University of Agriculture, Faisalabad

Question Bank for Animal Sciences for Admission to MS/M.Phil/M.Sc.(Hons)/Ph.D Program

ANIMAL BREEDING AND GENETICS MCQ's					Answer Key
1)	The place on chromosome where gene resides:				C
	A.	Linked genes	B.	Monohybrid	
	C.	Locus	D.	Allele	
2)	A cross of an offspring back to its homozygous recessive parent is known as				D
	A.	Back Cross	B.	Test Cross	
	C.	Monohybrid	D.	Two of these choices	
3)	Alternative form a gene is called:				A
	A.	Allele	B.	Recessive	
	C.	Dominant	D.	None of these choices	
4)	Modification in classical Monohybrid ratios results due to:				D
	A.	Incomplete dominance	B.	Co-dominance	
	C.	Epistasis	D.	Two of these choices	
5)	Interphase is the period corresponding to the cell cycle phase of:				B
	A.	G1+S+G2+M	B.	G1+S+G2	
	C.	Mitosis	D.	G1+S+G2+M+ Mitosis	
6)	The No. of chromosomes kept constant from parent cell to daughter cell during:				B
	A.	Meiosis	B.	Mitosis	
	C.	Both	D.	None	
7)	Exchange of segments between two homologous chromosomes is called:				B
	A.	Deletion	B.	Crossing over	
	C.	Inversion	D.	Reciprocal translocation	
8)	Dominance is an example of:				D
	A.	Non-allelic interaction	B.	Additive interaction	
	C.	Epistasis	D.	Allelic interaction	
9)	If chi-square calculated is less than chi-square tabulated, null hypothesis should be:				A
	A.	Accepted	B.	Rejected	
	C.	Decided on d.f	D.	Tested by t-test.	
10)	A term for genes on the differential segments of the Y chromosome:				A
	A.	Holandric	B.	sex linked	
	C.	sex influenced	D.	incomplete sex linked	
11)	Non-Allelic interaction is termed as:				C
	A.	Dominance	B.	Recessiveness	
	C.	Epistasis	D.	Additive interaction	
12)	Traits determined by genes on the same chromosome tend to be inherited as a single group:				D
	A.	linked genes	B.	linkage group	
	C.	linkage	D.	all of the choices	
13)	A unit of map distance equivalent to 1 % Crossover is called:				C
	A.	Micrometer	B.	Morgan	

	C.	Centimorgan	D.	All	
14)	Genes which cause the death fetal death during pregnancy or at birth:				D
	A.	Sub-lethal genes	B.	Holandric genes	
	C.	Detrimental genes	D.	Lethal genes	
15)	Most detrimental and lethal genes in farm animals are:				B
	A.	Dominant gene	B.	Recessive genes	
	C.	Partially dominant genes	D.	Two of these choices	
16)	Formation of RNA from DNA is known as:				B
	A.	Translation	B.	Transcription	
	C.	Central dogma	D.	Transformation	
17)	An individual that has received genetic material by gene transfer is referred as				C
	A.	Recombinant	B.	Clone	
	C.	Transgenic	D.	None of these	
18)	A change in very small segment of DNA involving single nucleotide is:				D
	A.	Silent mutation	B.	Neutral Mutation	
	C.	Nonsense mutation	D.	Point mutation	
19)	Milk production in sheep is inherited as:				D
	A.	Dominant trait	B.	Sex Influenced trait	
	C.	Sex Linked trait	D.	Sex limited trait	
20)	The force available to breeders to change gene frequency in a population is:				B
	A.	Breeding	B.	Selection	
	C.	Mutation	D.	None of these	
21)	MOET is referred to:				C
	A.	most embryo transferred	B.	mother of elite goat	
	C.	multiple ovulation and embryo transfer	D.	none of these	
22)	BLUP is used for:				A
	A.	estimating breeding values	B.	determining bovine leucosis	
	C.	Belgian Blue upgrading	D.	embryo flushing	
23)	Progeny testing is conducted to select better males because:				D
	A.	males don't produce milk	B.	males are fewer	
	C.	males are more than half of the herds	D.	all of the above	
24)	Narimaster was developed because:				A
	A.	Australia donated droughtmaster heifers	B.	Bhagnari conservation was needed	
	C.	Balochistan is deficient in milk production	D.	Red color was preferred at farmer level	
25)	Law requires semen from A2A2 bulls only because:				D
	A.	A1A1 is rare	B.	A1A2 are hybrids	
	C.	Crossbred cattle are already A2A2	D.	None of these	
26)	A process by which certain individuals in a population are preferred over others for the producing next generation, is called				C
	A.	Inbreeding	B.	Pedigree testing	
	C.	Selection	D.	Progeny testing	
27)	The selection process usually preferred for traits having high heritability on one's own records is				C
	A.	Family Selection	B.	Own Selection	
	C.	Mass Selection	D.	Totally own selection	
28)	Study and control of various means of improving human heredity characters has been termed as				D
	A.	Genetics	B.	Heritability	
	C.	Humanity	D.	Eugenics	

29)	Counseling about heritable disorders in society are basic applications of				C
	A.	Breeding	B.	Animal Nutrition	
	C.	Genetics	D.	Animal Production	
30)	The Cholistani breed of dairy cattle originated in,				C
	A.	Australia	B.	Cuba	
	C.	Pakistan	D.	USA	
31)	Type of protein present in chromosomes				A
	A.	histones	B.	carotene	
	C.	both	D.	none	
32)	DNA is made up of				B
	A.	Nucleoside	B.	Nucleotide	
	C.	Protein	D.	all	
33)	Nitrogenous base + sugar				A
	A.	Nucleoside	B.	Nucleotide	
	C.	Protein	D.	none of above	
34)	Pyramidine bases				D
	A.	Cytosine	B.	thymine	
	C.	uracil	D.	all	
35)	The process whereby RNA is synthesized from a DNA template				B
	A.	translation	B.	transcription	
	C.	replication	D.	all	
36)	The single stranded pieces of DNA produced by discontinuous replication of double stranded DNA				A
	A.	okazaki fragments	B.	beta helix	
	C.	alpha helix	D.	all	
37)	Regions within an eukaryotic primary transcript that are removed during processing of m RNA				B
	A.	exon	B.	intron	
	C.	okazaki fragments	D.	none of above	
38)	Removal or reversal of damaged DNA by a light - dependent enzyme				C
	A.	activation	B.	reactivation	
	C.	photoreactivation	D.	all	
39)	A genetic unit that code for the amino acid sequence of a complete polypeptide chain is most closely related to				C
	A.	an anticodon	B.	a promoter	
	C.	a gene	D.	a codon	
40)	Given the antisens strand DNA codon 3' TAC 5', anti codon that pairs with the corresponding m RNA codon could be				B
	A.	3' CAT 5'	B.	3' AUG 5'	
	C.	3' UAC 5'	D.	5' GUA 3'	
41)	A mutation in the codon UCG to UAG is be described as				D
	A.	a missence mutation	B.	a neutral mutation	
	C.	a silent mutation	D.	a frameshift mutation	
42)	Loss of some portion of DNA				D
	A.	transition mutation	B.	point mutation	
	C.	gross mutation	D.	deletion mutation	
43)	The generalized flow of genetic information from DNA to protein				A
	A.	central dogma of molecular biology	B.	translation	
	C.	transcription	D.	Replication	

44)	Ribosome consist of different kind of protein				B
	A.	25	B.	50	
	C.	23	D.	42	
45)	Adjective describing a locus whose phenotypic manifestation is suppressed by the phenomenon				D
	A.	epistasis	B.	dominance	
	C.	codominance	D.	hypostatic	
46)	A trait selected with natural selection				B
	A.	Production trait	B.	Fitness	
	C.	Quantitative traits	D.	None of above	
47)	The mating in which purebreds of the same breed are mated is				B
	A.	Inbreeding	B.	Straightbreeding	
	C.	Linebreeding	D.	None of above	
48)	Hybrid vigor for the direct component of a trait				D
	A.	Maternal hybrid vigor	B.	Paternal hybrid vigor	
	C.	Both A & B	D.	None of A & B	
49)	The forces acting to cause one genotype to be more fertile than another genotype				B
	A.	Natural selection	B.	Fecundity selection	
	C.	Mass selection	D.	None of above	
50)	An allele for which all members of the population under study are homozygous, so that no other alleles for this locus exist in the population				B
	A.	Homozygous Alleles	B.	Fixed allele	
	C.	Both A & B	D.	None of A & B	
51)	A step curve in which the frequencies of various arbitrarily bounded classes are graphed				B
	A.	Histogram	B.	Frequency histogram	
	C.	Frequency distribution	D.	None of above	
52)	In the evolutionary sense, some heritable feature of an individual's phenotype that improves its chances of survival and reproduction in the existing environment				C
	A.	Fitness	B.	Fertility	
	C.	Adaptation	D.	Adaptive peak	
53)	Genetic variance associated with the average effects of substituting one allele for another				B
	A.	Genetic variance	B.	Additive genetic variance	
	C.	Genotypic variance	D.	All of above	
54)	A rotational cross breeding system in which sire breeds are not used simultaneously, but introduced in sequence				B
	A.	Terminal sire	B.	Rotation in time	
	C.	Both A & B	D.	None of A & B	
55)	A discredited model of inheritance suggesting that the characteristics of an individual result from the smooth blending of fluid like influences from its parents				B
	A.	Medallion inheritance	B.	Blending inheritance	
	C.	Both A & B	D.	None of A & B	
56)	The proportion of total phenotypic variance at the population level that is contributed by genetic variance				B
	A.	Population heritability	B.	Broad sense heritability	
	C.	Narrow sense heritability	D.	None of above	
57)	Segregating and heritable determinant of the phenotype				C
	A.	Gene dose	B.	Gene family	
	C.	Gene	D.	Allele	
58)	The presence of a plasmid in a bacterial culture is usually determined by				B
	A.	blue-white screening	B.	growth in the presence of an antibiotic	
	C.	a restriction enzyme digest	D.	agarose gel electrophoresis	

59)	Transformation is				A
	A.	the take-up of a plasmid into a bacterium	B.	the expression of a gene in a bacterium	
	C.	the take-up of a bacteriophage into a bacterium	D.	the isolation of a plasmid from a bacterium	
60)	In agarose gel electrophoresis				D
	A.	DNA migrates towards the negative electrode	B.	supercoiled plasmids migrate slower than their nicked counterparts	
	C.	larger molecules migrate faster than smaller molecules	D.	Ethidium bromide can be used to visualize the DNA	
61)	The ABO blood groups of humans are determined by three alleles. How many genotypes are possible for these phenotypes?				C
	A.	3	B.	4	
	C.	6	D.	8	
62)	A mother of blood group O has a group O child. The father could be				A
	A.	A or B or O	B.	O only	
	C.	A or B	D.	AB only	
63)	If an individual of genotype AaBbCcDd is testcrossed, how many different phenotypes can appear in the progeny?				D
	A.	4	B.	8	
	C.	12	D.	16	
64)	If individuals of genotype AaBbCc are intercrossed, how many different phenotypes can appear in their offspring?				C
	A.	3	B.	6	
	C.	8	D.	16	
65)	If individuals of genotype AaBbCc are intercrossed, how many different genotypes can occur in their progeny?				D
	A.	6	B.	8	
	C.	16	D.	None of the above	
66)	The principle of dominance states that				C
	A.	all alleles are dominant	B.	all alleles are recessive	
	C.	some alleles are dominant and cover or mask the recessive alleles	D.	alleles are neither dominant nor recessive	
67)	DNA is copied during a process called				A
	A.	replication	B.	translation	
	C.	transcription	D.	transformation	
68)	The process of making changes in the DNA code of living organisms is called				B
	A.	selective breeding	B.	genetic engineering	
	C.	inbreeding	D.	hybridization	
69)	Viruses have more difficulty entering plant cells than animal cells because				A
	A.	plant cells have tough cell walls	B.	nitrogen fixation harms plant cells	
	C.	animal cells have no cell membranes	D.	viroids only infect animals	
70)	Mutations which occur in body cells which do not go on to form gametes can be classified as				B
	A.	auxotrophic mutations	B.	somatic mutations	
	C.	morphological mutations	D.	oncogenes	
71)	What would be the frequency of AABBCC individuals from a mating of two AaBbCc individuals?				A
	A.	1/64	B.	1/32	
	C.	1/16	D.	1/8	
72)	The stage of meiosis in which chromosomes pair and cross over is				A
	A.	prophase I	B.	metaphase I	
	C.	prophase II	D.	metaphase II	
73)	Which component of transcribed RNA in eukaryotes is present in the initial transcript but is removed before translation occurs:				A

	A.	Intron	B.	3’ Poly A tail	
	C.	Ribosome binding site	D.	5’ cap E. codons coding for the protein to be produced	
74)	Choose the correct statement about the genetic code				D
	A.	includes 61 codons for amino acids and 3 stop codons	B.	almost universal; exactly the same in most genetic systems	
	C.	three bases per codon	D.	all of the above	
75)	Assuming that the level of glucose is low, a mutation in the repressor associated with the lac operon of E. coli which prevents binding of the repressor to lactose should result in:				B
	A.	constitutive expression of the lac operon genes	B.	lack of expression or reduced expression of the lac operon genes under all circumstances	
	C.	expression of the genes only when lactose is present	D.	expression of the genes only when lactose is absent	
76)	On average, how many fragments would a restriction enzyme which recognizes a specific 4 base sequence in DNA be expected to cleave a double-stranded bacteriophage with a genome size of 5,000 bp into?				C
	A.	about 2	B.	about 4	
	C.	about 20	D.	about 50	
77)	The “sticky ends” generated by restriction enzymes allow:				D
	A.	selection for plasmids lacking antibiotic resistance	B.	easy identification of plasmids which carry an insert	
	C.	replication of transfer RNA within the bacterial cell	D.	. pieces of DNA from different sources to hybridize to each other and to be joined together	
78)	QTL analysis is used to:				D
	A.	identify RNA polymerase binding sites	B.	map genes in bacterial viruses	
	C.	determine which genes are expressed at a developmental stage	D.	identify chromosome regions associated with a complex trait in a genetic cross	
79)	Assuming Hardy-Weinberg equilibrium, the genotypic frequency of heterozygotes, if the frequency of the two alleles at the gene being studied are 0.6 and 0.4, will be:				C
	A.	0.80	B.	0.64	
	C.	0.48	D.	0.32	
80)	The likelihood of an individual in a population carrying two specific alleles of a human DNA marker, each of which has a frequency of 0.2, will be:				D
	A.	0.4	B.	0.32	
	C.	0.16	D.	0.08	
81)	Which of the following is NOT involved in translation?				B
	A.	Amino acids	B.	DNA	
	C.	mRNA	D.	rRNA	
82)	Pyrimidines have a _____ chemical structure				B
	A.	Straight chain	B.	One ringed	
	C.	Two ringed	D.	Three ringed	
83)	The mRNA that would be transcribed from the sequence 3' GGC 5' in a sense strand of DNA would be:				B
	A.	5' UUG 3'	B.	5' CCG 3'	
	C.	5' CGG 3'	D.	5' GCC 3'	
84)	A single strand of DNA has an A+T/C+G ratio of 1.67. The ratio in the complementary strand would be:				D
	A.	0.60	B.	1.33	
	C.	1.45	D.	1.67	
85)	During MITOSIS, synapsis occurs in the phase called:				D
	A.	Prophase	B.	Metaphase	
	C.	Anaphase	D.	None of the above	

86)	During which phase within a somatic cell cycle does DNA replication occur?				A
	A.	Interphase	B.	Prophase	
	C.	Metaphase	D.	Anaphase	
87)	Female gametogenesis differs greatly from male gametogenesis in that meiosis in the female oocyte is arrested in _____ at the time of birth				A
	A.	Prophase I	B.	Metaphase I	
	C.	Interphase I	D.	Prophase II	
88)	Which of the following chemical bonds would NOT be found in DNA?				D
	A.	Covalent	B.	Glycosidic	
	C.	Hydrogen	D.	Peptide	
89)	Breeding value is defined as				A
	A.	The value of an individual as a parent	B.	The value of a Progeny	
	C.	The value of an individual as a parent and value of an offspring as a producer	D.	All	
90)	The process that determines which individuals become the parents for the first time is known as				B
	A.	Culling	B.	Replacement selection	
	C.	Selection	D.	All	
91)	Selection on the basis of individual's phenotypic performance is called as				D
	A.	Artificial selection	B.	Natural selection	
	C.	Replacement Selection	D.	Phenotypic selection	
92)	The heritability of fertility in mammals is quite				B
	A.	High	B.	Low	
	C.	Medium in range	D.	None of above	
93)	Measure of strength of relationship between true values and their predictions is known as				A
	A.	Accuracy of prediction	B.	EBV	
	C.	Heritability	D.	Genetic prediction	
94)	A list of genetic predictions, accuracy values, and other useful information about sires in a breed is called				C
	A.	Sire value	B.	Animal model	
	C.	Sire summary	D.	All	
95)	A trait affected by many genes, no single gene have an over riding influence is called				B
	A.	Qualitative trait	B.	Quantitative trait	
	C.	Multigene trait	D.	Inherited trait	
96)	Fertility in mammals is a				B
	A.	Qualitative trait	B.	Quantitative trait	
	C.	Multigene trait	D.	Inherited trait	
97)	Simply inherited traits are those which are controlled by				A
	A.	Small number of genes	B.	High amount of genes	
	C.	Quantitative genes	D.	None	
98)	Breeding values and their predictions, or even with concepts like heritability are meant for				C
	A.	Simply inherited traits	B.	Qualitative traits	
	C.	Quantitative traits	D.	None	
99)	The mating of sires of one breed or breed combination to dams of another breed or breed combination is known as				B
	A.	Line breeding	B.	Cross breeding	
	C.	Inbreeding	D.	Heterosis	
100)	An individual that is a combination of species, breeds within species, or lines within breeds is called				C
	A.	Inbred individual	B.	Linebred individual	

