

**OBJECTIVES****[ COURSE NO: ASDS -242 COURSE TITLE: LIVESTOCK BREEDING AND NUTRITION ]**

1.	Animal cell size ranges in mm in diameter	
	<b>I. 0.01 to 0.1</b>	ii. 0.05to0.05
	iii. 1.0 to 2.0	iv. .001 to .005
2.	Number of genes present in the population is termed as.....	
	i. gene population	ii. gene pool
	iii. genotype frequency	<b>iv. gene frequency</b>
3.	Proportion of genotypes present in a population of livestock is.	
	<b>i. genotype frequencies</b>	ii. gene population
	iii. gene pool	iv. gene frequency
4.	Alternative form of a gene, locate at the same part on each of pair of chromosome are called as-----	
	i. genetic pairs	ii. chromosomal pair
	<b>iii. allelic pairs</b>	iv. none of these
5.	Heritability is a ratio of additive genetic variance to variance.	
	<b>i. total phenotypic</b>	ii. both i and iii.
	iii. total genotypic	iv. total additive
6.	Fraction of the total phenotypic variance which is due to genetic and permanent environment difference is called-----	
	i. heritability	ii. mutation
	iii. co-relation	<b>iv. repeatability</b>
7.	The correlation of traits ranges between.....	
	i. 0 to 1	ii. 1 to 10
	<b>iii.+1 to -1</b>	iv.less than 1
8.	Correlation between the phenotypic values of two traits is called.....	
	<b>i. Phenotypic correlation</b>	ii. repeatability
	iii. genotypic co-relation	iv.variaton
9.	Correlation between the breeding values of two quantitative traits is termed as ....	
	i. phenotypic correlation	<b>ii. genetic correlation</b>
	iii.genotypic correlation	iv. somatic correlation

10.	The ..... between two variable is equal to the covariance difference between two variables divided by square root of the product of variance of two variables.	
	i. variance	<b>ii. correlation</b>
	iii. regression	iv. heterosis
11.	An estimate of genetic superiority of an individual over the average of the group from which it was selected is called -----	
	i.actual breeding value	ii.total breeding value
	<b>iii .probable breeding value</b>	iv.none of these
12.	Evaluation of genetic worth of bull is termed as .....	
	i. heterosis	ii. regress
	iii. correlation	<b>iv. sire index</b>
13.	Sire index denotes for both genetic worth of individual and .....ability.	
	<b>i.transmitting</b>	ii. phenotypic
	iii. receiving	iv. sire
14.	The daughters half in between the production level of the dam and sire is called.-- --	
	i. average parent index	ii. equal daughter index
	<b>iii. equal parent index</b>	iv. daughters average index
15.	Regression index is average of equal parent index <b>and breed average.</b>	
	i. daughter average	ii. parent average
	iii. <b>breed average.</b>	iv. equal daughter index
16.	<b>Regression index-</b> is average of equal parent index and breed average.	
	<b>i. regression index</b>	ii. total index
	iii. correlation	iv.sire index
17.	Functional relationship between two traits is called <b>as regression coefficient</b>	
	<b>i. regression coefficient</b>	ii. correlation coefficient
	iii. variance	iv.sire index
18.	Inbreeding depression is opposite to <b>heterosis</b>	
	i. outbreeding	ii. outcrossing
	iii. inbreeding	<b>iv.heterosis</b>
19.	Active interaction of dominance and recessive gene is termed as <b>dominance theory</b> of heterosis.	
	i. recessive	<b>ii. dominance</b>

