comes on rapidly, and is accompanied by distinct symptoms.

**17.Estrus Cycle :** The correlated phenomena of the endocrine and reproductive systems of a female mammal from the beginning of one period of **estrus** to the beginning of the next called also estral cycle, estrus cycle.

**18.Milking :** Milking is an act of removing milk from udder.

**19.Dehorning :** Dehorning is the process of removing the fully grown horns of livestock.

**20.Grading of eggs :**

**21.Management :** Management is art and science and it is managerial capacity that can convert the resources into return.

**22.Debeaking :** Debeaking is the partial removal of the beak of poultry, especially layer hens and turkeys although it may also be performed on quail and ducks.

**23.Castration :** It is the removal of testicles.

**24.Calf :** Young one of cattle or buffalo below the age of six months is called calf.

**25.Vulva :** The external opening of female genitalia called as vulva.

**26.Vagina :** The thin walled tubular connection of cervix with vulva called as vagina.

**27.Sire :** The male parent of the calf.

**28.Heifer :** The younger female of cattle above age of six months to first calving.

**29.Service :** The process in which mature male covers the female i.e. in heat with the object to deposit spermatozoa in the female genital tract is called service.

**30.Conception :** The successful union of male and female gametes & implantation of zygote is known as conception.

**31.Gestation:** It is the condition of female when developing foetus is present in the uterus.

**32.Gestation Period :** The period from the date of service (actual conception) to the date of parturition is termed as parturition period or pregnancy period. This period varies according to species of animals e.g. in cows 279-283 days, in buffalo 310 days, sheep 148-152 days, goat 150-152 days.

**33.Parturition :** The act of giving birth to young one is called parturition.

**34.Lactation period :** The period after parturition in which the animal produces milk.

**35.Dry period :** The period after lactation in which the animal does not produce milk.

**36.Calving interval :** The period between two successive calving is calving interval.

**37.Average :** It is the sum of production divided by No. of animals.

**38.West average :** It is the average daily milk yield of a cow is lactation.

Total milk yield. of a lactation (kg or Lt).

$$\text{W.A} = \frac{\text{-----}}{\text{Lactation period (days)}}$$

**39.Herd Average :** It is average daily milk yield of milking animal in a herd.

Total milk yield of a day

$$\text{H. A.} = \frac{\text{-----}}{\text{No. of milking animals}}$$

**40.Overall average** : It is average daily milk yield of the animal in the period of calving interval.

$$\text{O.A.} = \frac{\text{Total milk yield of lactation}}{\text{Calving interval (days)}}$$

**41.Environment** : The sum of all external influences to which an individual is exposed.

**42.Genotype** : The complete genetic make up of an individual or its combination of genes it possesses which influences its characters. Several different genotypes may.

**43.Phenotype** : The external appearance or some other overall or measurable characteristics of an individual or it is the actual expression of the character as determined by his genes & the environment in which he has lived.

**44.Half sib** : Half brothers or half sisters.

**45.Full sib** : Full brothers or full sister.

**46.Heridity** : The occurrence of genetic factors derived from each of its parent in an Individual.

**47.Heritability** : The percentage of variation in individual characteristics between related individuals which is due to true genetic difference.

**48.Repeatability** : It is the expression of the same trait at different times in the life of the same individual or the tendency of an individual to repeat its performance e.g. dairy cow in successive lactation.

**49.Allele** : One or two or more alternative forms of a gene. Alleles are those genes which may appear at same locus in homologous chromosomes.

**50.Gene** : It is the unit of inheritance, which is transmitted in gametes or reproductive cells. It is the physical basis of heredity.

**51.Dominance** : A gene is said to be dominant when its characteristic effect is expressed in the heterozygote as well as homozygote, i.e.  $Aa < AA$ . Ability of gene to cover in block out expression of its allele or genes that have observable effect when present in any one member of a chromosome pair.

**52.Recessive** : Genes which have no. observable effect unless present in both members of a chromosome pair.

**53.Epistasis** : Interaction of two or more pairs of a gene that are not allele to produce a phenotype that they do not produce when they occur separately.

**54.Lethal** : (Deadly) A gene or genes that cause death of an individual which are possessed by them during pregnancy or at the time of birth.

**55.Prepotency** : The ability of certain individuals to stamp or impress their characters upon their offspring or prepotency is the ability to transmit characteristics to offspring to a marked degree.

**56.Fertility** : Ability of an animal to produce large number of living young.

**57.Fecundity** : It is the potential capacity of the female to produce functional ova regards of what happens to them after they are produced.

**58.Sterility** : Inability to produce any offspring.

- 59.Free martin** : A sterile heifer born twin with the male.
- 60.Cryptorchids** : The failure of testes to descend fully into the scrotum. If one testes is in scrotal position the male is usually fertile but if both are retained in the abdominal cavity sterility usually reported.
- 61.Atavism**: The reappearance of a character after it has not appeared for one or more generation.
- 62.Buller** : Cow always in estrus condition.
- 63.Teaser**: A vasectomized (castrated) bull used to detect the heat or estrus of female (cow).
- 64.Herd** : It is a group of cattle or buffalo.
- 65.Flock** : It is the group of sheep, goat or poultry birds.
- 66. Steer** : The male cattle that is castrated when he is still a calf or before the development of sexual maturity is called steer.
- 67.Veal** : The meat of calf below the age of 3 months.
- 68.Beef** : The meat of- cattle past calf stage.
- 69.Pork** : The meat of swine.
- 70.Mutton** : The meat of sheep & goat.
- 71.Chevon** : The meat of goat.
- 72.Wedder** : A castrated sheep is called wedder.
- 73.Prolificacy** : Ability to produce large number of offsprings. The animal is said to be prolific.
- 74.Variation** : The degree to which individuals differ with respect to the extent of development of expression of characteristics.
- 75.Puberty** : It is the period when reproductive tract & secondary sex organs/characteristics start to acquire their mature form. Before on set of puberty the reproductive tract of heifer grows proportionately to body growth but beginning at about 6 months age growth rate of these organs is much greater than body growth. At about 10 months of age the rapid growth phase of the reproductive tract ceases & this signifies the end of puberty. Heifer reaches puberty earlier than bull.
- 76.Inheritance** : Transmission of genetic factors from parent to offspring's.
- 77.Germplasm** : The material on the basis of heredity taken collectively. The sum of gene constitution of an individual.
- 78.Foetus** : A term for developing young one during last quarter of pregnancy.
- 79.Heifer calf** : A female calf under one year of age.
- 80.Heifer** : A female individual that has not yet calved.
- 81.Intercalving period** : No of days between two successive calvings.
- 82.Lactation Curve** :The graphical representation of the rate of milk secretion during lactation is called Lactation Curve.
- 83.Lactation length** : The time interval between the date of calving to the date of drying the animal expressed in days.
- 84.Cow** : The adult female of cattle from the date of first calving is called cow.

**85.Bull** : It is unsaturated of, cattle used for breeding or covering the cows.

**86.Bullock** : It is the castrated male of cattle used for work.

**87.Steaming up** : Feeding grain to pregnant heifers prior to calving is called as steaming up.



Chandrashekhar