	C.	Hybrid	D.	Heterosis	
101)	An increase in the performance of hybrids over that of purebreds, is called				A
	A.	Hybrid vigor	B.	Crossbreeding	
	C.	Hybrid	D.	All	
102)	If heritability of a trait is high then the breeding value for the same trait will be				C
	A.	High	B.	Same	
	C.	Have no relation	D.	None	
103)	Which of the following statement is true regarding heritability				D
	A.	Heritability changes from population to population	B.	Heritability is a population measure	
	C.	Heritability is less than repeatability for the same trait	D.	All	
104)	Heritability can be increased by				D
	A.	Uniformity of environment	B.	Accurate measurement of records	
	C.	Adjustment of records for known environmental effects	D.	All	
105)	The ratio of an individual's performance to the average performance of all animals in the individual's contemporary group is called as				A
	A.	Trait ratios	B.	Selection differential	
	C.	Phenotypic performance	D.	None	
106)	Rate of change in mean breeding value of a population caused by selection is called				C
	A.	Trait ratio	B.	Selection differential	
	C.	Rate of genetic change	D.	None	
107)	Variability of breeding values within a population for a trait under selection is called				C
	A.	Rate of genetic change	B.	Genetic change	
	C.	Genetic variation	D.	All	
108)	Genetic variation within a population increases by				B
	A.	Inbreeding	B.	Out breeding	
	C.	Random mating	D.	All	
109)	A population exhibits				D
	A.	growth	B.	differentiation	
	C.	maintenance	D.	all	
110)	The proportion of a particular genotype in a population				A
	A.	genotypic frequency	B.	phenotypic frequency	
	C.	gene frequency	D.	gene pool	
111)	Proportion or percentage of a particular gene in total gene pool				C
	A.	genotypic frequency	B.	phenotypic frequency	
	C.	gene frequency	D.	gene pool	
112)	The genotypic and gene frequency remain the same after generation after generation of random mating is a law presented by				D
	A.	Mendel	B.	Lamarck	
	C.	Darwin	D.	Hardy-Weinberg	
113)	Forces that change the genetic composition of population are				D
	A.	mutation	B.	migration	
	C.	selection	D.	all	
114)	A population in which the frequency of a given allele remains constant generation after generation is said to be in state of				C
	A.	equilibrium	B.	disequilibrium	

	C.	genetic equilibrium	D.	fixed population	
115)	Phenotypic value is a combination of				D
	A.	genotypic value	B.	genotype	
	C.	environmental value	D.	a and c	
116)	In population genetics regression of subsequent performance on past performance				B
	A.	heritability	B.	repeatability	
	C.	variance	D.	covariance	
117)	The measure of the association between the same trait measured on different, related animals and so indicates the extent to which the traits will be inherited together				B
	A.	phenotypic correlation	B.	genotypic correlation	
	C.	regression	D.	correlation	
118)	The genes that have drastic effect and cause the death of the young during pregnancy or at the time of birth are referred to as				A
	A.	lethal	B.	sub lethal	
	C.	semi lethal	D.	Detrimental	
119)	More than two alternative genes that can occupy the locus.				A
	A.	multiple alleles	B.	multilateral alleles	
	C.	both	D.	none	
120)	The presence of two non-allelic genes affecting two traits in the same chromosome is				C
	A.	epistasis	B.	dominance	
	C.	linkage	D.	over dominance	
121)	The different traits determined by genes on the same chromosome tend to be inherited as a single group				B
	A.	linked genes	B.	linkage group	
	C.	linkage	D.	all	
122)	The occurrence of one event in a given trial excluding the possibility of the occurrence of another event is known as				A
	A.	mutually exclusive	B.	mutual occurrence	
	C.	both	D.	none	
123)	What is the probability that two pannies tossed into air will both come up head?				C
	A.	1/2	B.	1/3	
	C.	1/4	D.	0	
124)	Division of cytoplasm				B
	A.	karyokinesis	B.	cytokinesis	
	C.	diakinesis	D.	none	
125)	Pairing of homologous chromosomes				A
	A.	synapsis	B.	karyokinesis	
	C.	cytokinesis	D.	diakinesis	
126)	Array of chromosomes in a given cell				A
	A.	Karyotype	B.	Genotype	
	C.	Phenotype	D.	none	
127)	The process of the formation of the gametes				C
	A.	spermatogenesis	B.	oogenesis	
	C.	gametogenesis	D.	all	
128)	The no. of chromosomes kept constant from generation to generation				A
	A.	Meiosis	B.	mitosis	
	C.	both	D.	none	
129)	Structure formed at the spot where crossing over occurs				A

	A.	Chiasma	B.	synapsis	
	C.	Both	D.	none	
130)	Genes present on the X chromosome				A
	A.	sex linked	B.	holandric	
	C.	Autosomes	D.	none	
131)	The most extensively used breed for cross breeding is				C
	A.	Nili-Ravi	B.	Kundi	
	C.	Sahiwal	D.	Dajal	
132)	Progeny testing is the method of choice for selection of breeding				A
	A.	males	B.	females	
	C.	heifers	D.	calves	
133)	MOET is meant for multiplication of genetic material from				B
	A.	males	B.	females	
	C.	heifers	D.	calves	
134)	Sires contribute the most of genes to the herd which are				A
	A.	70%	B.	80%	
	C.	90%	D.	95%	
135)	Gene that are alike in state are				C
	A.	alike in chemical structure	B.	functioning the same	
	C.	from common parentage	D.	two of these	
136)	Fitness traits relate to the animals ability				B
	A.	to exercise	B.	to survive and reproduce	
	C.	to high production	D.	to none of these	
137)	Most important factor for causing heritability to be low is				C
	A.	genetic control	B.	maternal effect	
	C.	environmental influences	D.	paternal effect	
138)	The heritability of a trait can be improved by controlling				A
	A.	environment	B.	genetic control	
	C.	maternal effect	D.	paternal effect	
139)	Reproductive traits are				C
	A.	highly heritable	B.	not heritable	
	C.	lowly heritable	D.	none of these	
140)	The longer dry periods and days open cause high producing cows to leave the herd				B
	A.	with minimum genetic contribution	B.	with low economic return	
	C.	ith decreased productive live	D.	all of these	
141)	Most common reason for culling a cow in developing countries is				B
	A.	production cessation	B.	reproductive failure	
	C.	Disease	D.	meat production	
142)	Lactation exhibits the trend which is known as				C
	A.	Polynomial	B.	linear	
	C.	Curvilinear	D.	multiple response	
143)	Progeny test may be used in selection for				B
	A.	Qualitative traits	B.	Quantitative traits	
	C.	Both	D.	None	
144)	A system of selection for increasing the combining ability of two or more lines or breeds that have already demonstrated from past crosses that they" nick" or combine well.				B

	A.	Mass selection	B.	Reciprocal recurrent selection	
	C.	Progeny testing	D.	None	
145)	Selection for a single trait at a time is				A
	A.	Tandem selection	B.	Mass selection	
	C.	Reciprocal recurrent selection	D.	All	
146)	Selection for two or more traits at a time but with a set minimum level for each trait				C
	A.	Tandem selection	B.	Mass selection	
	C.	Independent culling	D.	Progeny selection	
147)	The selection method that involves the separate determination of the value for each trait and then addition of these values to give a total score for all of the traits.				D
	A.	Tandem selection	B.	Mass selection	
	C.	Independent culling	D.	Selection index	
148)	A bull calf gained 4.0lb/day on a gain test as compare to an average of 2.50lb/day for other bull calves on the same test. What would be its gain ratio?				C
	A.	100	B.	150	
	C.	160	D.	195	
149)	The ability of a parent to stamp its characteristics on its offspring so that they resemble that parent, or each other more than usual				C
	A.	Hybrid vigor	B.	Nicking	
	C.	Prepotency	D.	Heterosis	
150)	A system of mating where each male has equal opportunity of mating with any female in the group				B
	A.	Tandem mating	B.	Random mating	
	C.	Selective mating	D.	Inbreeding	
151)	An individual with a white coat color and with pink eyes. Pigment is lacking in all external parts of the body.				A
	A.	True Albino	B.	Pseudo Albino	
	C.	Both	D.	None	
152)	The production of a particular phenotype by environment that is also produced by heredity				B
	A.	Phenotype	B.	Phenocopy	
	C.	Penetrance	D.	All	
153)	Some individuals inherited a particular genotype do not have associated phenotype				A
	A.	Penetrance	B.	Dominance	
	C.	Phenocopy	D.	All	
154)	Genetic gain per year is increased by				B
	A.	Increasing generation interval	B.	Decreasing generation interval	
	C.	Constant generation interval	D.	Eliminating generation interval	
155)	Selection differential is written as				A
	A.	S = Selected parent mean - Population mean	B.	S = Selected parent mean + Population mean	
	C.	S = Population mean - Selected parent mean	D.	S = Population mean + Selected parent mean	
156)	The relative chromosomal location of a gene				A
	A.	locus	B.	loci	
	C.	DNA	D.	none	
157)	Nitrogenous base + sugar + phosphorus				B
	A.	Nucleoside	B.	Nucleotide	
	C.	Protein	D.	none of above	
158)	The stage of meiosis in which chromosomes pair and cross over is:				A
	A.	prophase I	B.	metaphase I	
	C.	prophase II	D.	metaphase II	
159)	Mating of closely related individuals is called				A

	A.	Inbreeding	B.	Crossbreeding	
	C.	Linebreeding	D.	Outbreeding	
160)	Important tropical dairy breeds of Pakistan include:				A
	A.	Sahiwal & Cholistani	B.	Sahiwal & Dhanni	
	C.	Dhanni & Bhagnari	D.	Kankraj & Dhanni	
161)	The heritability of milk yield is				C
	A.	Low	B.	High	
	C.	Medium	D.	A & B	
162)	Breeding value is defined as				A
	A.	The value of an individual as a parent	B.	The value of a Progeny	
	C.	The value of an individual as a parent and value of an offspring as a producer	D.	All	
163)	The process that determines which individuals become the parents for the first time is known as				B
	A.	Culling	B.	Replacement selection	
	C.	Selection	D.	All	
164)	Accuracy of selection is dependent on				D
	A.	Heritability of a trait	B.	Genetic prediction technology	
	C.	Number of records	D.	All	
165)	The rate of genetic change is dependent on				D
	A.	Accuracy of selection	B.	Generation interval	
	C.	Intensity of selection	D.	All	
166)	Proportion or percentage of a particular gene in total gene pool				C
	A.	genotypic frequency	B.	phenotypic frequency	
	C.	gene frequency	D.	gene pool	
167)	The genotypic and gene frequency remain the same after generation after generation of random mating is a law presented by				D
	A.	Mendel	B.	Lamark	
	C.	Darwin	D.	Hardy-weinberg	
168)	A mutation in the codon UCG to UAG is be described as				A
	A.	a missence mutation	B.	a neutral mutation	
	C.	a silent mutation	D.	a frameshift mutation	
169)	A person with Kalinifelter syndrom is considered as				B
	A.	Monosomic	B.	Trisomic	
	C.	Triploid	D.	Deletion	
170)	BLUP stands for				C
	A.	Bohemian likely unbiased probability	B.	Bohemian linear unbiased prediction	
	C.	Best linear unbiased prediction	D.	Best likely unbiased probability	
171)	A trait affected by many genes, no single gene have an overriding influence is called				B
	A.	Qualitative trait	B.	Quantitative trait	
	C.	Multigene trait	D.	Inherited trait	
172)	Breeding values and their predictions, or even with concepts like heritability are meant for				C
	A.	Simply inherited traits	B.	Qualitative traits	
	C.	Quantitative traits	D.	None	
173)	The mating of sires of one breed or breed combination to dams of another breed or breed combination is known as				B
	A.	Line breeding	B.	Cross breeding	
	C.	Inbreeding	D.	Heterosis	
174)	Progeny testing is the method of choice for selection of breeding				A

	A.	males	B.	females	
	C.	heifers	D.	Calves	
175)	A system of selection for increasing the combining ability of two or more lines or breeds that have already demonstrated from past crosses that they" nick" or combine well.				B
	A.	Mass selection	B.	Reciprocal recurrent selection	
	C.	Progeny testing	D.	None	
176)	The value of regression coefficient				D
	A.	always ranges between 0 and 1	B.	may be less than zero or more than one	
	C.	cannot be negative	D.	two of these choices	
177)	The measures of central tendency include				B
	A.	Mean and median	B.	Mean, median and mode	
	C.	Mean, median, mode and variance	D.	Mean and variance only	
178)	Replication is needed to get an estimate of the				D
	A.	standard error	B.	variance	
	C.	standard deviation	D.	experimental error	
179)	Normal Distribution is always a				A
	A.	Bell shaped curve	B.	Positively skewed	
	C.	Negatively skewed	D.	Straight line	
180)	The ability of a parent to stamp its characteristics on its offspring so that they resemble that parent, or each other more than usual.				C
	A.	Hybrid vigor	B.	Nicking	
	C.	Prepotency	D.	Heterosis	
181)	The most famous cattle draught breed of Balochistan is				D
	A.	Sahiwal	B.	Kankraj	
	C.	Lohani	D.	Bhagnari	
182)	The heritability of milk yield is				C
	A.	Low	B.	High	
	C.	Medium	D.	None of these	
183)	What is the difference in the number of phenotypes produced by a single gene locus with two alleles with dominance versus co-dominance?				A
	A.	1	B.	2	
	C.	3	D.	Many	
184)	Which evolutionary process is entirely random?				D
	A.	Gene flow	B.	Natural selection	
	C.	Speciation	D.	Mutation	
185)	Heritability is defined as				C
	A.	Additive genetic worth of an individual	B.	The parentage value	
	C.	A measure of strength of relationship b/w breeding value and phenotypic value for a trait in a population	D.	None of above	
186)	Which one of the followings is a highly heritable trait				C
	A.	Fertility	B.	Milk production	
	C.	Mature body weight	D.	None	
187)	Forces that change the genetic composition of population are				D
	A.	mutation	B.	migration	
	C.	selection	D.	All	
188)	Movement of individuals between populations is called				B
	A.	displacement	B.	migration	

	C.	mutation	D.	Habituation	
189)	More than two alternative genes that can occupy the locus				A
	A.	multiple alleles	B.	multilateral alleles	
	C.	both	D.	none	
190)	The presence of two non-allelic genes affecting two traits in the same chromosome is				C
	A.	Epistasis	B.	dominance	
	C.	linkage	D.	over dominance	
191)	The genotype with two different alleles for a trait				B
	A.	Homozygous	B.	Heterozygous	
	C.	Hemizygous	D.	Autozygous	
192)	Division of nucleus				B
	A.	Synapsis	B.	karyokinesis	
	C.	cytokinesis	D.	diakinesis	
193)	One of the two identical halves of a replicated chromosome				B
	A.	Centomere	B.	chromatid	
	C.	chromosome	D.	all	
194)	Haploid cells specialized for reproduction				B
	A.	Genes	B.	Gametes	
	C.	both	D.	none	
195)	DNA is copied during a process called				A
	A.	Replication	B.	translation	
	C.	transcription	D.	transformation	
196)	Beetal is a goat breed of Pakistan and its habitat is in				A
	A.	Punjab	B.	Sindh	
	C.	Balochistan	D.	NWFP	
197)	The longer dry periods and days open cause high producing cows to leave the herd				D
	A.	with minimum genetic contribution	B.	with low economic return	
	C.	with decreased productive life	D.	all of these	
198)	Lactation exhibits the trend which is known as				C
	A.	polynomial	B.	linear	
	C.	curvilinear	D.	multiple response	
199)	Gene that are alike in state are				C
	A.	alike in chemical structure	B.	functioning the same	
	C.	from common parentage	D.	two of these	
200)	If heritability of a trait is high then the breeding value for the same trait will be				C
	A.	High	B.	Same	
	C.	Have no relation	D.	None	
201)	Phenotypic value is a combination of				D
	A.	genotypic value	B.	genotype	
	C.	environmental value	D.	a and c	
202)	The measure of degree of association between two traits measured on the same individuals in a population				A
	A.	phenotypic correlation	B.	genotypic correlation	
	C.	regression	D.	correlation	
203)	Total milk yield and total fat yield have a				A
	A.	positive correlation	B.	negative correlation	
	C.	no correlation	D.	none of these	

204)	The value of a variance				D
	A.	always ranges between 0 and 1	B.	May be less than zero or more than 1	
	C.	May be negative or positive	D.	Always positive but any value, may be more than 1	
205)	The number of treatments must be equal to the number of experimental units in				C
	A.	CRD	B.	RCBD	
	C.	LSD	D.	None of these choices	
206)	DNA is located in				A
	A.	Nuclues	B.	Cytoplasm	
	C.	Mitochondria	D.	None of these	
207)	Which of the following is NOT involved in translation?				B
	A.	Amino acids	B.	DNA	
	C.	mRNA	D.	rRNA	
208)	A single strand of DNA has an A+T/C+G ratio of 1.67. The ratio in the complementary strand would be				D
	A.	0.60	B.	1.33	
	C.	1.45	D.	1.67	
209)	A trait affected by many genes, no single gene have an over riding influence is called				B
	A.	Qualitative trait	B.	Quantitative trait	
	C.	Multigene trait	D.	Inherited trait	
210)	Survivability is a				B
	A.	Highly heritable trait	B.	Low heritable trait	
	C.	Moderately Heritable trait	D.	None	
211)	Number of legs in a dog is a				D
	A.	Highly heritable trait	B.	Moderately heritable trait	
	C.	Low heritable trait	D.	None	
212)	The rate of genetic change is dependent on				D
	A.	Accuracy of selection	B.	Generation interval	
	C.	Intensity of selection	D.	All	
213)	Milk yield and fat yield have a				B
	A.	positive correlation	B.	negative correlation	
	C.	no correlation	D.	none of these	
214)	The phenotypic ratio of monohybrid cross				A
	A.	3 ratio 1	B.	9 ratio 1	
	C.	2 ratio 1	D.	3 ratio	
215)	Chromosomes that do not differ between the sexes				A
	A.	Autosomes	B.	sex chromosomes	
	C.	both	D.	none	
216)	Pairing of homologous chromosomes				A
	A.	synapsis	B.	karyokinesis	
	C.	cytokinesis	D.	diakinesis	
217)	Nitrogenous base + sugar				A
	A.	Nucleoside	B.	Nucleotide	
	C.	Protein	D.	none of the choices	
218)	Double helical structure of DNA				A
	A.	Watson and Crick	B.	Griffth	
	C.	Harshey	D.	none	
219)	No. of hydrogen bonds between A & T				C
	A.	4	B.	3	
	C.	2	D.	1	