	iii. dependent	iv. independent
20.	A record of history of ancestors of an individual is called as <b>pedigree</b>	
	i. ancestral character	ii. nomenclature
	iii. classification	iv. <b>pedigree</b>
21.	<b>Robert backwell</b> English scientist in eighteenth century is remembered as setting the pattern of modern animal breeding.	
	i. Robert brown	ii. Robert hook
	iii. <b>Robert backwell</b>	iv. Camilo Golgi
22.	In Animal cell organelles . <b>lysosomes</b> Contains most of the active enzymes removes unneeded material from cell.	
	i. <b>lysosomes</b>	ii. mitochondria
	iii. peroxisomes	iv. ribosome
23.	In <b>meiosis</b> cell division daughter nuclei produce half the number of chromosomes.	
	i. mitosis	ii. equational division
	iii. <b>meiosis</b>	iv. none of these
24.	<b>Mitosis &amp; Meiosis</b> type of division of cell takes place in gonads and proceeds in Gametogenesis.	
	i. mitosis	ii. meiosis
	iii. reductional division	iv. <b>both ii. &amp; iii.</b>
25.	<b>Mitosis</b> division chromosome number remain same as that of original parent nucleolus	
	i. meiosis	ii. reductional division
	iii. <b>mitosis</b>	iv. all of these
26.	<b>Mitosis</b> division of somatic cell and two daughter nuclei are formed	
	i. meiosis	ii <b>mitosis</b>
	iii. <b>mitosis</b>	iv. <b>both ii. &amp; iii.</b>
27.	In meiosis division of animal cell at -----Stage genetic recombination take place	
	i. zygotene	ii. dikinesis
	iii. leptotene	iv. <b>pachytene</b>
28.	Exchange of genetic material in pachytenic stage is termed as <b>crossing over</b>	
	i. <b>crossing over</b>	ii. transmission
	iii. chiasma formation	iv. mitosis
29.	<b>Genetics</b> is a branch of biological science which deals with heredity and variation among	

	related organism.	
	i. breeding	ii. biotechnology
	iii. <b>genetics</b>	iv. both i. & iii.
30.	<b>Heredity</b> means transmission of traits /character from parents to offspring.	
	i. variation	ii. outbreeding
	iii. transferring	iv. <b>heredity</b>
31.	A group of animal having common ancestors of possessing certain common character is called as <b>. breed</b>	
	i. species	ii. genus
	iii. <b>breed</b>	iv. family
32.	A cross of unrelated and inbred individuals often results in F <sub>1</sub> generation which increases vigour much above their of parents is called <b>as hybrid vigor</b>	
	i. outbreeding	ii. <b>hybrid vigor</b>
	iii.outcrossing	iv. cross breeding
33.	Quantitative traits are controlled by <b>Many</b> pairs of gene.	
	i. <b>many</b>	ii. single
	iii. two	iv. both i. & ii.
34.	Qualitative traits are controlled by <b>single</b> Pairs of gene.	
	i. many	ii. <b>single</b>
	iii. two	iv. both i. & ii.
35.	<b>Epistasis</b> is called genetic effect due to interaction among two or more pairs of non-allelic gene.	
	i. hypostatis	ii. heterosis
	iii. <b>Epistasis</b>	iv. hybrid vigour
36.	Gene / Genes masking the effect of new allelic gene <b>Epistatic.</b>	
	i. <b>Epistatic</b>	ii. heterosis
	iii. hypostatic	iv. hybrid vigour
37.	Genes which are masked is <b>called Hypostatic</b>	
	i. <b>Hypostatic</b>	ii. dominant
	iii. epistatic	iv. heterosis
38.	Ability of an individual to stamp a given set of characteristics on its offspring is called	

	<b>Prepotency</b>	
	i. Totipotency	iii. Perpetuation
	ii. <b>Prepotency</b>	iv. None of these
39.	<b>autosomes</b> are the chromosomes other than sex chromosomes	
	<b>i. autosomes</b>	ii. alosomes
	iii. both i. & ii.	iv. none of above
40.	A group of animals which possess similar genotypes is called <b>as species</b>	
	<b>i. species</b>	ii. genus
	iii. breed	iv. family
41	<b>60</b> number of chromosomes(2n) are present in in <i>Boss indicus (Indian)</i> species of cattle	
	i. 54	ii. 58
	iii. 72	<b>iv. 60</b>
42.	Alteration in the chemical structure of gene is called. <b>-mutation</b>	
	i. deletion	ii. inversion
	<b>iii. mutation</b>	iv. alteration
43.	Inverse occurrence of segment of chromosome breaks off and rejoin the opposite end from original is called <b>as inversion</b>	
	<b>i. inversion</b>	ii. duplication
	iii. deletion	iv. translocation
44.	In Hardy and Weinberg law frequency of heterozygosity is not greater than. - <b>50%</b>	
	<b>i. 50%</b>	ii. 100%
	iii. 87.5%	iv. both iii. & iv.
45.	To bring homozygosity and maintaining purity is followed in <b>inbreeding</b> type of systems of breeding.	
	i.outbreeding	<b>ii. inbreeding</b>
	iii. species hybridization	iv. criss crossing
46.	Inbreeding system increases <b>inbreeding</b> to infection.	
	i. susceptibility	ii. resistance
	iii. both i. & ii.	iv. none of above
47.	In <b>out breeding</b> type of systems of breeding mating of individuals who have no common ancestor for four to six generation.	
	<b>i. out breeding</b>	ii. close breeding