220)	Which of the following is not a characteristic of cellular RNA?				D
	A.	contain uracil	B.	is single stranded	
	C.	is much shorter than DNA	D.	serves as template for its own synthesis	
221)	A unit of map distance equivalent to 1 % Crossover				C
	A.	Micrometer	B.	Morgan	
	C.	Centimorgan	D.	All	
222)	Change in the mean performance of a population over time caused by change in environment is referred to as ----------.				C
	A.	GxE interaction	B.	Genetic trend	
	C.	Environmental trend	D.	Regression	
223)	A crossbreeding system in which maternal breed females are mated to paternal breed sires to efficiently produce progeny that are especially desirable from a market standpoint. Terminally sired females are not kept as replacements, but are slaughtered.				A
	A.	Terminal sire crossbreeding system	B.	Rotational crossbreeding system	
	C.	Complementarity	D.	None of above	
224)	A rotational cross breeding system in which sire breeds are not used simultaneously, but introduced in sequence.				B
	A.	Terminal sire	B.	Rotation in time	
	C.	Both A & B	D.	None of A & B	
225)	The DNA fingerprinting process involves				C
	A.	chain terminators	B.	degenerate oligonucleo-tides	
	C.	VNTR loci	D.	RFLPs	
226)	The improvement method suggested for improvement of Sahiwal cattle and Nili-Ravi buffalo in Pakistan's breeding policy is				D
	A.	through genetic selection	B.	development of gene pools	
	C.	establishment of farmers' cooperatives	D.	all of these	
227)	RCBD is used when				C
	A.	experimental material is quite homogenous and has no known source of variation	B.	experimental material has one known source of variation	
	C.	experimental material has two known source of variation	D.	none of these choices	
228)	Standard deviation of mean is				C
	A.	Square of variance	B.	variance/2	
	C.	Square root of variance	D.	Square of standard error of mean	
229)	The response to selection for more than one trait is equal to				B
	A.	√n	B.	1/√n	
	C.	n/√n	D.	√n/n	
230)	Full sibs have				C
	A.	Common sire	B.	Common dam and grand dam	
	C.	Common sire and dam	D.	Common sire and grandsire	
231)	The science of genetics was born in				A
	A.	1900	B.	1905	
	C.	1910	D.	1912	
232)	The term genetics was coined by				A
	A.	Bateson	B.	Punnett	
	C.	Morgan	D.	De Vries	

233)	Bateson coined the term genetics in				B
	A.	1900	B.	1905	
	C.	1907	D.	1910	
234)	Mendels results were independently rediscovered in 1900 by				D
	A.	De Vries	B.	Correns	
	C.	Tschermak	D.	All of these	
235)	The preformation theory was proposed by				B
	A.	Bateson	B.	Swammerdam & Bonnet	
	C.	Weismann	D.	Lamarck	
236)	The theory of epigenesis was proposed by				B
	A.	Weismann	B.	Wolff	
	C.	Lamarck	D.	Darwin	
237)	The theory of acquired character was proposed by				B
	A.	Wolff	B.	Lamarck	
	C.	Weismann	D.	De Vries	
238)	Theory of Pangenes was advocated by				B
	A.	Weismann	B.	Darwin	
	C.	Lamarck	D.	Wolff	
239)	The germplasm theory was proposed by				B
	A.	Darwin	B.	Weismann	
	C.	Lamarck	D.	Sutton	
240)	Weismann advocated germplasm theory in				C
	A.	1875	B.	1879	
	C.	1889	D.	1901	
241)	Which of the following theories is universally accepted?				C
	A.	Preformation	B.	Pangenes	
	C.	Epigenesis	D.	Germplasm	
242)	The term cytogenetics was coined by				B
	A.	Bateson	B.	Sutton	
	C.	Morgan	D.	Chatton	
243)	Sutton coined the term cytogenetics in				A
	A.	1903	B.	1905	
	C.	1908	D.	1910	
244)	Term eugenics was first used by				B
	A.	Fisher	B.	Galton	
	C.	Sutton	D.	Bateson	
245)	Galton coined the lerm eugenics in				B
	A.	1875	B.	1883	
	C.	1885	D.	1890	
246)	Term euphenics was first used by				B
	A.	Galton	B.	Koltzov	
	C.	Johannsen	D.	Sutton	
247)	Term gene was coined in 1909 by				B
	A.	Morgan	B.	Johannsen	

	C.	Muller	D.	Bridges	
248)	Term molecular biology was first used by				C
	A.	Watson	B.	Crick	
	C.	Astbury	D.	Benzer	
249)	Terms cukaryoles and prokaryoles were coined by				B
	A.	Sutton	B.	Chalton	
	C.	Bateson	D.	Morgan	
250)	Bateson and Punnett founded the journal of genetics in				B
	A.	1895	B.	1901	
	C.	1905	D.	1910	

LIVESTOCK MANAGEMENT MCQ's					Answer Key
251)	Temperature of cow suffering from milk fever is:				A
	A.	100°F	B.	104°F	
	C.	107°F	D.	110°F	
252)	Sick animals are isolated to:				D
	A.	Avoid fights	B.	Treat them well	
	C.	Keep clean	D.	Prevent spread of disease	
253)	Quarantine means				C
	A.	Isolation	B.	Isolation and keep under observation	
	C.	Isolated for 40 days	D.	Treatment of animals	
254)	The pulse rate in goat is taken from the arteries				A
	A.	Jugular and maxillary	B.	Maxillary & coccygeal	
	C.	Coccygeal & Jugular	D.	Pulmonary & Jugular	
255)	Abortion in Trichomoniasis occurs in				A
	A.	Early pregnancy	B.	Middle pregnancy	
	C.	Late pregnancy	D.	None of these	
256)	Which one of the following is disinfectant?				A
	A.	Chlorine	B.	Chloroform	
	C.	Pot. Nitrate	D.	Boric acid	
257)	Vermicide in the following is				B
	A.	Sod. Sulphate	B.	Nilverm	
	C.	Ammonium Chloride	D.	Phenol	
258)	Foot and mouth in cattle is due to infection by				B
	A.	Bacteria	B.	Virus	
	C.	Parasite	D.	Fungus	
259)	Tympanitis is a condition associated with:				A
	A.	Gas in rumen	B.	Viral infection	
	C.	Bacterial infection	D.	More water intake	
260)	Mark the estrus Cycle of a healthy cow:				A
	A.	21 days	B.	18 Hours	
	C.	281 days	D.	30 days	
261)	What is the heat period in buffalo?				D
	A.	2 to 8 hours	B.	4 days	
	C.	8 to 12 days	D.	12 to 34 days	
262)	Central pair of incisors in cattle erupts at:				B
	A.	3 years	B.	2 years	
	C.	6 months	D.	5 years	
263)	Tropical cattle maintain body temperature through				C
	A.	Hairs	B.	Tongue	
	C.	Dewlap	D.	Tail	

264)	Extra feeding of pregnant cow should be done after				A
	A.	6 months	B.	3 months	
	C.	1 month	D.	20 days	
265)	Udder secretion immediately after calving is called				C
	A.	First milk	B.	Special milk	
	C.	Colostrum	D.	Calf starter	
266)	After birth umbilical cord must be treated with				D
	A.	Sodium carbonate	B.	Potassium Permanganate	
	C.	Sulphur ointment	D.	Tincture iodine	
267)	Scrotal sac temperature of a bull compared to body temperature is				A
	A.	Less	B.	Indefinite	
	C.	More	D.	Equal	
268)	Dry matter required by cow of 400 kg body weight should be (per day)				A
	A.	10 kg	B.	20 kg	
	C.	2.5 kg	D.	0.5 kg	
269)	Pica is caused due to the deficiency of:				C
	A.	Vitamin B_{12}	B.	Protein	
	C.	Phosphorus	D.	Cystine	
270)	Specific gravity is generally more in the milk of				B
	A.	Cow	B.	Separated milk	
	C.	Buffalo	D.	Camel	
271)	Metritis is a disease of:				B
	A.	Udder	B.	Reproductive organs	
	C.	Heart	D.	None of these	
272)	A double row dairy shed (60 x 12 mt.) can house cows.				A
	A.	100	B.	50	
	C.	200	D.	1000	
273)	Best method of milking is:				C
	A.	Suckling	B.	Knuckling	
	C.	Full hand milking	D.	Stripping	
274)	The principal function of 'Vitamin D is to				A
	A.	Maintain bone growth	B.	Form Rhodopsin	
	C.	Keep muscles strong	D.	Cause urination	
275)	A constituent found in milk but not in blood is				D
	A.	Globulin	B.	Glucose	
	C.	Minerals	D.	Casein	
276)	Name the disease where carcass must be pitted with lime				A
	A.	Anthrax	B.	Black quarter	
	C.	Tuberculosis	D.	Malaria	
277)	A teaser bull is maintained to:				B
	A.	Keep herd moving	B.	Detect heat	
	C.	Protect weak animals	D.	Inseminate cow	
278)	Doe is the adult female of				D
	A.	Dog	B.	Duck	
	C.	Sheep	D.	Goat	
279)	Average pulse rate of adult sheep is				A
	A.	80 per minute	B.	100 per minute	
	C.	120 per minute	D.	25 per minute	

280)	Desirable body weight of a heifer at first mating should be				B
	A.	180 kg	B.	250 kg	
	C.	400 kg	D.	80 kg	
281)	Total solid percentage of cow milk is approximately				A
	A.	13	B.	25	
	C.	0.5	D.	5.0	
282)	Total solid percentage of buffalo milk is approximately				D
	A.	13	B.	25	
	C.	0.5	D.	17	
283)	DCP for maintenance of a cow/1000 kg body weight should be				A
	A.	0.70 kg	B.	0.24 kg	
	C.	1.25 kg	D.	2.00 kg	
284)	Increase in live weight of pregnant zebu cow during last 60 days of gestation period is				B
	A.	10-15 kg	B.	20-30 kg	
	C.	40-50 kg	D.	50-60 kg	
285)	Mark the time of insemination of a cow in heat				C
	A.	At the onset of heat	B.	Mid of estrus	
	C.	Between mid to late of heat	D.	Between late to end of heat	
286)	Mark the normal respiration rate per minute of health buffalo				A
	A.	12-20	B.	8-12	
	C.	6-12	D.	8-10	
287)	Vitamin B_{12} is also called				D
	A.	Thiamin	B.	Riboflavin	
	C.	Cobalamin	D.	Cynocobalamin	
288)	Tocoferol is also called				D
	A.	Vitamin B	B.	Vitamin C	
	C.	Vitamin D	D.	Vitamin E	
289)	In case of retention of placenta cow may be given				B
	A.	Pot permanganate	B.	Lugol solution	
	C.	Dextrose solution	D.	Replenta	
290)	After manual removal of placenta the douching should be done with				D
	A.	Salt solution	B.	Sodium Choloride solution	
	C.	Sodium carbonate	D.	Lugol solution	
291)	A constituent found in milk and blood both is				A
	A.	Globolin	B.	Casein	
	C.	Albumen	D.	Minerals	
292)	Mark the per lactation milk yield of Sahiwal cow				C
	A.	1100 kg	B.	1400 kg	
	C.	1800 kg	D.	2000 kg	
293)	Mark the lyre-horned grey cattle with wide forehead flat or dished in profile				A
	A.	Kankrej	B.	Haryana	
	C.	Rojhan	D.	Dajal	
294)	Which of these is a dual purpose breed?				B
	A.	Red Sindhi	B.	Tharparker	
	C.	Bagh Nari	D.	Dhanni	
295)	Mark the optimum calving interval for the high level of breeding efficiency in cow				C
	A.	250 days	B.	310 days	
	C.	395 days	D.	450 days	

296)	A successful pure-breeder is one who knows how to				B
	A.	Milk cattle	B.	Cull	
	C.	Feed cattle	D.	write and read good articles	
297)	A buffalo bred on February 26, will calve on				B
	A.	November 15	B.	December, 23	
	C.	October 11	D.	September 20	
298)	The greatest criticism of milking machine is that it is				D
	A.	Noisy	B.	Complicated	
	C.	Efficient	D.	Sometimes means of spreading udder troubles	
299)	Most dairy calves are raised				A
	A.	On milk feeding by hand	B.	Dam suckling	
	C.	On another cow	D.	On butter milk	
300)	The term dual purpose describes cattle that are				B
	A.	Of two colours	B.	Bred for milk and draught	
	C.	Yield high milk with high fat	D.	Breed for fat and milk	
301)	Gestation period in case of buffalo is of				C
	A.	282 days	B.	151 days	
	C.	307 days	D.	335 days	
302)	Addition of water in milk will:				C
	A.	Increase specific gravity	B.	Increase total solids	
	C.	Decrease specific gravity	D.	No change in specific gravity	
303)	Specific gravity of separated milk is				C
	A.	1.025	B.	1.032	
	C.	1.030	D.	1.028	
304)	If correct lactometer reading (C.L.R.) of milk is 25, the specific gravity will be:				A
	A.	1.025	B.	1.032	
	C.	1.030	D.	1.036	
305)	The reading on lactometer ranges from				B
	A.	0-20	B.	0-40	
	C.	10-20	D.	0-50	
306)	Fat in milk exists in the form of				A
	A.	Emulsion	B.	Colloidal	
	C.	Solution	D.	Partly in solution	
307)	The average size of fat globules in cow milk is				A
	A.	3-4 micron	B.	8-10 micron	
	C.	5-6 micron	D.	10-20 micron	
308)	Present population of goats in Pakistan is				A
	A.	56.7 million	B.	4.9 million	
	C.	106 million	D.	10.6 million.	
309)	The presence of ketone bodied in the urine is the indication of				C
	A.	Milk fever	B.	High blood pressure	
	C.	Acetonaemia	D.	Bloat	
310)	Flushing can increase the lamb crop by				D
	A.	50%	B.	30%	
	C.	2%	D.	10-20%	
311)	Which one is the fat tail breed of sheep?				C
	A.	Lohi	B.	Sipli	
	C.	Salt Range	D.	Kajli	

312)	Which one is the Kharif fodder?				D
	A.	Barseem	B.	Barley	
	C.	Oats	D.	Sorghum	
313)	The most killer disease of sheep and goat is				D
	A.	H.S	B.	Rinderpest	
	C.	Foot & Mouth	D.	Enterotoxemia	
314)	Vaccination in livestock is mostly done by				D
	A.	Orally	B.	Intrauterine injection	
	C.	Intramuscular injection	D.	Subcutaneous injection	
315)	The total solids %age in goat colostrum is				D
	A.	10%	B.	15%	
	C.	40%	D.	20%	
316)	Marbling in meat is due to deposition of				C
	A.	Subcutaneous fat	B	Intramuscular fat	
	C.	Intramuscular fat	D	None of these	
317)	What is the heat period in buffalo?				D
	A.	2 to 8 hours	B.	4 days	
	C.	8 to 12 days	D.	12 to 34 days	
318)	Tropical cattle maintain body temperature through				C
	A.	Hairs	B.	Tongue	
	C.	Dewlap	D.	Tail	
319)	The pulse rate in goat is taken from the arteries				A
	A.	Jugular and maxillary	B.	Maxillary & coccygeal	
	C.	Coccygeal & Jugular	D.	Pulmonary & Jugular	
320)	Abortion in Trichomoniasis occurs in				A
	A.	Early pregnancy	B.	Middle pregnancy	
	C.	Late pregnancy	D.	None of these	
321)	Chevon is the meat of				D
	A.	Cattle	B.	Deer	
	C.	Camel	D.	Goat	
322)	Vermicide in the following is				B
	A.	Sod. Sulphate	B.	Nilverm	
	C.	Ammonium Chloride	D.	Phenol	
323)	Foot and mouth in cattle is due to infection by				B
	A.	Bacteria	B.	Virus	
	C.	Parasite	D.	Fungus	
324)	Mohair is the fleece of				D
	A.	Beetal goat	B.	Camel	
	C.	Sheep	D.	Angora goat	
325)	Mark the estrus Cycle of a healthy cow:				A
	A.	21 days	B.	18 Hours	
	C.	281 days	D.	30 days	
326)	Which one of the following is disinfectant?				A
	A.	Chlorine	B.	Chloroform	
	C.	Pot. Nitrate	D.	Boric acid	
327)	Central pair of incisors in cattle erupts at:				B
	A.	3 years	B.	2 years	
	C.	6 months	D.	5 years	

328)	Tympanitis is a condition associated with:				A
	A.	Gas in rumen	B.	Viral infection	
	C.	Bacterial infection	D.	More water intake	
329)	Extra feeding of pregnant cow should be done after				A
	A.	6 months	B.	3 months	
	C.	1 month	D.	20 days	
330)	Udder secretion immediately after calving is called				C
	A.	First milk	B.	Special milk	
	C.	Colostrum	D.	Calf starter	
331)	After birth umbilical cord must be treated with				D
	A.	Sodium carbonate	B.	Potassium Permanganate	
	C.	Sulphur ointment	D.	Tincture iodine	
332)	Scrotal sac temperature of a bull compared to body temperature is				A
	A.	Less	B.	Indefinite	
	C.	More	D.	Equal	
333)	Dry matter required by cow of 400 kg body weight should be (per day)				A
	A.	10 kg	B.	20 kg	
	C.	2.5 kg	D.	0.5 kg	
334)	Pica is caused due to the deficiency of:				C
	A.	Vitamin B_{12}	B.	Protein	
	C.	Phosphorus	D.	Cystine	
335)	Specific gravity is generally more in the milk of				B
	A.	Cow	B.	Separated milk	
	C.	Buffalo	D.	Camel	
336)	Metritis is a disease of:				B
	A.	Udder	B.	Reproductive organs	
	C.	Heart	D.	None of these	
337)	A double row dairy shed (60 x 12 mt.) can house cows.				A
	A.	100	B.	50	
	C.	200	D.	1000	
338)	Best method of milking is:				C
	A.	Suckling	B.	Knuckling	
	C.	Full hand milking	D.	Stripping	
339)	The principal function of 'Vitamin D is to				A
	A.	Maintain bone growth	B.	Form Rhodopsin	
	C.	Keep muscles strong	D.	Cause urination	
340)	A constituent found in milk but not in blood is				D
	A.	Globulin	B.	Glucose	
	C.	Minerals	D.	Casein	
341)	Name the disease where carcass must be pitted with lime				A
	A.	Anthrax	B.	Black quarter	
	C.	Tuberculosis	D.	Malaria	
342)	A teaser bull is maintained to:				B
	A.	Keep herd moving	B.	Detect heat	
	C.	Protect weak animals	D.	Inseminate cow	
343)	Doe is the adult female of				D
	A.	Dog	B.	Duck	
	C.	Sheep	D.	Goat	

344)	Average pulse rate of adult sheep is				A
	A.	80 per minute	B.	100 per minute	
	C.	120 per minute	D.	25 per minute	
345)	Desirable body weight of a heifer at first mating should be				B
	A.	180 kg	B.	250 kg	
	C.	400 kg	D.	80 kg	
346)	Total solid percentage of cow milk is approximately				A
	A.	13	B.	25	
	C.	0.5	D.	5.0	
347)	Which one is the Kharif fodder?				D
	A.	Barseem	B.	Barley	
	C.	Oats	D.	Sorghum	
348)	DCP for maintenance of a cow/1000 kg body weight should be				A
	A.	0.70 kg	B.	0.24 kg	
	C.	1.25 kg	D.	2.00 kg	
349)	Increase in live weight of pregnant zebu cow during last 60 days of gestation period is				B
	A.	10-15 kg	B.	20-30 kg	
	C.	40-50 kg	D.	50-60 kg	
350)	Mark the time of insemination of a cow in heat				C
	A.	At the onset of heat	B.	Mid of estrus	
	C.	Between mid to late of heat	D.	Between late to end of heat	
351)	Mark the normal respiration rate per minute of health buffalo				A
	A.	12-20	B.	8-12	
	C.	6-12	D.	8-10	
352)	Vaccination in livestock is mostly done by				D
	A.	Orally	B.	Intrauterine injection	
	C.	Intramuscular injection	D.	Subcutaneous injection	
353)	Tocoferol is also called				D
	A.	Vitamin B	B.	Vitamin C	
	C.	Vitamin D	D.	Vitamin E	
354)	In case of retention of placenta cow may be given				B
	A.	Pot permanganate	B.	Lugol solution	
	C.	Dextrose solution	D.	Replenta	
355)	The total solids %age in goat colostrum is				D
	A.	10%	B.	15%	
	C.	40%	D.	20%	
356)	A constituent found in milk and blood both is				A
	A.	Globolin	B.	Casein	
	C.	Albumen	D.	Minerals	
357)	Mark the per lactation milk yield of Sahiwal cow				C
	A.	1100 kg	B.	1400 kg	
	C.	1800 kg	D.	2000 kg	
358)	Mark the lyre-horned grey cattle with wide forehead flat or dished in profile				A
	A.	Kankrej	B.	Haryana	
	C.	Rojhan	D.	Dajal	
359)	Which of these is a dual purpose breed?				B
	A.	Red Sindhi	B.	Tharparker	
	C.	Bagh Nari	D.	Dhanni	

360)	Mark the optimum calving interval for the high level of breeding efficiency in cow				C
	A.	250 days	B.	310 days	
	C.	395 days	D.	450 days	
361)	A successful pure-breeder is one who knows how to				B
	A.	Milk cattle	B.	Cull	
	C.	Feed cattle	D.	write and read good articles	
362)	A buffalo bred on February 26, will calve on				B
	A.	November 15	B.	December, 23	
	C.	October 11	D.	September 20	
363)	Flushing can increase the lamb crop by				D
	A.	50%	B.	30%	
	C.	2%	D.	10-20%	
364)	Most dairy calves are raised				A
	A.	On milk feeding by hand	B.	Dam suckling	
	C.	On another cow	D.	On butter milk	
365)	The term dual purpose describes cattle that are				B
	A.	Of two colours	B.	Bred for milk and draught	
	C.	Yield high milk with high fat	D.	Breed for fat and milk	
366)	Gestation period in case of buffalo is of				C
	A.	282 days	B.	151 days	
	C.	307 days	D.	335 days	
367)	Addition of water in milk will:				C
	A.	Increase specific gravity	B.	Increase total solids	
	C.	Decrease specific gravity	D.	No change in specific gravity	
368)	Specific gravity of separated milk is				C
	A.	1.025	B.	1.032	
	C.	1.030	D.	1.028	
369)	If correct lactometer reading (C.L.R.) of milk is 25, the specific gravity will be:				A
	A.	1.025	B.	1.032	
	C.	1.030	D.	1.036	
370)	The reading on lactometer ranges from				B
	A.	0-20	B.	0-40	
	C.	10-20	D.	0-50	
371)	Fat in milk exists in the form of				A
	A.	Emulsion	B.	Colloidal	
	C.	Solution	D.	Partly in solution	
372)	The average size of fat globules in cow milk is				A
	A.	3-4 micron	B.	8-10 micron	
	C.	5-6 micron	D.	10-20 micron	
373)	Present population of goats in Pakistan is				A
	A.	56.7 million	B.	4.9 million	
	C.	106 million	D.	10.6 million.	
374)	The presence of ketone bodied in the urine is the indication of				C
	A.	Milk fever	B.	High blood pressure	
	C.	Acetonaemia	D.	Bloat	
375)	The greatest criticism of milking machine is that it is				D
	A.	Noisy	B.	Complicated	
	C.	Efficient	D.	Sometimes means of spreading udder troubles	

376)	Which one is the fat tail breed of sheep?				C
	A.	Lohi	B.	Sipli	
	C.	Salt Range	D.	Kajli	
377)	Total solid percentage of buffalo milk is approximately				D
	A.	13	B.	25	
	C.	0.5	D.	17	
378)	The most killer disease of sheep and goat is				D
	A.	H.S	B.	Rinderpest	
	C.	Foot & Mouth	D.	Enterotoxemia	
379)	Vitamin B_{12} is also called				D
	A.	Thiamin	B.	Riboflavin	
	C.	Cobalamin	D.	Cynocobalamin	
380)	After manual removal of placenta the douching should be done with				D
	A.	Salt solution	B.	Sodium Choloride solution	
	C.	Sodium carbonate	D.	Lugol solution	
381)	The important beef breed is				B
	A.	Niliravi	B.	Narimaster	
	C.	Sahiwal	D.	Cholistani	
382)	A beef animal needs covered area				B
	A.	140 sq feet	B.	50 sq f	
	C.	200 sq f	D.	120 sq f	
383)	Beef animals are kept for				A
	A.	Meat	B.	None of these	
	C.	Milk	D.	Skin	
384)	Sheep meat is called				D
	A.	Beef	B.	None of these	
	C.	Edible organ	D.	Mutton	
385)	To improve fertility in goat, following is important				B
	A.	Grooming	B.	Flushing	
	C.	Cleaning	D.	Feeding	
386)	A male adult of sheep is called				C
	A.	Bull	B.	Ewe	
	C.	Ram	D.	Buck	
387)	Vermicide in the following is				B
	A.	Sod. Sulphate	B.	Nilverm	
	C.	Ammonium Chloride	D.	Phenol	
388)	Foot and mouth in cattle is due to infection by				B
	A.	Bacteria	B.	Virus	
	C.	Parasite	D.	Fungus	
389)	Tympanitis is a condition associated with:				A
	A.	Gas in rumen	B.	Viral infection	
	C.	Bacterial infection	D.	More water intake	
390)	Mark the estrus Cycle of a healthy cow:				A
	A.	21 days	B.	18 Hours	
	C.	281 days	D.	30 days	
391)	What is the heat period in buffalo?				D
	A.	2 to 8 hours	B.	4 days	
	C.	8 to 12 days	D.	12 to 34 days	

392)	Central pair of incisors in cattle erupts at:				B
	A.	3 years	B.	2 years	
	C.	6 months	D.	5 years	
393)	Tropical cattle maintain body temperature through				C
	A.	Hairs	B.	Tongue	
	C.	Dewlap	D.	Tail	
394)	Extra feeding of pregnant cow should be done after				A
	A.	6 months	B.	3 months	
	C.	1 month	D.	20 days	
395)	Udder secretion immediately after calving is called				C
	A.	First milk	B.	Special milk	
	C.	Colostrum	D.	Calf starter	
396)	After birth umbilical cord must be treated with				D
	A.	Sodium carbonate	B.	Potassium Permanganate	
	C.	Sulphur ointment	D.	Tincture iodine	
397)	Scrotal sac temperature of a bull compared to body temperature is				A
	A.	Less	B.	Indefinite	
	C.	More	D.	Equal	
398)	Dry matter required by cow of 400 kg body weight should be (per day)				A
	A.	10 kg	B.	20 kg	
	C.	2.5 kg	D.	0.5 kg	
399)	Pica is caused due to the deficiency of:				C
	A.	Vitamin B_{12}	B.	Protein	
	C.	Phosphorus	D.	Cystine	
400)	Specific gravity is generally more in the milk of				B
	A.	Cow	B.	Separated milk	
	C.	Buffalo	D.	Camel	
401)	Metritis is a disease of:				B
	A.	Udder	B.	Reproductive organs	
	C.	Heart	D.	None of these	
402)	A double row dairy shed (60 x 12 mt.) can house cows.				A
	A.	100	B.	50	
	C.	200	D.	1000	
403)	Best method of milking is:				C
	A.	Suckling	B.	Knuckling	
	C.	Full hand milking	D.	Stripping	
404)	The principal function of 'Vitamin D is to				A
	A.	Maintain bone growth	B.	Form Rhodopsin	
	C.	Keep muscles strong	D.	Cause urination	
405)	A constituent found in milk but not in blood is				D
	A.	Globulin	B.	Glucose	
	C.	Minerals	D.	Casein	
406)	Name the disease where carcass must be pitted with lime				A
	A.	Anthrax	B.	Black quarter	
	C.	Tuberculosis	D.	Malaria	
407)	A teaser bull is maintained to:				B
	A.	Keep herd moving	B.	Detect heat	
	C.	Protect weak animals	D.	Inseminate cow	

408)	Doe is the adult female of				D
	A.	Dog	B.	Duck	
	C.	Sheep	D.	Goat	
409)	Average pulse rate of adult sheep is				A
	A.	80 per minute	B.	100 per minute	
	C.	120 per minute	D.	25 per minute	
410)	The replacement of milk teeth in small ruminants commences at the age of				A
	A.	12 to 14 months.	B.	30-35 months	
	C.	20-24 months	D.	18-30 months	
411)	Total solid percentage of cow milk is approximately				A
	A.	13	B.	25	
	C.	0.5	D.	5.0	
412)	Total solid percentage of buffalo milk is approximately				D
	A.	13	B.	25	
	C.	0.5	D.	17	
413)	DCP for maintenance of a cow/1000 kg body weight should be				A
	A.	0.70 kg	B.	0.24 kg	
	C.	1.25 kg	D.	2.00 kg	
414)	Increase in live weight of pregnant zebu cow during last 60 days of gestation period is				B
	A.	10-15 kg	B.	20-30 kg	
	C.	40-50 kg	D.	50-60 kg	
415)	The presence of ketone bodied in the urine is the indication of				C
	A.	Milk fever	B.	High blood pressure	
	C.	Acetonaemia	D.	Bloat	
416)	Mark the normal respiration rate per minute of health buffalo				A
	A.	12-20	B.	8-12	
	C.	6-12	D.	8-10	
417)	Vitamin B_{12} is also called				D
	A.	Thiamin	B.	Riboflavin	
	C.	Cobalamin	D.	Cynocobalamin	
418)	Tocoferol is also called				D
	A.	Vitamin B	B.	Vitamin C	
	C.	Vitamin D	D.	Vitamin E	
419)	The best way of combating the snake bite is				C
	A.	Injecting Antibiotic	B.	Giving mineral mixture	
	C.	Injecting antivenum serum	D.	Giving mineral oil	
420)	After manual removal of placenta the washing should be done with				D
	A.	Salt solution	B.	Sodium Choloride solution	
	C.	Sodium carbonate	D.	Lugol solution	
421)	A constituent found in milk and blood both is				A
	A.	Globolin	B.	Casein	
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422)	Mark the per lactation milk yield of Sahiwal cow				C
	A.	1100 kg	B.	1400 kg	
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423)	Mark the lyre-horned grey cattle with wide forehead flat or dished in profile				A
	A.	Kankrej	B.	Haryana	
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424)	Which of these is a dual purpose breed?				B
	A.	Red Sindhi	B.	Tharparker	
	C.	Bagh Nari	D.	Dhanni	
425)	Mark the optimum calving interval for the high level of breeding efficiency in cow				C
	A.	250 days	B.	310 days	
	C.	395 days	D.	450 days	
426)	A feed high in energy or protein, low in fiber and highly digestible is				C
	A.	Roughage	B.	Silage	
	C.	Concentrate	D.	Hay	
427)	A buffalo bred on February 26, will calve on				B
	A.	November 15	B.	December, 23	
	C.	October 11	D.	September 20	
428)	The greatest criticism of milking machine is that it is				D
	A.	Noisy	B.	Complicated	
	C.	Efficient	D.	Sometimes means of spreading udder troubles	
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	C.	On another cow	D.	On butter milk	
430)	The term dual purpose describes cattle that are				B
	A.	Of two colours	B.	Bred for milk and draught	
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435)	The reading on lactometer ranges from				B
	A.	0-20	B.	0-40	
	C.	10-20	D.	0-50	
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	A.	Emulsion	B.	Colloidal	
	C.	Solution	D.	Partly in solution	
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	A.	56.7 million	B.	4.9 million	
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439)	The presence of ketone bodied in the urine is the indication of				C
	A.	Milk fever	B.	High blood pressure	
	C.	Acetonaemia	D.	Bloat	

440)	Flushing can increase the lamb crop by				D
	A.	50%	B.	30%	
	C.	2%	D.	10-20%	
441)	Which one is the fat tail breed of sheep?				C
	A.	Lohi	B.	Sipli	
	C.	Salt Range	D.	Kajli	
442)	Which one is the Kharif fodder?				D
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	C.	Oats	D.	Sorghum	
443)	The most killer disease of sheep and goat is				D
	A.	H.S	B.	Rinderpest	
	C.	Foot & Mouth	D.	Enterotoxemia	
444)	Vaccination in livestock is mostly done by				D
	A.	Orally	B.	Intrauterine injection	
	C.	Intramuscular injection	D.	Subcutaneous injection	
445)	Carbohydrate is the sole source of energy in the				A
	A.	Brain	B.	Skeletal muscle	
	C.	Myocardium	D.	Kidney	
446)	A localized collection of pus known as				A
	A.	Abscess	B.	Injury	
	C.	Wound	D.	Fracture	
447)	On average, fat content in sheep milk is				A
	A.	5.3%	B.	3.5%	
	C.	12.4%	D.	10.5%	
448)	A sheep bred on January 15 will lamb on				A
	A.	June 12	B.	May, 1	
	C.	March 18	D.	April, 29	
449)	Sheep meat is called				D
	A.	Beef	B.	None of these	
	C.	Edible organ	D.	Mutton	
450)	The standard lactation period of milch cattle is				A
	A.	305 days.	B.	250 days	
	C.	320 days	D.	150 days	
451)	A breeding male of sheep is called				C
	A.	Bull	B.	Ewe	
	C.	Ram	D.	Buck	
452)	Vermicide in the following is				B
	A.	Sod. Sulphate	B.	Nilverm	
	C.	Ammonium Chloride	D.	Phenol	
453)	Foot and mouth in buffalo is due to				B
	A.	Bacteria	B.	Virus	
	C.	Parasite	D.	Fungus	
454)	Tympanitis is a condition associated with:				A
	A.	Gas in rumen	B.	Viral infection	
	C.	Bacterial infection	D.	More water intake	
455)	Mark the estrus Cycle of a healthy cow:				A
	A.	21 days	B.	18 Hours	
	C.	281 days	D.	30 days	

456)	Heat period in buffalo is about				D
	A.	2 to 8 hours	B.	4 days	
	C.	8 to 12 days	D.	12 to 34 days	
457)	Central pair of incisors in cattle erupts at:				B
	A.	3 years	B.	2 years	
	C.	6 months	D.	5 years	
458)	A beef animal requires covered area				B
	A.	140 sq feet	B.	50 sq f	
	C.	200 sq f	D.	120 sq f	
459)	Extra feeding of pregnant cow should be done after				A
	A.	6 months	B.	3 months	
	C.	1 month	D.	20 days	
460)	Udder secretion immediately after calving is called				C
	A.	First milk	B.	Special milk	
	C.	Colostrum	D.	Calf starter	
461)	In newly born calf, umbilical cord must be treated with				D
	A.	Sodium carbonate	B.	Potassium Permanganate	
	C.	Sulphur ointment	D.	Tincture iodine	
462)	Scrotal sac temperature of a bull compared to body temperature is				A
	A.	Less	B.	Indefinite	
	C.	More	D.	Equal	
463)	Dry matter required by cow of 400 kg body weight should be (per day)				A
	A.	10 kg	B.	20 kg	
	C.	2.5 kg	D.	0.5 kg	
464)	Pica is caused due to the deficiency of:				C
	A.	Vitamin B_{12}	B.	Protein	
	C.	Phosphorus	D.	Cystine	
465)	Specific gravity is generally more in the milk of				B
	A.	Cow	B.	Separated milk	
	C.	Buffalo	D.	Camel	
466)	Metritis is a disease of:				B
	A.	Udder	B.	Reproductive organs	
	C.	Heart	D.	None of these	
467)	A double row dairy shed (60 x 12 mt.) can house cows.				A
	A.	100	B.	50	
	C.	200	D.	1000	
468)	Best method of milking is:				C
	A.	Suckling	B.	Knuckling	
	C.	Full hand milking	D.	Stripping	
469)	The principal function of 'Vitamin D is to				A
	A.	Maintain bone growth	B.	Form Rhodopsin	
	C.	Keep muscles strong	D.	Cause urination	
470)	A constituent found in milk but not in blood is				D
	A.	Globulin	B.	Glucose	
	C.	Minerals	D.	Casein	
471)	Name the disease where carcass must be pitted with lime				A
	A.	Anthrax	B.	Black quarter	
	C.	Tuberculosis	D.	Malaria	