	iii. both i. & ii.	iv. line breeding.
48.	Production of new breed formed <b>by cross breeding</b> System of breeding.	
	<b>i. cross breeding</b>	ii. close breeding
	iii. both i. & ii.	iv. line breeding.
49.	Three breeds of same species crossed in rotational manner is called as <b>criss crossing</b>	
	i. triple crossing	ii. criss crossing
	iii. back crossing	iv. cross breeding.
50.	<b>back crossing</b> type of crossing is mating of a crossbred animals back to one of pure bred parent	
	i. rotational crossing	<b>ii. back crossing</b>
	iii. two breed crossing	iv. three breed crossing
51.	Dr. Ian Wilmut at Roslin Institute, Edinburgh, created a sheep in laboratory named- <b>Dolly</b>	
	i. Garima	<b>ii. Dolly</b>
	iii. wilmut	iv. non of these.
52	Water present in embryo stage is <b>95 %</b> of total body of cattle	
	<b>i. 95</b>	ii.75-80
	iii.40-65	iv. 10-20
53	Water present at birth stage is <b>75-80. %</b> of total body of cattle	
	i. 95	<b>ii.75-80</b>
	iii.40-65	iv. 10-20
54	Water present at adult stage is <b>40-65 %</b> of total body of cattle	
	i. 95	ii.75-80
	<b>iii.40-65</b>	iv. 10-20
55	Carbohydrates present in animal body is less than <b>1.%</b>	
	i. 95	ii.75-80
	<b>iii. 1</b>	iv. 10-20
56	Carbohydrate nutrient stored in animal body in liver in the form of <b>glycogen</b>	
	i. glucose	ii. fructose
	iii.galactose	<b>iv. glycogen</b>
57	The scientist Stohmann and Hennberg put forth method of feed analysis called as <b>Weende's method</b> feed analysis.	

	i. Morrison method	<b>ii. Weende's method</b>
	iii. Modified Morrison	iv. Kellner's method
58	<b>Crude protein.</b> Indicates the total amount of protein in to the feedstuff.	
	<b>i. Crude protein</b>	ii. True protein
	iii. NPN	iv. non of above
59	Crude protein includes true protein as well as <b>NPN (Non Protein Nitrogen )</b>	
	i. protein	ii. NPN
	iii. fat	iv. CHO
60	<b>Crude fiber</b> - includes less digestible carbohydrates like pectin, cellulose, hemicelluloses, and lignin.	
	i. NFE	ii. crude protein
	iii. EE	<b>iv. Crude fiber</b>
61	<b>NFE</b> - includes more digestible carbohydrates like starch, sugar cellulose, hemicelluloses in minor quantity.	
	<b>i. NFE</b>	ii. crude protein
	iii. EE	iv. Crude fiber
62	<b>EE</b> (Ether Extract) represents lipid portion of feed stuff in proximate analysis.	
	i. NFE	ii. C. P.
	<b>iii. EE</b>	iv. C. F.
63	<b>Total Ash</b> represents inorganic portion of feed stuff in proximate analysis.	
	i. NFE	<b>ii. Total Ash</b>
	iii. EE	iv. C F
64	<b>Urea</b> - used as special feed source of Non protein nitrogen substance for ruminant animals.	
	<b>i. Urea</b>	ii. Molasis
	iii. Vegetable oils	iv. Animal fat
65	Mineral & Vitamin supplements are the compounds improve value of basal feed and take care any deficiency.	
	i. Feed	ii. Mineral
	iii. Vitamin	<b>iv. All of above</b>
66	<b>Roughages</b> are bulky feeds containing more than 18% crude fiber and less than 60% TDN on air dry matter basis	