472)	A teaser bull is maintained to:				B
	A.	Keep herd moving	B.	Detect heat	
	C.	Protect weak animals	D.	Inseminate cow	
473)	Doe is the adult female of				D
	A.	Dog	B.	Duck	
	C.	Sheep	D.	Goat	
474)	Average pulse rate of adult sheep is				A
	A.	80 per minute	B.	100 per minute	
	C.	120 per minute	D.	25 per minute	
475)	The replacement of milk teeth in small ruminants commences at the age of				A
	A.	12 to 14 months.	B.	30-35 months	
	C.	20-24 months	D.	18-30 months	
476)	Total solid percentage of cow milk is approximately				A
	A.	13	B.	25	
	C.	0.5	D.	5.0	
477)	Total solid percentage of buffalo milk is approximately				D
	A.	13	B.	25	
	C.	0.5	D.	17	
478)	DCP for maintenance of a cow/1000 kg body weight should be				A
	A.	0.70 kg	B.	0.24 kg	
	C.	1.25 kg	D.	2.00 kg	
479)	Increase in live weight of pregnant zebu cow during last 60 days of gestation period is				B
	A.	10-15 kg	B.	20-30 kg	
	C.	40-50 kg	D.	50-60 kg	
480)	The presence of ketone bodied in the urine is the indication of				C
	A.	Milk fever	B.	High blood pressure	
	C.	Acetonaemia	D.	Bloat	
481)	Mark the normal respiration rate per minute of health buffalo				A
	A.	12-20	B.	8-12	
	C.	6-12	D.	8-10	
482)	Beef animals are kept for				A
	A.	Meat	B.	None of these	
	C.	Milk	D.	Skin	
483)	Tocoferol is also called				D
	A.	Vitamin B	B.	Vitamin C	
	C.	Vitamin D	D.	Vitamin E	
484)	The best way of combating the snake bite is				C
	A.	Injecting Antibiotic	B.	Giving mineral mixture	
	C.	Injecting antivenum serum	D.	Giving mineral oil	
485)	After manual removal of placenta the washing should be done with				D
	A.	Salt solution	B.	Sodium Choloride solution	
	C.	Sodium carbonate	D.	Lugol solution	
486)	A constituent found in milk and blood both is				A
	A.	Globolin	B.	Casein	
	C.	Albumen	D.	Minerals	
487)	Mark the per lactation milk yield of Sahiwal cow				C
	A.	1100 kg	B.	1400 kg	
	C.	1800 kg	D.	2000 kg	

488)	Mark the lyre-horned grey cattle with wide forehead flat or dished in profile				A
	A.	Kankrej	B.	Haryana	
	C.	Rojhan	D.	Dajal	
489)	Which of these is a dual purpose breed?				B
	A.	Red Sindhi	B.	Tharparker	
	C.	Bagh Nari	D.	Dhanni	
490)	Mark the optimum calving interval for the high level of breeding efficiency in cow				C
	A.	250 days	B.	310 days	
	C.	395 days	D.	450 days	
491)	A feed high in energy or protein, low in fiber and highly digestible is				C
	A.	Roughage	B.	Silage	
	C.	Concentrate	D.	Hay	
492)	A buffalo bred on February 26, will calve on				B
	A.	November 15	B.	December, 23	
	C.	October 11	D.	September 20	
493)	The greatest criticism of milking machine is that it is				D
	A.	Noisy	B.	Complicated	
	C.	Efficient	D.	Sometimes means of spreading udder troubles	
494)	Most dairy calves are raised				A
	A.	On milk feeding by hand	B.	Dam suckling	
	C.	On another cow	D.	On butter milk	
495)	The term dual purpose describes cattle that are				B
	A.	Of two colours	B.	Bred for milk and draught	
	C.	Yield high milk with high fat	D.	Breed for fat and milk	
496)	Gestation period in case of buffalo is of				C
	A.	282 days	B.	151 days	
	C.	307 days	D.	335 days	
497)	Addition of water in milk will:				C
	A.	Increase specific gravity	B.	Increase total solids	
	C.	Decrease specific gravity	D.	No change in specific gravity	
498)	Specific gravity of separated milk is				C
	A.	1.025	B.	1.032	
	C.	1.030	D.	1.028	
499)	If correct lactometer reading (C.L.R.) of milk is 25, the specific gravity will be:				A
	A.	1.025	B.	1.032	
	C.	1.030	D.	1.036	
500)	The reading on lactometer ranges from				B
	A.	0-20	B.	0-40	
	C.	10-20	D.	0-50	

POULTRY SCIENCE MCQ's				Answer Key
501)	Pre-brooding management means the various measures that are taken for brooding of newly hatched chicks			A
	A. Before arriving at farm.	B.	After arriving at farm.	
	C. At the age of two weeks.	D.	At the age four week.	
502)	Shed selected for brooding should be away from other shed at a distance of			B
	A. 60 Foot	B.	100 Foot	
	C. 180 Foot	D.	140 Foot	
503)	To reduce chances of microbial growth in shed, wall should be cemented from ground at a distance of			A
	A. 2.0-2.5 Foot	B.	3.0-3.5 Foot	
	C. 2.5-3.0 Foot	D.	3.5-4.0 Foot	
504)	Equipments earlier removed should be scrubbed clean with brush and later on sprinkled with some disinfectant			A
	A. $KMnO_4$	B.	Formalin	
	C. Hot water	D.	Cold water	
505)	Shed should preferably be clean and disinfected			A
	A. One week before arrival of chick	B.	Two weeks before arrival of chicks	
	C. Three weeks before arrival of chicks	D.	Four weeks before arrival of chicks	
506)	In case of cold weather, brooder should be turned on at least			B
	A. 8 hours before arrival	B.	10 hours before arrival	
	C. 12 hours before arrival	D.	20 hours before arrival	
507)	From the brooder edge chick guard should be away at a distance of			B
	A. 1-2 Foot	B.	2-3 Foot	
	C. 3-4 Foot	D.	4-5 Foot	
508)	To reduce early chick mortality, antibiotics should be administered for			B
	A. 1-3 days	B.	3-5 days	
	C. 5-7 days	D.	7-9 days	
509)	Upon arrival of chicks at farm, layer of litter should be two inches deep with			B
	A. Single layer of paper	B.	Double layer of paper	
	C. Triple layer of papers	D.	None of the above	
510)	Special care and management of baby chicks until they do not require artificial source			A
	A. Brooding	B.	Rearing	
	C. Laying	D.	All of the above	
511)	Brooding system in which individual brooder with capacity of 300-400 chicks is known as			A
	A. Colony brooder system	B.	Continuous brooder	
	C. system Battery brooding	D.	Tier brooding	
512)	Brooding system in which large number of chicks are brooded at a time in a single house is known as			B
	A. Colony brooder system	B.	Continuous brooder system	
	C. Battery brooding	D.	Tier brooding	
513)	During first three weeks of chick's life litter should have slight moisture and after that it should contain about			D
	A. 10% moisture	B.	15% moisture	

	C.	20% moisture	D.	25% moisture	
514)	During first few days of chicks life, paper is spread on the litter and it should be removed after				B
	A.	1-2 days	B.	2-3 days	
	C.	3-4 days	D.	4-5 days	
515)	As soon as chicks learn the source of supplementary heat, guard must be expanded to allow a greater area on				C
	A.	first day	B.	Second day	
	C.	Third day	D.	Fourth day	
516)	A satisfactory temperature during first week at a point of 6 inches outside the canopy and 2 inches above the floor of the litter should be				C
	A.	75 °F	B.	85 °F	
	C.	95 °F	D.	105 °F	
517)	The brooder temperature should be reduced by 5 °F weekly according to the age but not beyond				A
	A.	75 °F	B.	85 °F	
	C.	95 °F	D.	105 °F	
518)	In case of breeder flock brooding, male chicks should be provided more temperature than female chicks is				A
	A.	02-05 °F	B.	05-08 °F	
	C.	08-10 °F	D.	10-11 °F	
519)	Birds feces contain approximately moisture %				C
	A.	55-60	B.	65-70	
	C.	75-80	D.	85-90	
520)	Level of CO at which poisoning can occur in the chicks is				A
	A.	0.01%	B.	0.02%	
	C.	0.03%	D.	0.04%	
521)	Genetics is the science devoted to the study of				C
	A.	Resemblance	B.	Offspring	
	C.	Inheritance	D.	Parents	
522)	Basic constituent of all living material				B
	A.	Gene	B.	Cell	
	C.	Chromosome	D.	Tissue	
523)	The part of cell which is responsible for transmission of hereditary factors is				C
	A.	Cell wall	B.	Cytoplasm	
	C.	Nucleus	D.	Protoplasm	
524)	How many types of cells according to their function				A
	A.	02	B.	3	
	C.	04	D.	05	
525)	Cell that compose the tissues of the body are				D
	A.	Auto cells	B.	Sex cells	
	C.	Functional cells	D.	Somatic cells	
526)	Rod like structures within the nucleus are				C
	A.	Gene	B.	Reticulum	
	C.	Chromosome	D.	Chlorophyll	
527)	Total pairs of chromosomes in chicken are				B
	A.	38	B.	39	
	C.	40	D.	41	
528)	Evidently the pairs of macro chromosomes are				B
	A.	04	B.	06	
	C.	08	D.	10	

529)	Number of pairs of micro chromosomes are				A
	A.	33	B.	34	
	C.	35	D.	36	
530)	Types of chromosomes are				A
	A.	02	B.	04	
	C.	06	D.	08	
531)	History of birds is as old as				C
	A.	100 million years ago	B.	125 million years ago	
	C.	150 million years ago	D.	175 million years ago	
532)	The first bird on earth was				B
	A.	Red Jungle Fowl	B.	Archaeopteryx	
	C.	Gallus domesticus	D.	Gallus gallus	
533)	The most probable species from which domestic fowl evolved is				C
	A.	Green jungle fowl	B.	Grey jungle fowl	
	C.	Red jungle fowl	D.	Black jungle fowl	
534)	Domestication of chicken stated in China				D
	A.	8000 BC	B.	2500 BC	
	C.	2000 BC	D.	None of these	
535)	Domestication of chicken started in Indus valley				B
	A.	2500 BC	B.	2000 BC	
	C.	1500 BC	D.	1200 BC	
536)	Birds were used first not for food purpose but for				D
	A.	Religious purpose	B.	Cock fighting	
	C.	Entertainment	D.	All of the above	
537)	Cock fighting was banned due to cruelty in				B
	A.	1800 A.D.	B.	1850 A.D.	
	C.	1900 A.D.	D.	1950 A.D.	
538)	American Poultry Association started its work in				D
	A.	1870	B.	1871	
	C.	1872	D.	1873	
539)	A group of standard breeds which have been develop in a certain region are known as				C
	A.	Breed	B.	Strain	
	C.	Class	D.	Genus	
540)	Number of classes of poultry are				B
	A.	Three	B.	Four	
	C.	Five	D.	Six	
541)	Loss of appetite and weight occur due to Aflatoxin level in feed (ppm) @				C
	A.	0.055	B.	0.065	
	C.	0.075	D.	0.085	
542)	Severe drop in growth and production along with mortality occur due to Aflatoxin level in feed (ppm) @				A
	A.	10.00	B.	20.00	
	C.	30.00	D.	40.00	
543)	Loss in weight and emaciated flocks occur due to Ochratoxin level in feed (ppm) @				A
	A.	0.50	B.	1.00	
	C.	1.50	D.	2.00	
544)	Mortality starts, emaciated flocks and production drop occur due to Ochratoxin level in feed (ppm) @				A
	A.	10.00	B.	20.00	

	C.	30.00	D. 40.00	
545)	Loss in weight with liver damage occur due to Citranin level in feed (ppm) @			C
	A.	10	B. 20	
	C.	30	D. 40	
546)	Pronounced hemorrhages in intestine occur due Citranin level in feed (ppm) @			B
	A.	100	B. 150	
	C.	200	D. 250	
547)	Fat on liver, ulcers in mouth, drop in production occur due to Trichothecenes level in feed (ppm) @			A
	A.	05	B. 10	
	C.	15	D. 20	
548)	Ulcers in gizzard, swollen kidneys, pale comb and mortality occur due to Trichothecenes level in feed (ppm) @			B
	A.	05	B. 10	
	C.	15	D. 25	
549)	Loss in weight and production, anemia and pale comb occur due to Zeralenone level in feed (ppm) @			B
	A.	050	B. 100	
	C.	150	D. 200	
550)	Ascites means			B
	A.	Mortality due to higher CO_2 level in environment	B. Belly of bird containing water	
	C.	Toxicity due to higher NH_3 level in environment	D. Higher level of citric acid in blood of the bird	
551)	Feed intake and egg production are depressed when NaCl level in laying ration is			B
	A.	05%	B. 10%	
	C.	15%	D. 20%	
552)	Lethal dose of $KMnO_4$ for the chicken body weight is			
	A.	02 g/kg	B. 04 g/kg	B
	C.	06 g/kg	D. 08 g/kg	
553)	Renyl powder is an example of			C
	A.	Disinfectant	B. Antibacterial	
	C.	Diuretic	D. Antiparasitic	
554)	Causative organism of Pullorum disease is			B
	A.	Salmonella galinarum	B. Salmonella pullorum	
	C.	Salmonella typhimorium	D. Salmonella entridis	
555)	Causative organism of Typhoid disease is			A
	A.	Salmonella galinarum	B. Salmonella pullorum	
	C.	Salmonella typhimorium	D. Salmonella entridis	
556)	Causative organism of Omphalistis disease may be			A
	A.	Salmonella typhimorium	B. Salmonella pullorum	
	C.	Salmonella sporogenes	D. Salmonella entridis	
557)	Causative organism of Infectious Coryza disease is			B
	A.	Salmonella galinarum	B. Hemophilus para gallinarum	
	C.	Salmonella sporogenes	D. Salmonella entridis	
558)	Causative organism of Chronic Respiratory disease is			B
	A.	Salmonella galinarum	B. Mycoplasma gallisepticum	
	C.	Mycoplasma synoviae	D. Salmonella entridis	
559)	Causative organism of Newcastle disease is			B
	A.	Orthoparamyxovirus	B. Paramyxovirus type-1	
	C.	Birna virus	D. Adenovirus	
560)	Causative organism of Rani Khet disease is			B
	A.	Orthoparamyxovirus	B. Paramyxovirus type-1	

	C.	Birna virus	D.	Adenovirus	
561)	Poultry housing enhance bird's production by providing				A
	A.	Physical environment	B.	Hot environment	
	C.	Moderate environment	D.	Cold environment	
562)	For construction of poultry shed, soil should be				D
	A.	Clay	B.	Saline	
	C.	Sandy	D.	Sandy loan	
563)	In temperate areas the direction of shed should be				B
	A.	Towards North South	B.	Towards East West	
	C.	Both A and B	D.	Direction is not important	
564)	In the cold areas length of shod must be				A
	A.	Towards North South	B.	Towards East West	
	C.	Both a & b	D.	Direction is not important	
565)	Movement of water flow in the shed should be				A
	A.	From young towards old stock	B.	From old towards young stock	
	C.	Out of the shed	D.	In the middle of shed	
566)	Poultry shed should not be close to				B
	A.	Hill top	B.	Populated area	
	C.	Vaccine market	D.	Feed market	
567)	Poultry shed should be located on				D
	A.	Hill top	B.	Plane land	
	C.	In the valley	D.	Sloping hill side	
568)	Outer boundary of the farm should be planted with				C
	A.	Vegetable	B.	Fodder crop	
	C.	Trees	D.	Bushes	
569)	Recommended length of open sided shed is				A
	A.	100 Feet	B.	500 Feet	
	C.	1000 Feet	D.	2000 Feet	
570)	Recommended length of environment-controlled house is				A
	A.	300 Feet	B.	50 Feet	
	C.	100 Feet	D.	1000 Feet	
571)	Recommended width of an open sided shed is				A
	A.	30 Feet	B.	50 Feet	
	C.	100 Feet	D.	150 Feet	
572)	Recommended width of an environmentally controlled shed is				B
	A.	20 Feet	B.	40 Feet	
	C.	100 Feet	D.	500 Feet	
573)	Standard height of poultry shed in hot areas				A
	A.	12-14 Feet	B.	13-15 Feet	
	C.	05-07 Feet	D.	08-10 Feet	
574)	Standard height of poultry shed in cold area is				B
	A.	07-08 Feet	B.	08-10 Feet	
	C.	12-13 Feet	D.	13-15 Feet	
575)	Minimum distance between two poultry sheds should be				C
	A.	5 Feet	B.	20 Feet	
	C.	50 Feet	D.	100 Feet	
576)	Minimum distance between two poultry farm should be				A

	A.	01 km	B.	05 km	
	C.	10 km	D.	20 km	
577)	Minimum distance of poultry shed from the road should be				D
	A.	25 feet	B.	40 feet	
	C.	75 feet	D.	100 feet	
578)	Recommended floor space for broilers birds in conventional type poultry houses is				D
	A.	05 sq.ft./bird	B.	03 sq.ft./bird	
	C.	02 sq.ft./bird	D.	01 sq.ft./bird	
579)	Recommended floor space for layer birds on litter floor system is				A
	A.	1.75 sq.ft./bird	B.	2.50 sq.ft./bird	
	C.	4.50 sq.ft./bird	D.	5.50 sq.ft./bird	
580)	Recommended floor space for egg type breeder birds is				B
	A.	1.0 sq.ft./bird	B.	2.0 sq.ft./bird	
	C.	3.0 sq.ft./bird	D.	4 .0 sq.ft./bird	
581)	In birds fertilization takes place in				C
	A.	Ovary	B.	Uterus	
	C.	Infundibulum	D.	Vagina	
582)	In birds fertilization take place in				D
	A.	Ovary	B.	Uterus	
	C.	Vagina	D.	None of these	
583)	In fowls during embryonic development various parts of digestive tract are developed from				A
	A.	Hypoblast	B.	Epiblast	
	C.	Mesoderm	D.	None of these	
584)	In fowls during embryonic development skin is developed from				B
	A.	Hypoblast	B.	Epiblast	
	C.	Mesoderm	D.	None of these	
585)	In fowls during embryonic development feathers are developed from				B
	A.	Hypoblast	B.	Epiblast	
	C.	Mesoderm	D.	None of these	
586)	In fowls during embryonic development beak is developed from				B
	A.	Hypoblast	B.	Epiblast	
	C.	Mesoderm	D.	None of these	
587)	In fowls during embryonic development claws are developed from				B
	A.	Hypoblast	B.	Epiblast	
	C.	Mesoderm	D.	None of these	
588)	In fowls during embryonic development nervous system is developed from				B
	A.	Hypoblast	B.	Epiblast	
	C.	Mesoderm	D.	None of these	
589)	In fowls during embryonic development the lens and retina of the eye are developed from				B
	A.	Hypoblast	B.	Epiblast	
	C.	Mesoderm	D.	None of these	
590)	In fowls during embryonic development lining of the mouth and vent cavities are developed from				B
	A.	Hypoblast	B.	Epiblast	
	C.	Mesoderm	D.	None of these	
591)	In fowls during embryonic development respiratory organs are developed from				A
	A.	Hypoblast	B.	Epiblast	
	C.	Mesoderm	D.	None of these	
592)	In fowls during embryonic development secretary organs are developed from				A

	A. Hypoblast	B. Epiblast		
	C. Mesoderm	D. None of these		
593)	In fowls during embryonic development bones are developed from			C
	A. Hypoblast	B. Epiblast		
	C. Mesoderm	D. None of these		
594)	In fowls during embryonic development muscles are developed from			C
	A. Hypoblast	B. Epiblast		
	C. Mesoderm	D. None of these		
595)	How many types of pox viruses that can cause disease			C
	A. Two	B. Three		
	C. Four	D. Five		
596)	In fowls during embryonic development the organs of the reproduction are developed from			C
	A. Hypoblast	B. Epiblast		
	C. Mesoderm	D. None of these		
597)	In a laying hen, a developing egg remains in magnum for a period of			B
	A. 1-2 hour	B. 3-4 hours		
	C. 5-6 hour	D. 7-8 hour		
598)	In a laying hen, a developing egg remains in isthmus for a period of			A
	A. 1-2 hours	B. 5-6 hours		
	C. 9-10 hours	D. 11-12 hours.		
599)	In a laying hen, a developing egg remains in shell gland for a period of			C
	A. 1-3 hour	B. 8-10 hours		
	C. 18-20 hours	D. None of these.		
600)	During a chicken embryonic development, the cleavage starts in			C
	A. Infundibulum	B. Magnum		
	C. Isthmus	D. Uterus		
601)	Length of uterus in the reproductive system of a bird is			B
	A. 05 cm	B. 10 cm		
	C. 15 cm	D. 20 cm		
602)	Length of infundibulum in the reproductive system of a bird is			B
	A. 05 cm	B. 10 cm		
	C. 15 cm	D. 20 cm		
603)	Main function of vagina of a hen is			D
	A. Fertilization	B. Cleavage formation		
	C. Albumin secretion	D. Sperm storage		
604)	Somites are blocks of cells that segregate off from the			D
	A. Ectoderm	B. Endoderm		
	C. Mesoderm	D. Dorsal mesoderm		
605)	Incubation period of Chicken egg is			C
	A. 11 days	B. 16 days		
	C. 21 days	D. 26 days		
606)	Incubation period of Quail egg is			C
	A. 11 days	B. 14 days		
	C. 17 days	D. 20 days		
607)	Incubation period of Pheasant egg is			C
	A. 14 days	B. 21 days		

	C.	28 days	D.	35 days	
608)	Incubation period of Duck egg is				B
	A.	14 days	B.	28 days	
	C.	42 days	D.	None of these	
609)	Incubation period of Peacock egg is				B
	A.	14 days	B.	28 days	
	C.	42 days	D.	None of these	
610)	Incubation period of Ostrich egg is				D
	A.	11 days	B.	21 days	
	C.	31 days	D.	42 days	
611)	In the embryonic development, allantois serves as				D
	A.	Nutritive	B.	Bacteriostatic	
	C.	Insulatitive	D.	None of these	
612)	Hatching eggs are shifted from setter to hatcher at the age of				D
	A.	16 days	B.	17 days	
	C.	20 days	D.	18 days	
613)	In the embryonic development, the chorio-allantoic membrane serves as				A
	A.	Nutritive	B.	Bacteriostatic	
	C.	Insulatitive	D.	Respiratory surface	
614)	During incubation process the heart of a chicken embryo starts beating at				A
	A.	2nd day of incubation	B.	3rd day of incubation	
	C.	4th day of incubation	D.	5th day of incubation	
615)	During incubation process the heart of a chicken embryo starts beating at				D
	A.	4th day of incubation	B.	6th day of incubation	
	C.	8th day of incubation	D.	None of these	
616)	Follicle stimulating hormone is produced by				B
	A.	Posterior pituitary	B.	Anterior pituitary	
	C.	Thymus gland	D.	Adrenal gland	
617)	Follicle stimulating hormone is produced by				D
	A.	Posterior pituitary	B.	Thymus gland	
	C.	Adrenal gland	D.	None of these	
618)	Number of days required to mature an individual yolk in the body of a hen are				B
	A.	05 days	B.	10 days	
	C.	15 days	D.	20 days	
619)	In a laying hen an individual yolk matures in				A
	A.	10 days	B.	20 days	
	C.	30 days	D.	40 days	
620)	Progesterone hormone is secreted by				D
	A.	Shell gland	B.	Magnum	
	C.	Isthmus	D.	Ovary	
621)	Recommended floor space of meat type breeder birds is				A
	A.	3.5 sq.ft./bird	B.	4.5 sq.ft./bird	
	C.	5.5 sq.ft./bird	D.	6.5 sq.ft./bird	
622)	Relative humidity required in poultry shed is				A
	A.	60-65%	B.	75-80%	
	C.	85-90%	D.	90-100%	
623)	Temperature required during 1st week of brooding is				A

	A.	95 °F	B.	75 °F	
	C.	85 °F	D.	80 °F	
624)	Temperature required during 2nd week of brooding is				A
	A.	90 ^{0}F	B.	70 ^{0}F	
	C.	80 ^{0}F	D.	75^{0}F	
625)	Temperature required during 3rd week of brooding is				A
	A.	85 ^{0}F	B.	65 ^{0}F	
	C.	75 ^{0}F	D.	70 ^{0}F	
626)	Temperature required during 4th week of brooding is				A
	A.	80 ^{0}F	B.	90 ^{0}F	
	C.	70 ^{0}F	D.	65 ^{0}F	
627)	Temperature required during 5th week of brooding is				A
	A.	75 ^{0}F	B.	80 ^{0}F	
	C.	65 ^{0}F	D.	60 ^{0}F	
628)	Temperature required during 6th week of brooding is				B
	A.	65 ^{0}F	B.	75 ^{0}F	
	C.	85 ^{0}F	D.	95 ^{0}F	
629)	Thermo neutral zone for poultry bird is				B
	A.	25-50 ^{0}F	B.	55-75 ^{0}F	
	C.	75-85 ^{0}F	D.	85-100 ^{0}F	
630)	Respiration rate of the birds is governed by				A
	A.	CO_2 content of the blood	B.	O_2 content of the blood	
	C.	H_2O content of the blood	D.	N content of the blood	
631)	Normal respiration rate of bird ranges between				B
	A.	5-10 cycles/min	B.	15-25 cycles/min	
	C.	60-70 cycles/min	D.	80-100 cycles/min.	
632)	Body temperature of adult poultry bird is				A
	A.	106.5 ^{0}F	B.	120.5 ^{0}F	
	C.	130.5 ^{0}F	D.	150.5 ^{0}F	
633)	Mechanisms of heat lost from bird's body through touching of cold air is called				B
	A.	Conduction	B.	Convection	
	C.	Radiation	D.	Evaporation	
634)	Mechanisms of heat lost from bird's body through waves of energy is called				C
	A.	Conduction	B.	Convection	
	C.	Radiation	D.	Evaporation	
635)	Mechanisms of heat lost from bird's body through touching of cold object is called				A
	A.	Conduction	B.	Convection	
	C.	Radiation	D.	Evaporation	
636)	Mechanisms of heat test from bird's body through respiration is called				D
	A.	Conduction	B.	Convection	
	C.	Radiation	D.	Evaporative heat lost	
637)	Thermal stress stated when environmental temperature exceed from				C
	A.	15 ^{0}C	B.	25 ^{0}C	
	C.	35 ^{0}C	D.	45 ^{0}C	
638)	While insulating poultry shed more emphasis should be given to insulate				D
	A.	Windows	B.	Doors	
	C.	Walls	D.	Ceiling	

639)	Minimum R-value of roof for hot climatic conditions should be			B
	A. 02		B. 04	
	C. 08		D. 12	
640)	Minimum R-value of walls for hot climatic conditions should be			B
	A. 01		B. 02	
	C. 04		D. 08	
641)	Causative organism of Infectious Bursal disease is			C
	A. Orthoparamyxo virus		B. Paramyxovirus type-1	
	C. Birna virus		D. Adenovirus	
642)	Causative organism of Gumboro disease is			C
	A. Orthoparamyxo virus		B. Paramyxovirus type-1	
	C. Birna virus		D. Adenovirus	
643)	Causative organism of Avian Nephrosis syndrome is			C
	A. Orthoparamyxo virus		B. Paramyxovirus type-1	
	C. Birna virus		D. Adenovirus	
644)	Causative organism of Hydropericardium syndrome is			D
	A. Orthoparamyxovirus		B. Paramyxovirus type-1	
	C. Birna virus		D. Adenovirus	
645)	Causative organism of Angara disease is			C
	A. Orthoparamyxovirus		B. Paramyxovirus type-1	
	C. Birna virus		D. Adenovirus	
646)	Causative organism of Fowl Pox disease is			C
	A. Orthoparamyxovirus		B. Paramyxovirus type-1	
	C. Pox virus		D. Adenovirus	
647)	Causative organism of Marek's disease is			C
	A. Orthoparamyxovirus		B. Paramyxovirus type-1	
	C. Herpes virus		D. Adenovirus	
648)	Causative organism of Range Paralysis disease is			C
	A. Orthoparamyxovirus		B. Paramyxovirus type-1	
	C. Herpes virus		D. Adenovirus	
649)	Causative organism of Avian Leukosis disease is			D
	A. Orthoparamyxovirus		B. Paramyxovirus type-1	
	C. Herpes virus		D. Oncoronavirus C	
650)	Causative organism of Coccidiosis disease is			C
	A. Orthoparamyxovirus		B. Paramyxovirus type-1	
	C. Emeria Tanella		D. Adenovirus	
651)	Causative organism of Caecal Coccidiosis disease is			C
	A. Orthoparamyxovirus		B. Paramyxovirus type-1	
	C. Emeria Tanella		D. Adenovirus	
652)	Causative organism of Intestinal Coccidiosis disease is			A
	A. Emeria Maxima		B. Paramyxovirus type-1	
	C. Emeria Tanella		D. Adenovirus	
653)	There are about _ species that cause Coccidiosis in chicken			B
	A. 08		B. 09	
	C. 10		D. none of the above.	
654)	Most susceptible age of chicken for coccidiosis attack is			B
	A. 2nd week		B. 3rd week	

	C. 4^{th} weeks	D.	None of the above	
655)	Specific symptom of Intestinal Coccidiosis that confirms the disease is			C
	A. Bloody diarrhea	B.	Blood in droppings	
	C. Pin point hemorrhages in intestine	D.	Birds reluctant to move	
656)	The drug of choice for Coccidiosis is			A
	A. Amprolium	B.	Nocox	
	C. Coccidak	D.	Diasulfina	
657)	Never give _____ during coccidiosis attack			C
	A. Vitamin A&K	B.	Vitamin C	
	C. Vitamin B complex	D.	all of the above	
658)	Medicine for coccidiosis should be administered in the following way			C
	A. Continuous for 5 days	B.	Continuous for 7 days	
	C. Continuous for 3 days, 2 days rest & then 2 days	D.	None of the above	
659)	Coccidiosis is a _____ disease			D
	A. Viral	B.	Bacterial	
	C. Mycotic	D.	Managemental	
660)	Spores of coccidiosis when seen under microscope are _____in shape			D
	A. Oval	B.	Spherical	
	C. Round	D.	Doubled walled oval	
661)	Group of birds belongs to same living place and having similar characteristics including body shape, size and skin color are known as			A
	A. Breed	B.	Variety	
	C. Strain	D.	Class	
662)	Within a breed the group of birds differentiated either by plumage color or shape of comb or feather pattern are known as			B
	A. Breed	B.	Variety	
	C. Strain	D.	Class	
663)	Birds of which class have feathered shank			B
	A. Mediterranean	B.	Asiatic	
	C. American	D.	English	
664)	Birds of which class lay white shelled eggs			A
	A. Mediterranean	B.	Asiatic	
	C. American	D.	English	
665)	Birds of which class have white ear lobes			A
	A. Mediterranean	B.	Asiatic	
	C. American	D.	English	
666)	Birds of which class lay large number of eggs			A
	A. Mediterranean	B.	Asiatic	
	C. American	D.	English	
667)	Commercial development of the domestic fowl is successful attainment of			D
	A. Feeding	B.	Vaccination	
	C. Biosecurity	D.	Genetic Engineering	
668)	Chicken reaches sexual maturity at about			B
	A. 16 weeks	B.	20 weeks	
	C. 24 weeks	D.	28 weeks	
669)	Incubation period for a fertile chicken egg is			B
	A. 19 days	B.	21 days	

	C.	25 days	D.	28 days	
670)	A hen can produce how many progeny per year				C
	A.	100	B.	125	
	C.	150	D.	175	
671)	Objective for layer breeding should be				D
	A.	Rearing and laying mortality	B.	Age at 50% egg production	
	C.	Feed per dozen of eggs	D.	All of these	
672)	Objective for broiler breeding should be				D
	A.	Hen housed production	B.	Hen day production	
	C.	Blood and meat spots	D.	None of these	
673)	Objective for ornamental birds				A
	A.	Improve plumage color	B.	Egg production	
	C.	Body weight	D.	Growth rate	
674)	Economic traits are known as				B
	A.	Important traits	B.	Quantitative traits	
	C.	Qualitative traits	D.	Permanant traits	
675)	Ability of quantitative characters to be transmitted from parent to offspring is known as				A
	A.	Heritability	B.	Heredity	
	C.	Inheritance	D.	Genetics	
676)	Heritability value for chick livability is				A
	A.	05%	B.	07%	
	C.	09%	D.	11%	
677)	Heritability value for age at sexual maturity is				C
	A.	15%	B.	20%	
	C.	25%	D.	30%	
678)	Heritability percentage for adult body weight is				D
	A.	40	B.	45	
	C.	50	D.	55	
679)	Heritability percentage for egg production is:				C
	A.	10	B.	13	
	C.	15	D.	17	
680)	Heritability percentage for fertility is				A
	A.	05	B.	10	
	C.	15	D.	20	
681)	Removal of moisture and heat is usually most important to determine the				B
	A.	Temperature	B.	Ventilation rate	
	C.	Humidity	D.	All of the above	
682)	Ideal relative humidity in the brooder house is				B
	A.	55%	B.	65%	
	C.	75%	D.	85%	
683)	After receiving chicks, first of all flushing is required to provide the energy source. For this purpose use				D
	A.	100 g Sugar/ gallon water	B.	150 g Sugar/ gallon water	
	C.	200 g Sugar/ gallon water	D.	250 g Sugar/ gallon water	
684)	Pure good quality ground maize should be given to chicks during the first day. It provides				A
	A.	Good source of energy and contain high fiber	B.	Good source of energy and contain low fiber	
	C.	Poor source of energy and contain high fiber	D.	Poor source of energy and contain low fiber	

685)	De-beaking is necessary to prevent cannibalism and is done at an age of			B
	A.	5-10 days	B. 07-10 days	
	C.	15-20 days	D. 25-30 days	
686)	Cannibalism can cause mortality among the affected flock at a rate of			A
	A.	30%	B. 40%	
	C.	50%	D. 60%	
687)	The term Cannibalism can be defined as eating a member of			A
	A.	Same species	B. Different Species	
	C.	Species of different breeds	D. None of the above	
688)	To reduce cannibalism problem, debeaking is done. Debeaking is the cutting of			A
	A.	$1/3^{rd}$ of the upper beak	B. $1/4^{th}$ of the upper beak	
	C.	$1/5^{th}$ of the upper beak	D. $1/6^{th}$ of the upper beak.	
689)	Birds are more prone to the diseases during			A
	A.	Brooding	B. Rearing	
	C.	Laying	D. All of the above	
690)	Debeaking should be done in coolest part of the day, some birds bleed excessively, if temperature rises above			A
	A.	$80\ ^0F$	B. $90\ ^0F$	
	C.	$100\ ^0F$	D. $110\ ^0F$	
691)	During incubation hatcher temperature is maintained at			A
	A.	$98.5\ ^0F$	$98.5\ ^0C$	
	C.	$99.5\ ^0F$	$99.5\ ^0C$	
692)	Evacuation of feces along with excess water and electrolyte is known as			D
	A.	Omphalitus.	B. Pullorum	
	C.	Infectios coryza	D. Diarrhea	
693)	Birds kept for production of hatching quality eggs to get progeny for maintaining production of flock are called			C
	A.	Broiler	B. Layer	
	C.	Breeder	D. Non of all	
694)	For Hubbard breeders protein requirements ranges from			C
	A.	15-16%	B. 16-17%	
	C.	17-18%	D. 19-20%	
695)	Metabolizable energy requirement of the Hubbard breeders are			A
	A.	2750-2850 Kcal/ Kg	B. 2850-2950 Kcal/ Kg	
	C.	2950-3050 Kcal/ Kg	D. 3050-3150 Kcal/ Kg	
696)	Chickens kept for meat purpose to meet protein requirement are called			A
	A.	Broiler	B. Layer	
	C.	Breeder	D. All of the above	
697)	Dewclaw of all the chicks should be clipped at			A
	A.	First day	B. Second day	
	C.	Third day	D. Fourth day	
698)	The process of removing the comb is called as			A
	A.	Dubbing	B. Debeaking	
	C.	Clipping	D. All of the above	
699)	Normally all the cockerel should be dubbed at			A
	A.	First day	B. Second day	
	C.	Third day	D. Fourth day	