	<b>i. Roughages</b>	ii. concentrates
	iii. vitamins	iv. minerals
67	<b>Concentrates</b> - are feeds containing less than 18% crude fiber and more than 60% TDN on air dry matter basis.	
	<b>i. Roughages</b>	<b>ii. concentrates</b>
	iii. vitamins	iv. minerals
68	Succulent roughages contain moisture from <b>60%-90%</b> .	
	<b>i. 60%,90%</b>	ii. 10%,30%
	iii. 0%,5%	iv. 30%,40%
69	Dry roughages contain moisture from <b>15%,20%</b>	
	i.60%,90%	<b>ii. 15%,20%</b>
	iii. 0%,5%	iv.70%,100%
70	The high yielding cows or buffaloes may suffer from a disease <b>Milk fever</b> due to fall in level of blood calcium.	
	<b>i. Milk fever</b>	ii. grass titany
	iii.beri-beri	iv.ricket
71	The high yielding cows or buffaloes may suffer from a disease milk fever due to fall in level of blood <b>calcium</b>	
	<b>i. calcium</b>	ii. Potash
	iii. sulfur	iv. iron
72	<b>Metabolic water</b> . type of water produced inside the body by metabolic process of body.	
	i. free water	<b>ii. metabolic water</b>
	iii. bound water	iv.non of above
73	<b>Bound water</b> type of water differs from free water, combined with constituent of protoplasm of animal cell.	
	<b>i. bound water</b>	ii. metabolic water
	iii.bothi.&ii.	iv.non of above.
74	<b>Water</b> is food constituent that nourishes the body of animal.	
	i. Protein	ii. Water
	iii.Carbohydrate	iv. Nutrient
75	Daily dry matter requirement for adult crossbred cattle is <b>2.5 %</b>	
	<b>i. 2.5 %</b>	ii. 4.5 %



	iii. 3.5 %	iv. 1.5 %
76	The chief energy source of cattle feed ration is <b>Carbohydrate</b>	
	<b>i. Carbohydrate</b>	ii. Protein
	ii. Vitamins	iv. minerals
77	Percent crude protein = Percent N <sub>2</sub> x <b>6.25</b>	
	<b>i) 6.25</b>	ii. 6.46
	iii. 11.25	iv. 16
78	Urea can replace protein satisfactorily total protein in ration for matured ruminants and lactating cows up to <b>30 %</b>	
	<b>i. 30 %</b>	ii. 40%
	iii. 50%	iv. 10 %
79	Energy value of milk fat per gram is <b>9.3 food calories</b>	
	<b>i. 9.3 food calories</b>	ii. 8.3 food calories
	iii. 8.0 food calories	iv. 7.0 food calories
80	<b>Water</b> helps in excretion of waste product in the form of urine ,faeces and perspiration.	
	i. Carbohydrate	ii. Protein
	ii. Vitamins	<b>iv. water</b>

81	<b>Lactose-</b> is made up of one molecules of glucose and one molecules of galactose.	
	i. fructose	ii. maltose
	<b>ii.lactose</b>	iv. sucrose
82	<b>Starch</b> is a mixture of amylase and amylopectin.	
	<b>i. Starch</b>	ii. Glycogen
	ii. Cellulose	iv. Glucose
83	<b>Glycogen</b> is called animal starch.	
	i. Starch	<b>ii. Glycogen</b>
	ii. Cellulose	iv. Glucose
84	The ruminant contains rumen micro-organism in the digestive tract they digest .....	
	i. lignin	ii. tannin
	<b>ii. Cellulose</b>	iv.non of above.
85	At 5 <sup>th</sup> generation of ancestors parents population expression will be . ( 2) <sup>5</sup>	
	<b>i. ( 2)<sup>5</sup></b>	ii. ( 2) <sup>6</sup>
	ii. ( 2) <sup>4</sup>	iv. ( 2) <sup>7</sup>
86	Straw of wheat, barley, rice and oat DCP contains proportionally is . <b>nil</b>	
	<b>i. nil</b>	ii. high
	iii. medium	iv.bothii.&iii. answer
87	Carbohydrates nutrient are received from milk in the form of <b>lactose</b>	
	i. fructose	ii. maltose
	<b>ii.lactose</b>	iv. sucrose
88	Fats are esters of glycerol that are <b>liquid</b> at room temperature.	
	<b>i. liquid</b>	ii..solid
	iii.bothi.&ii.	iv.non of above.
89	Vitamins A,D,K,E are in <b>fat</b> soluble absorbed in to blood of livestock.	
	<b>i. fat</b>	ii. water
	iii. acid	iv. alkali
90	Lysine, Arginine, Histidine are <b>essential</b> type of amino acids present in protein in livestock.	
	i. non-essential	<b>ii. essential</b>
	iii.bothi.&ii.	iv.non of above.
91	<b>Protein</b> nutrient helps in formation wool, hairs, and nails of animal.	
	i. Carbohydrate	<b>ii. Protein</b>

	ii. fat	iv. vitamins
92	Ascorbic acid vitamins is good example of <b>Water</b> soluble of.	
	i. fat	<b>ii. water</b>
	iii. acid	iv. alkali
93	Ascorbic acid contains type- <b>C</b> vitamins.	
	i. A	ii. B
	<b>iii. C</b>	iv. D
94	<b>Osteoporosis</b> -Disease observe in cattle due to deficiency of calcium mineral.	
	<b>i.Osteosporasis</b>	ii.Ricket
	iii. Grass titany	iv.Oedema
95	<b>Pica</b> - disease observe in cattle due to deficiency of phosphorus mineral.	
	i.Osteosporasis	ii.Ricket
	iii. Grass titany	<b>iv. Pica</b>
96	<b>Grass titany</b> - disease observe in cattle due to deficiency of magnesium mineral.	
	i.Osteosporasis	ii.Ricket
	<b>iii. Grass titany</b>	iv. Pica
97	<b>Oedema</b> - disease observe in cattle due to deficiency of chlorine mineral.	
	i.Osteosporasis	ii.Ricket
	iii. Grass titany	<b>iv.Oedema</b>
98	<b>Anemia</b> -disease observe in cattle due to deficiency of Iron mineral.	
	i.Osteosporasis	<b>ii. Anemia</b>
	iii. Grass titany	iv.Oedema
99	<b>Enzootic ataxia</b> disease observe in lambs due to deficiency of copper mineral.	
	<b>i. Enzootic ataxia</b>	ii. Anemia
	iii. Grass titany	iv.Oedema
100	<b>Goiter</b> -disease observe in livestock due to deficiency of iodine mineral.	
	i.Osteosporasis	<b>ii. goiter</b>
	iii. Grass titany	iv.Oedema
101	<b>Reproductive failure</b> . Symptom observe in livestock due to deficiency of cobalt mineral.	
	i.Osteosporasis	ii. goiter

	<b>iii. Reproductive failure</b>	iv. Oedema
102	<b>Night blindness</b> .symptom observe in livestock due to deficiency of vitamin A	
	<b>i. Night blindness</b>	ii. Rickets
	iii. Reproductive failure	iv. Beri-beri
103	<b>Rickets</b> symptom observe in livestock due to deficiency of vitamin D	
	i. Night blindness	<b>ii. Rickets</b>
	iii. Reproductive failure	iv. Beri-beri
104	<b>Reproductive failure</b> symptom observe in livestock due to deficiency of vitamin E	
	i. Night blindness	ii. Rickets
	<b>iii. Reproductive failure</b>	iv. Beri-beri
105	<b>Beriberi</b> symptom observe in livestock due to deficiency of vitamin B	
	i. Night blindness	ii. Rickets
	iii. Reproductive failure	<b>iv. Beri-beri</b>
106	<b>Scurvy</b> symptom observe in livestock due to deficiency of vitamin C	
	<b>i. Scurvy</b>	ii. Rickets
	iii. Reproductive failure	iv. Beri-beri
107	<b>prolonged blood clotting</b> symptom observe in livestock due to deficiency of vitamin K	
	i. Night blindness	ii. Rickets
	<b>iii. prolonged blood clotting</b>	iv. Beri-beri
108	Amount of feed given at time or portion at interval to the animal during 24 hours is called . <b>ration</b>	
	i. complete ration	ii. balance ration
	iii. production ration	<b>iv. ration</b>
109	A ration which provides all essential nutrient for nourishment during 24 hours without excess or deficit is called <b>balance ration</b>	
	i. complete ration	<b>ii. balance ration</b>
	iii. production ration	iv. ration
110	A feed required to maintain body without gain or loss in weight under resting period is called <b>maintainans ration</b>	