700)	The most practical program for rearing broiler is				C
	A.	Brooding system	B.	Brood grow house	
	C.	All in all out system	D.	None of all	
701)	Managemental factor which affect the performance of chicks are				D
	A.	Temperature	B.	Sanitation	
	C.	Ventilation and Humidity	D.	All of the above	
702)	Broiler have the inherited ability to grow faster and it become ready to be marketed at the age of				B
	A.	05 weeks	B.	06 weeks	
	C.	07 weeks	D.	008 weeks	
703)	Sulpha drugs can be used to prevent the early chick mortality but it should not be used to prevent				A
	A.	Poisoning	B.	Pullorum	
	C.	Omphalitus	D.	None of all	
704)	In case of broilers, one gallon water should be provided for				B
	A.	20-25 birds	B.	25-30 birds	
	C.	30-35 birds	D.	35-40 birds	
705)	The period in the life of the layer which follows the brooding up to the sexual maturity is called as				A
	A.	Rearing	B.	Laying	
	C.	Molting	D.	All of the above	
706)	Housing system in which birds are moved only once at 10^{th} weeks of age to permanent laying house is called				**B**
	A.	Brood Grow house	B.	Grow Lay house	
	C.	Brood Grow Lay House	D.	All of the above	
707)	The system in which birds are kept from one day of age until the end of laying is called as				C
	A.	Brood Grow house	B.	Grow Lay house	
	C.	Brood Grow Lay House	D.	All of the above	
708)	To improve laying performance, birds feed is restricted up to 15-20% from 9 weeks to sexual maturity is called as				B
	A.	Qualitative restriction	B.	Quantitative restriction	
	C.	Both A and B	D.	None of the above	
709)	For the satisfactory results, light threshold during the rearing period should be				C
	A.	07-08 hours	B.	08-10 hours	
	C.	10-11 hours	D.	11-12 hours	
710)	Light intensity during rearing period should be				A
	A.	½ foot candle	B.	One foot candle	
	C.	One and half foot candle	D.	Two foot candle	
711)	Heritability value for hatchability of fertile egg is				B
	A.	05%	B.	10%	
	C.	15%	D.	20%	
712)	Heritability percentage for broiler live body weight at 6 weeks of age is				C
	A.	35	B.	40	
	C.	45	D.	50	
713)	Heritability percentage for total feed consumption in case of broiler is				D
	A.	50	B.	60	
	C.	65	D.	70	
714)	If off springs are better than parents in certain aspects is known as:				B
	A.	Heritability	B.	Nickability	
	C.	Fertility	D.	Hatchability	
715)	Performance of the off springs above their parents is known as				C

	A.	Worth	B.	Health	
	C.	Vigor	D.	Genetics	
716)	Expression of quantitative genes is effected by				D
	A.	Breeding	B.	Selection	
	C.	Environment	D.	All of these	
717)	Increased selection within a given flock of birds so that a smaller segment of the flock population can be used as breeder is known as				B
	A.	Mass selection	B.	Selection pressure	
	C.	Progeny selection	D.	Individual selection	
718)	Egg production and livability has				B
	A.	Negative correlation	B.	Positive correlation	
	C.	No correlation	D.	Equal correlation	
719)	Body weight and egg production has				A
	A.	Negative correlation	B.	Positive correlation	
	C.	Equal correlation	D.	No correlation	
720)	How much role of environment is in the egg production				D
	A.	70%	B.	75%	
	C.	80%	D.	85%	
721)	The pulmonary respiration in a developing chicken embryo starts during				C
	A.	5^{th} day of incubation	B.	10^{th} day of incubation	
	C.	15^{th} day of incubation	D.	20^{th} day of incubation	
722)	Pipping of shell by a chicken embryo starts on				C
	A.	18^{th} day of incubation	B.	17^{th} day of incubation	
	C.	20^{th} day of incubation	D.	21^{st} day of incubation	
723)	The hatching egg should be stored at a temperature of				D
	A.	$25\ ^{O}F$	B.	$45\ ^{O}F$	
	C.	$65\ ^{O}F$	D.	$85\ ^{O}F$	
724)	During storage of hatching egg the relative humidity should be maintained at				C
	A.	30%	B.	45%	
	C.	60%	D.	75%	
725)	In an incubator, setter temperature for chicken eggs should be maintained at				A
	A.	$99.5\ ^{O}F$	B.	$99.5\ ^{O}C$	
	C.	$98.5\ ^{O}C$	D.	$98.5\ ^{O}F$	
726)	During incubation of chicken eggs the relative humidity should be maintained at (wet bulb reading)				D
	A.	50%	B.	60%	
	C.	70%	D.	84%	
727)	For the best hatching results, thickness of eggshell should be				D
	A.	0.21 mm	B.	0.27 mm	
	C.	0.30 mm	D.	0.36 mm	
728)	Weak shell eggs have a shell thickness less than				D
	A.	0.45 mm	B.	0.39 mm	
	C.	0.33 mm	D.	0.27 mm	
729).	Strong shell eggs have a shell thickness more than				C
	A.	0.24 mm	B.	0.33 mm	
	C.	0.30 mm	D.	0.27 mm	
730)	The cracked shell eggs have				D
	A.	Low hatchability	B.	High hatchability	
	C.	Medium hatchability	D.	None of these	
731)	For effective litter management, super phosphate is used at the rate of ___ kg/1000 square feet				C

	A.	15-20	B.	20-25	
	C.	25-30	D.	30-35	
732)	To control round worms use				A
	A.	Piperazine	B.	Rintol	
	C.	Systamax	D.	Wormol	
733)	_____ is an example of vertically transmitted disease				D
	A.	Coccidiosis	B.	Marek's	
	C.	Trichomoniasis	D.	Leukosis	
734)	Marek's disease occurs in the birds usually at the age of				C
	A.	4-6 week	B.	6-8 week	
	C.	6-16 week	D.	after 16 weeks of age	
735)	Oncorona C virus is a				A
	A.	RNA containing virus	B.	DNA containing virus	
	C.	lethal virus	D.	None of the above	
736)	Tumors in case of Marek's disease are usually found on				A
	A.	Nerves, eyes and skin	B.	Bursa, liver and kidneys	
	C.	Liver, heart and neck	D.	All of above	
737)	Tumors in case of Lymphoid Leukosis disease are usually found on				B
	A.	Nerves, eyes and skin	B.	Liver and spleen	
	C.	Heart and neck	D.	All of above	
738)	Lymphoid Leukosis disease occurs in the birds usually at the age of				D
	A.	4-6 week	B.	6-8 week	
	C.	6-16 week	D.	After 16 weeks of age	
739)	Herpes virus is a				B
	A.	RNA containing virus	B.	DNA containing virus	
	C.	Lethal virus	D.	None of the above	
740)	Soft yellowish white tumors on caranium, long bones and pleural surface of thoracic cage are symptoms of				A
	A.	Myelocytomatosis	B.	Myeloid Leukosis	
	C.	Erythroid Leukosis	D.	Lymphoid Leukosis	
741)	Width of environment-controlled house may be increased up to				B
	A.	40 Feet	B.	50 Feet	
	C.	100 Feet	D.	200 Feet	
742)	Evaporative cooling system is employed when air temperature is greater than				C
	A.	20 ^{O}F	B.	40 ^{O}F	
	C.	80 ^{O}F	D.	90 ^{O}F	
743)	Evaporative cooling system is employed when relative humidity is below				D
	A.	20 %	B.	40 %	
	C.	60 %	D.	80 %	
744)	Air speed in environment-controlled house for better production may range between				A
	A.	350-400 m/sec.	B.	600-900 m/sec.	
	C.	1000-1200 m/sec	D.	1500-2000 m/sec	
745)	Reflective paint on the roof can led to reduce the inside temperature up to				A
	A.	08 ^{0}C	B.	12 ^{0}C	
	C.	20 ^{0}C	D.	25 ^{0}C	
746)	Sprinkling water on the roof can reduce temperature inside the shed up to				B
	A.	01 ^{0}C	B.	05 ^{0}C	

	C.	15 ^{0}C	D.	20 ^{0}C	
747)	The R-value of ceiling in the area of cold climate should be				A
	A.	14	B.	24	
	C.	34	D.	44	
748)	The R-value of walls in the area of cold climate should be				B
	A.	05	B.	10	
	C.	20	D.	40	
749)	In the deep litter housing system floor of the shed is covered with the litter up to				A
	A.	10 inches	B.	20 inches	
	C.	30 inches	D.	40 inches	
750)	Layers during production period are given mash feed whose number is				A
	A.	03	B.	04	
	C.	13	D.	23	

ANIMAL NUTRITION MCQ's					Answer Key
751)	_____ is a primary nutrient				
	A.	Water	B.	Vitamin	D
	C.	Minerals	D.	Fat	
752)	Inorganic part of the diet;				
	A.	Carbohydrates	B.	Proteins	D
	C.	Fats	D.	Minerals	
753)	A Feed that is common to all groups of an experiment;				
	A.	Basal feed	B.	Balanced feed	A
	C.	Complete feed	D.	Both Balanced feed & Complete feed	
754)	Which of the following is the set of micro minerals				
	A.	Fe, Cu, Mn, Zn, Se,	B.	Ca, P, Cl, Na,	A
	C.	Cu, P, Mn, Na	D.	Fe, P, Cl, Mg	
755)	_____ is not the example of volatile fatty acids				
	A.	Acetic acid	B.	Propionic acid	C
	C.	Palmitic acid	D.	Butyric acid	
756)	_____ parts of water for each part of feed are considered water requirements in poultry				
	A.	Two	B.	Three	A
	C.	Four	D.	Five	
757)	-------- is an organic secondary nutrient				
	A.	Carbohydrates	B.	Fat	D
	C.	Protein	D.	Vitamin	
758)	_enzyme, majorly present in the saliva of the animals;				
	A.	Protease	B.	Lipase	D
	C.	Sucrase	D.	Amylase	
759)	Feed is temporarily stored in the bird's----------				
	A.	Mouth	B.	Proventriculus	C
	C.	Crop	D.	Gizzard	
760)	--------- is the unit used to express the energy in mass unit				
	A.	ME	B.	BV	B
	C.	NPR	D.	NPU	
761)	When dietary nutrients are provided more than the requirements, called as ---------- nutrient balance				
	A.	Positive	B.	Negative	B
	C.	Equilibrium	D.	None of them	
762)	_____ is related to the value of protein				
	A.	Nutritive Value	B.	Oxidation value	A
	C.	Biological value	D.	Both Nutritive Value & Biological value	
763)	A form of feed in which all ingredients are in grinded form;				
	A.	Pellet	B.	Mash	A
	C.	Crumble	D.	Kibbles	
764)	-------- % of water is present in the chicken's egg				
	A.	55	B.	65	C
	C.	75	D.	85	

765)	2-9 units of monosaccharaides are present in ---------				
	A.	Disaccharides	B.	Tri-saccharides	C
	C.	Oligosaccharides	D.	Polysaccharides	
766)	Amount of heat of a material when it is completely oxidized is known as----------energy				
	A.	Digestible	B.	Metabolizable	D
	C.	Net	D.	Gross	
767)	Sucrose molecule is made up from----------units				
	A.	Two glucose	B.	Two fructose	D
	C.	Two galactose	D.	Glu + Fruc	
768)	Feed which is rich in total digestible nutrients (more than 80%) poor in fiber contents (less than 18%)				
	A.	Forage	B.	Concentrate	B
	C.	Roughages	D.	Meal	
769)	Some enzymes have non-protein part of the enzyme, known as				
	A.	Co-enzyme	B.	Co-factor	B
	C.	Prosthetic group	D.	Both Co-enzyme & Co-factor	
770)	The fate of dietary components after digestion and absorption, named as				
	A.	Intermediary metabolism	B.	Anabolism	A
	C.	Catabolism	D.	Both Anabolism & Catabolism	
771)	Break down of energy rich compounds into organic acids and alcohols, known as				
	A.	Digestion	B.	Hydrolysis	D
	C.	Metabolism	D.	Fermentation	
772)	Which of the followings is a feed formulation software				
	A.	Brill	B.	Mix-it	D
	C.	Winfeed	D.	All of these	
773)	_____is the end product of protein in poultry birds				
	A.	Glucose	B.	Amino acids	B
	C.	Fructose	D.	Both Amino acids & Fructose	
774)	-------- nutrient has 2.25% more energy than others				
	A.	Carbohydrates	B.	Protein	C
	C.	Fat	D.	Minerals	
775)	Minerals that are mainly involved in skeleton formation				
	A.	Ca, P & Se	B.	Ca, P & I	C
	C.	Ca, P & Mg	D.	Ca, Mg & S	
776)	Continuously evaporation and condensation of organic solvent is happened in ___determination				
	A.	CP	B.	EE	B
	C.	CF	D.	NFE	
777)	Which of the following does not need any chemical reagent for its determination				
	A.	NFE	B.	Crude ash	D
	C.	Moisture	D.	All of these	
778)	The internal temperature of oven for the determination of moisture should be				
	A.	100	B.	150	C
	C.	105	D.	205	
779)	Distillation needs _____ in the determination of crude protein				
	A.	Sodium hydroxide	B.	Potassium hydroxide	A
	C.	Ammonium hydroxide	D.	Calcium hydroxide	
780)	____is present in larger amount than other parts of digestion mixture				
	A.	Sulfuric acid	B.	Copper sulfate	C
	C.	Potassium sulfate	D.	Iron sulfate	
781)	Which one is the function of desiccator				
	A.	It is used to lower down the temperature of the heated sample	B.	It is used to avoid the moisture contamination from the surrounding	D

	C.	It provides moisture free place to cool down the sample	D.	All of these	
782)	We can find the percentage of organic matter with the help of				
	A.	Moisture determination	B.	Ash determination	B
	C.	CP determination	D.	NFE	
783)	We assumed that all protein present in the sample contains on an average _____ percent N				
	A.	6.25	B.	2.25	C
	C.	16	D.	0.0014	
784)	_____ is integral part in the standardization of the solution				
	A.	Distillation	B.	Digestion	C
	C.	Titration	D.	Dehydration	
785)	Phenolphthalein has _____ color in the solution having pH above 7				
	A.	Colorless	B.	Pink	B
	C.	Violet	D.	Light brown	
786)	How much NaOH do you need to make 1 L of 1 M NaOH				
	A.	20	B.	30	C
	C.	40	D.	50	
787)	Term Gram Equivalent Weight is associated with _____ type of solutions				
	A.	Normal	B.	Molar	A
	C.	Percent	D.	Molal	
788)	Which of the following chemical will have similar amount for its 1 N and 1 M solution formation				
	A.	Sulfuric acid	B.	Hydrochloric acid	D
	C.	Sodium hydroxide	D.	Both HCl and NaOH	
789)	_____ is designed to accurately measure the volume of a solution				
	A.	Beakers	B.	Erlenmeyer flask	C
	C.	Volumetric flask	D.	Tall form beakers	
790)	_____ metabolic pathway mainly concern with the formation of NADPH				
	A.	Shunt pathway	B.	Glycolysis	A
	C.	Beta oxidation	D.	Gluconeogenesis	
791)	_____ is responsible for the synthesis of linear sequence of glucose molecules in the formation of glycogen				
	A.	Glycogen synthase	B.	Glucosyl 4 6 transferase	A
	C.	Gluco kinase	D.	UDP glucose pyrophosphorylase	
792)	The process of formation of glycogen from carbohydrate sources is known as				
	A.	Glycogenesis	B.	Gluconeogenesis	A
	C.	Glycogenolysis	D.	None of them	
793)	_____ makes most of the stored energy in the animal body				
	A.	Fats	B.	Protein	A
	C.	Glycogen	D.	Starch	
794)	_____ is strictly aerobic process				
	A.	Glycolysis	B.	Fermentation	C
	C.	Beta oxidation	D.	Both glycolysis and beta oxidation	
795)	Right sequence of four steps of the beta oxidation				
	A.	Hydration then oxidation then hydration then thiolytic cleavage	B.	Oxidation then dehydration then oxidation then thiolytic cleavage	D
	C.	Oxidation then isomerization then oxidation then thiolytic cleavage	D.	Oxidation then hydration then oxidation then thiolytic cleavage	
796)	Beta oxidation cycle will be repeated for _____ times for a fatty acid having 20 C chain length				
	A.	7	B.	8	C
	C.	9	D.	10	
797)	Number of ATP molecules utilized for the beta oxidation of myristic acid				A
	A.	2	B.	5	

	C.	8	D.	7	
798)	The percentage of protein equivalent for the urea is about				
	A.	112	B.	220	C
	C.	280	D.	225	
799)	Ketoacids for microbial protein synthesis comes from the fermentation of _____				
	A.	Carbohydrates	B.	proteins	A
	C.	Fats	D.	Urea	
800)	What is the correct condition for ketogenesis				
	A.	When oxaloacetate is diverted for gluconeogenesis	B.	TCA cycle cannot function optimally	D
	C.	When body does not have enough carbohydrates to burn for energy	D.	All of these	
801)	For dry ashing_____laboratory equipment is used				
	A.	Kjeldahl apparatus	B.	Soxhlet apparatus	C
	C.	Muffle furnace	D.	Hot air oven	
802)	After doing wet ashing we made _____ ml volume of sample solution				
	A.	100	B.	200	A
	C.	300	D.	400	
803)	If 5 ml of sample solution contain 0.875 mg vitamin C then 100 ml solution will contain ___ mg vitamin C				
	A.	1.75	B.	17.5	B
	C.	175	D.	157	
804)	For elemental mineral analysis which of the following technique could be useful after wet digestion				
	A.	Spectrophotometer	B.	Amino acid analyzer	A
	C.	Gas chromatography	D.	HPLC	
805)	For wet ashing sample is treated with _____ and _____acids				
	A.	Nitric acid and perchloric	B.	Perchloric and phosphoric acid	A
	C.	Sulfuric and perchloric	D.	Nitric and phosphoric	
806)	In flame photometer _____ is used to convert light energy into electrical energy				
	A.	Photocell	B.	Galvanometer	A
	C.	Filters specific to minerals like Na or K	D.	None of them	
807)	_____ (mineral) is also known as burning stone				
	A.	Cobalt	B.	Sulfur	B
	C.	Zinc	D.	Copper	
808)	Absorption of cobalt requires specially _____ secreted in stomach				
	A.	Intrinsic factor	B.	HCL	A
	C.	Pepsinogen	D.	None of them	
809)	Iron and ____ are mutually involved in the formation of hemoglobin				
	A.	Copper	B.	Cobalt	A
	C.	Calcium	D.	Chromium	
810)	Big head disease in horses is due to the toxicity of				
	A.	Zinc	B.	Manganese	C
	C.	Iodine	D.	Iron	
811)	Zinc is also bounded in _____ like Ca and P and become unavailable to the body				
	A.	Phytate complex	B.	Dietary protein	A
	C.	Undigested material	D.	None of them	
812)	Thiamin is also known as				
	A.	Antiberiberi	B.	Antineuretic	D
	C.	Antipolyneuritis	D.	None of them	
813)	_____is dietary essential for animals and humans as an important constituent of coenzyme A (CoA)				
	A.	B_1	B.	B_2	D
	C.	B_3	D.	B_5	