	i. complete ration	ii. balance ration
	iii. production ration	<b>iv. maintains ration</b>
111	A feed required to addition to maintenance is called <b>production ration</b>	
	i. complete ration	ii. balance ration
	<b>iii. production ration</b>	iv. maintains ration
112	A ration which provides all essential nutrient require to satisfy the appetite is called -- <b>complete ration</b>	
	<b>i. complete ration</b>	ii. balance ration
	iii. production ration	iv. maintains ration
113	For crude protein estimate by proximate analysis method 5 gm. of digestible mixture contain <b>sulfate of potassium &amp;cobalt</b> chemicals.	
	<b>i. sulfate of potassium &amp;cobalt</b>	ii. sulfate of calcium &copper
	iii. sulfate of copper &cobalt	iv. none of above
114	For crude protein estimate by proximate analysis method 5 gm. of digestible mixture with feed sample adds 20ml.of . <b>sulfuric acid</b>	
	i.sulfer dioxide.	ii. citric acid
	iii. sodium chloride	<b>iv. sulfuric acid</b>
115	In proximate analysis method the nutrient ether extract estimation is carried by <b>soxhlet</b> apparatus.	
	i.Kjeldhal's flask	<b>ii.soxhlet</b>
	iii.bothi.&ii.	iv. none of above
116	For crude protein <b>estimate N</b> element is estimated.	
	i. C	ii. H
	iii. O	<b>iv. N</b>
117	In <b>Crude fiber</b> estimation gives idea of cellulose hemicelluloses and lignin.	
	<b>i.Crude fiber</b>	ii.Crude protein
	iii.Ether extract	iv.Ash
118	Ratio of digestible crude protein and digestible crude non-nitrogenous nutrients called as <b>nutritive ratio</b>	
	i. starch equivalent	<b>ii. nutritive ratio</b>
	iii. gross energy	iv. digestible energy

119	Young and growing animals , ratio between 1:1to 1:4 generally advocated called as <b>narrow</b> ratio	
	i. Wide	ii. medium
	<b>iii. narrow</b>	iv. none of above
120	Milch animals , nutritive ratio(N) between 1:4 to 1:6 generally advocated and called as <b>medium</b> ratio	
	i. Wide	<b>ii. medium</b>
	iii. narrow	iv. none of above
121	Working animals , ratio between 1:6 and above generally advocated and called as <b>Wide</b> ratio.	
	<b>i. Wide</b>	ii. medium
	iii. narrow	iv. none of above
122	<b>Gross</b> energy value of feed is determined by using an instrument bomb calorimeter.	
	i. Net	ii. Metabolic
	iii.Digestible	<b>iv. Gross</b>
123	<b>Digestible</b> energy value of feed is determined by loss of energy through feces from gross energy.	
	i. Net	ii. Metabolic
	<b>iii.Digestible</b>	iv. Gross
124	<b>Metabolic</b> energy value of feed is determined by loss of energy through urine and gas from digestible energy.	
	i. Net	<b>ii. Metabolic</b>
	iii.Digestible	iv. Gross
125	<b>Net</b> Energy value of feed is used to maintenance and production .	
	<b>i. Net</b>	<b>ii. Metabolic</b>
	iii.Digestible	iv. Gross