814)	Which vitamin play a role in RBCs formation				C
	A.	Pyridoxine	B.	Biotin	
	C.	Cyanocoblamine	D.	Niacin	
815)	Pellagra is caused due to the deficiency of				A
	A.	Niacin	B.	Choline	
	C.	Biotin	D.	Thiamin	
816)	Nutrient requirements to carry on essential functions, such as body metabolism and temperature and replacement of body cells and tissue is known as				B
	A.	Growth requirements	B.	Maintenance requirements	
	C.	Production requirements	D.	Reproduction requirements	
817)	Which mineral has interrelationship with vitamin E regarding antioxidant capacity				D
	A.	Calcium	B.	Sulfur	
	C.	Silicone	D.	Selenium	
818)	Vitamin _____ contain four percent cobalt in its structure				A
	A.	Cyanocobalamin	B.	Niacin	
	C.	Pantothenic acid	D.	Thiamin	
819)	Feeds that have low digestible nutrients and high fiber content is known as;				B
	A.	Concentrates	B.	Roughages	
	C.	Crumbles	D.	Mash	
820)	Which nutrient has heat insulating function in the body?				A
	A.	Fats	B.	Carbohydrates	
	C.	Proteins	D.	none of them	
821)	Corn has approximately ____ percent of crude protein				B
	A.	16	B.	9	
	C.	40	D.	35	
822)	Silage is also known as_____				D
	A.	Pickled fodder	B.	Preserved fodder	
	C.	Fermented fodder	D.	All	
823)	_____ is the supplemental source of Ca and P in the diet of animals				B
	A.	Corn	B.	DCP	
	C.	Oil	D.	Molasses	
824)	True stomach of ruminants digestive system is				D
	A.	Rumen	B.	Reticulum	
	C.	Omasum	D.	Abomasum	
825)	The major end product of fermentation in dairy cattle is				B
	A.	Glucose	B.	VFAs	
	C.	Amino acids	D.	Glycerol	
826)	Nutrients, which an animal can synthesize for growth and maintenance, are in a category called:				A
	A.	Non-essential nutrients	B.	Essential nutrients	
	C.	Indispensable	D.	None of them	
827)	Contribution of feed in total cost of production in broiler farming is about _____ %				C
	A.	30	B.	50	
	C.	70	D.	90	
828)	Structural carbohydrates are main source of energy for:				B
	A.	Non-ruminants	B.	Ruminants	
	C.	Pseudo ruminants	D.	Mono gastric	
829)	Biological fuel values for protein is about _____ kcal/g				D
	A.	1	B.	2	
	C.	3	D.	4	
830)	Vitamin that is not stored in the body and need to be consumed everyday through diet is				B
	A.	Vitamin A	B.	Vitamin B	

	C.	Vitamin D	D.	Vitamin E	
831)	Organic compounds, which are the building blocks in the formation of proteins, are:				C
	A.	Glycerol	B.	Fatty acid	
	C.	Amino acids	D.	Monosaccharaides	
832)	Wheat bran and animal fat are feed concentrates that are classified as:				C
	A.	Protein concentrates	B.	Crop by-products	
	C.	Processing by-products	D.	Supplements	
833)	Which protein concentrate is limited to use by ruminants?				A
	A.	Urea	B.	SBM	
	C.	SFM	D.	CSM	
834)	Minerals that have role in Protein synthesis in the body is/are				D
	A.	Zn	B.	P	
	C.	S	D.	All above	
835)	Which nutrient is the condensed source of energy in the body?				A
	A.	Fats	B.	Carbohydrates	
	C.	Proteins	D.	none of them	
836)	Feed allowance given to the animal during 24 hours, contains all nutrients, is called as;				A
	A.	Complete feed	B.	Basal feed	
	C.	Nutrient	D.	Diet	
837)	Which of the following is a fat soluble vitamin?				D
	A.	Thiamin	B.	Riboflavin	
	C.	Niacin	D.	Tocopherol	
838)	Livestock converts useless feeds such as _____in to useful products for human				D
	A.	Eggs	B.	Meat	
	C.	Milk	D.	Roughages	
839)	Condition when young one is no longer fed milk				B
	A.	Shearing	B.	Weaning	
	C.	Calving & Lambing	D.	Kidding	
840)	Which of the following is a macro mineral?				A
	A.	Calcium	B.	Zinc	
	C.	Iron	D.	Cobalt	
841)	In the feeding of lactating animals the thumb rule is 1 litter milk production needs ___ Kg concentrates to the animal				B
	A.	1	B.	2	
	C.	3	D.	4	
842)	True stomach of ruminants digestive system is				D
	A.	Rumen	B.	Reticulum	
	C.	Omasum	D.	Abomasum	
843)	Gizzard is used as the mechanical digestion of feed in				A
	A.	Chicken	B.	Cattle	
	C.	Horse	D.	Goat	
844)	The major end product of fermentation in cattle is				B
	A.	Glucose	B.	VFAs	
	C.	Amino acids	D.	Minerals	
845)	How can you classify the Mulberry				B
	A.	Concentrates then Energy Concentrates then Agroindustrial byproducts	B.	Roughages then Green Roughages then Tree leaves	
	C.	Roughages then Green Roughages then Silage	D.	Concentrates then Protein Concentrates	
846)	Example of monogastric animals is				D
	A.	Broiler	B.	Layer	
	C.	Broiler breeder	D.	All of them	

847)	Break down of larger feed particles into smaller particles with the help of enzymes is known as				
	A.	Absorption	B.	Ingestion	C
	C.	Digestion	D.	None of them	
848)	How well an animal likes or accepts a feed is referred to as the:				
	A.	Digestibility	B.	Palatability	B
	C.	Absorbability	D.	Rumination	
849)	The total protein contained in a feed is termed as				
	A.	Digestible protein	B.	True protein	C
	C.	Crude protein	D.	NPN	
850)	Biological fuel values for protein is about _____ kcal/g				
	A.	1	B.	4	D
	C.	7	D.	9	
851)	pH of saliva is				
	A.	2-3	B.	5.5-6	C
	C.	8.1-8.5	D.	9-10	
852)	Which of the following is not a protease				
	A.	Pepsin	B.	Trypsin	D
	C.	Carboxypeptidase	D.	Ptylin	
853)	Trypsinogen converted into trypsin in presence of?				
	A.	HCl	B.	Rumen	D
	C.	Both	D.	None of above	
854)	Testosterone is secreted by?				
	A.	Testes	B.	Ovary	A
	C.	Placenta	D.	Kidney	
855)	Water regulation hormone is?				
	A.	STH	B.	ACTH	D
	C.	LH	D.	ADH	
856)	Egg white injury is prevented by _____ nutrient				
	A.	Folacin	B.	Choline	D
	C.	Inositol	D.	Biotin	
857)	Polyneuritis is due to deficiency of?				
	A.	Thiamin	B.	Riboflavin	A
	C.	Niacin	D.	Tocopherol	
858)	Sailor disease is due to deficiency of?				
	A.	Vitamin A	B.	Vitamin B	C
	C.	Vitamin C	D.	Vitamin D	
859)	After burning the animal and plant tissues _____ remained				
	A.	Carbs	B.	Protein	D
	C.	Vitamins	D.	Minerals	
860)	Fats produce _____ times more energy than other nutrients				
	A.	2	B.	2.25	B
	C.	2.5	D.	2.75	
861)	Which of the following ingredient contain more protein than others				
	A.	SBM	B.	SFM	A
	C.	CG30	D.	CSM	
862)	_____ contain more digestible nutrients than other classes of feed ingredients				
	A.	Concentrates	B.	Roughages	A
	C.	Additives	D.	Molasses	
863)	According to the nutrient demand growth and fattening are categorized into				
	A.	Low	B.	High	C
	C.	Medium	D.	Variable	

864)	Commercially more valuable parts of the animals are				D
	A.	Fat	B.	Muscles	
	C.	Udders	D.	All of these	
865)	Young animals generally_____ in comparison of older animals				B
	A.	Consume more feed irrespective of percent of body weight	B.	Use a smaller proportion of their feed for maintenance	
	C.	Form relatively less muscle tissue, which has a more caloric value than fat	D.	All	
866)	_____ is an antioxidant working inside the animals body and it is prepared synthetically				C
	A.	Vitamin E	B.	Sodium propionate	
	C.	Ethoxyquin	D.	Vitamin C	
867)	Non structural carbohydrates are not digested by the poultry birds and ___ is the example of non structural carbohydrates				A
	A.	Bet glucans	B.	Lignin	
	C.	Cellulose	D.	Both cellulose and lignin	
868)	Some _____ are also parts of coccidiostats				B
	A.	Antifungal	B.	Ionophores	
	C.	Pellet binders	D.	Enzymes	
869)	Estrogen compounds are used to increase the growth rate and fat deposition on carcass and ___ is an example of these compounds				A
	A.	DES	B.	Ethoxyquin	
	C.	Iodinated casein	D.	All	
870)	___ substances has role in repartitioning of nutrients from fat to protein synthesis				A
	A.	Beta adrenergic agents	B.	Alkalizing agents	
	C.	Thyroactive substances	D.	DES	
871)	__ is very useful for cardiac patients				A
	A.	Saponins	B.	Zeolites	
	C.	Cimaterol	D.	Clenbuterol	
872)	____ protein is not insoluble in the distilled water				B
	A.	Euglobins	B.	Pseudo glubins	
	C.	Derived proteins	D.	All	
873)	Amino acid catabolism is more likely to occur when _____ levels are low				A
	A.	Glucose	B.	Proteins	
	C.	Fats	D.	Urea	
874)	Cephalin is related to_____				B
	A.	Non glycerol based lipids	B.	Phospholipids	
	C.	Glycolipids	D.	Waxes	
875)	Glycerol is metabolized into ____				C
	A.	Intermediates of Krebs cycle	B.	Intermediated of electron transport chain	
	C.	Dihydroxy acetone	D.	Alpha ketoglutarate	
876)	A feed that provides all the nutrients in a proper portion as required by an animal body is called				C
	A.	Complete feed	B.	Total mixed ration	
	C.	Balanced feed	D.	Total mix ration	
877)	Metabolizable energy of a feed is equal to its				C
	A.	Gross energy minus fecal energy	B.	Fecal energy minus urinary energy	
	C.	Fecal energy minus urinary and gaseous energy	D.	Gross energy minus urinary energy	
878)	Nonnutritive products that improve the rate and/ or efficiency of gain of animals, prevent certain diseases, or preserve feeds are called				D
	A.	feed supplements	B.	Feed additives	
	C.	Ionophores	D.	Growth promoters	
879)	In ruminants, defaunation refers to				B

	A.	Removal of bacteria	B.	Removal of protozoa	
	C.	Removal of bacteriophage	D.	Removal of fungi	
880)	Cellulose is basically polymer of glucose linked through				
	A.	α,1-4 linkage	B.	ß, 1-4 linkage	B
	C.	α,1-6 linkage	D.	ß, 1-6 linkage	
881)	Crude fibers contain followings				
	A.	Lignin and cellulose	B.	Lignin, cellulose and hemicellulose	A
	C.	Lignin, cellulose, hemicellulose and starch	D.	Monosaccharides, disaccharides, and polysaccharides	
882)	…… in indigestible both in ruminants and monogastric				
	A.	Cellulose	B.	Lignin	B
	C.	Hemicellulose	D.	Neutral detergent fiber	
883)	Lactose is a disaccharide of				
	A.	Glucose+fructose	B.	Glucose+ glucose	C
	C.	Glucose+ galactose	D.	Galactose+ galactose	
884)	Green leguminous fodder contains……				
	A.	Saponins	B.	Cyanogens	A
	C.	Trypsin inhibitor	D.	Glycosinolates	
885)	Formation of glucose from protein is				
	A.	Gluconeogenesis	B.	Glyconeolysis	A
	C.	Glycoenesis	D.	Glycolysis	
886)	Silo filler's disease is due to inhalation of oxides of----------				
	A.	Nitrogen	B.	Sulphur	A
	C.	Phosphorus	D.	Magnesium	
887)	During milk fever the body temperature of animal				
	A.	Rises to above $105^{O}C$	B.	Becomes subnormal	B
	C.	Has no relationship with the disease	D.	Can vary from 100-$105^{O}C$	
888)	Signs include stiff gait, tremors, tetany, constipation, and decreased rumen contractions				
	A.	Hypomagnesemia	B.	White Muscle Disease	C
	C.	Hypocalcemia	D.	Copper Toxicosis	
889)	Example of Succulent feeds….				
	A.	Hay	B.	Silage	D
	C.	Tapoica Roots	D.	Both Silage and Tapocia roots	
890)	Main source of energy in the body ruminant animals is				
	A.	Glucose	B.	Glucose, fructose and galactose	C
	C.	Volatile fatty acids	D.	Amino acids and all fatty acids	
891)	_____ is the muscular wave of contractions that squeezes a bolus into the stomach				
	A.	Peristalsis	B.	Psoriasis	A
	C.	Substrate feeding	D.	Conjunctivitis	
892)	……..VFA act as precursor of glucose in ruminants				
	A.	Acetate	B.	Butyrate	C
	C.	Propionate	D.	All the above	
893)	VFA act as precursor of milk fat in ruminants				
	A.	Acetate	B.	Butyrate	A
	C.	Propionate	D.	All the above	
894)	If a sample of feed contains 10% Nitrogen, its crude protein will be equal to				
	A.	62.5%	B.	6.25%	A
	C.	10%	D.	0%	
895)	Absorption of amino acids in ruminant animals takes place				
	A.	In the rumen	B.	In the reticulum	D
	C.	In the abomasum	D.	In the small intestine	
896)	Immediately after fat absorption, monoglycerides move into				A

	A.	Lymph vessels	B.	Blood vessels	
	C.	Villi	D.	Chylomicron	
897)	The fats absorbed from the gut are transported to the blood in the form of				C
	A.	Liposomes	B.	Chemomicrons	
	C.	Chylomicrons	D.	Micelles	
898)	The measure of total energy present in a feed is called				A
	A.	Gross energy	B.	Digestible energy	
	C.	Metabolizable energy	D.	Net energy	
899)	Brix value is the measure of				C
	A.	Bitterness	B.	Sweetness	
	C.	Sugar contents	D.	None of above	
900)	Which one is sulpher containing amino acid				D
	A.	lysine	B.	Tryptophan	
	C.	Threonine	D.	Methionine	
901)	Amino acid which does not participate in transamination reactions				A
	A.	Lysine	B.	Valine	
	C.	Tryptophan	D.	None of these	
902)	Which one is correctly matched?				C
	A.	Vitamin D-Riboflavin	B.	Vitamin B-Calciferol	
	C.	Vitamin E-Tocopherol	D.	Vitamin A-Thyamine	
903)	Which fat soluble vitamin also acts as hormones				B
	A.	A	B.	D	
	C.	E	D.	K	
904)	Vitamin K acts as				A
	A.	Anti-coagulant	B.	Hormones	
	C.	Calcium binding factor	D.	None of these	
905)	Cows that are at risk of developing ketosis can be fed with the following vitamin to help prevent ketosis				A
	A.	Niacin	B.	Zinc	
	C.	B complex	D.	Vitamin C	
906)	Cyanocobalamine is essential for the formation of				C
	A.	Lymph	B.	WBC	
	C.	RBC	D.	Platelets	
907)	The intake of calciferol is known to prevent				C
	A.	Osteomalacia	B.	pellagra	
	C.	scurvy	D.	xerophthalmia	
908)	Which of the following trace element is significant for maintenance of teeth				A
	A.	Fluoride	B.	Zinc	
	C.	Copper	D.	Manganese	
909)	Correction with the endogenous compounds of feces during digestibility estimation is called				A
	A.	True digestibility	B.	apparent digestibility	
	C.	overall digestibility	D.	none of these	
910)	During prolonged fasting the sequence of organic compounds used by body is				A
	A.	Carbohydrates, fats, proteins	B.	Fats, carbohydrates, proteins	
	C.	Carbohydrates, proteins, lipids	D.	Proteins, lipids, carbohydrates	
911)	Brunner's glands are found in				D
	A.	Stomach	B.	Ileum	
	C.	Colon	D.	Duodenum	
912)	Which ones are bile salts				D
	A.	Hemoglobin and biliverdin	B.	Bilirubin and biliverdin	
	C.	Bilirubin and hemoglobin	D.	Sodium glycolate and taurocholate	
913)	…….. is the heat produced by an animal during complete rest (not sleeping) following fasting,				A

	using energy just enough to maintain vital cellular activity, respiration and circulation				
	A.	Basal metabolic rate	B.	Heat of Increment	
	C.	Basal Metabolic reaction	D.	All of these	
914)	Maximum permitted level of aflatoxin in animal feeds				A
	A.	30 ppb	B.	300 ppb	
	C.	3000 ppb	D.	30000 ppb	
915)	They are generally thought to aid in the digestion of very fibrous components of feed, such as lignin and cellulose, but their action is not completely understood				B
	A.	Protozoa	B.	Yeast	
	C.	Bacteria	D.	Both bacteria and yeast	
916)	The pathway of propionate production in animal consuming high fibrous diet				A
	A.	Succinate pathway	B.	Citrate Cycle	
	C.	Glycolysis	D.	none of these	
917)	Which protein is responsible for transportation of iron within the body				A
	A.	Transferrin	B.	Calbindin	
	C.	Hemoglobin	D.	none of these	
918)	What is common among amylase, renin and trypsin				B
	A.	these are all proteolytic enzymes	B.	these are all proteins	
	C.	these are all produced in stomach	D.	these act at pH lower than 7	
919)	Hydrolytic enzymes which act on low pH are called as				C
	A.	Protease	B.	Alpha amylase	
	C.	Hydrolases	D.	Peroxidases	
920)	Mature cows produce _____ gallons of saliva per day				D
	A.	2	B.	4	
	C.	6	D.	12	
921)	The hormone that raises blood glucose levels is				B
	A.	Insulin	B.	Glucagon	
	C.	Secretin	D.	Pepsin	
922)	In estimation of true digestibility considering endogenous losses is important mostly in the case of …				
	A.	proteins and amino acids	B.	fibre	
	C.	NDF	D.	ADF	
923)	The saliva of pre-ruminant calves contains pregastric esterase which is secreted by				A
	A.	Palatine glands	B.	Sub-lingual gland	
	C.	Parotid gland	D.	Sub-mandibular gland	
924)	Following minerals have important roles in erythropoiesis, except				D
	A.	Iron	B.	Copper	
	C.	Cobalt	D.	Molybdenum	
925)	Protease inhibitors are present in				D
	A.	Molasses	B.	Sunflower meal	
	C.	Canola meal	D.	Soybean meal	
926)	Which one is an essential amino acid for poultry				
	A.	Taurine	B.	Glycine	
	C.	Glutamine	D.	Serine	
927)	Urease test is used for assessing the quality of				A
	A.	Soybean meal	B.	DCP	
	C.	MCP	D.	NONE	
928)	Protein utilization is interfered in …				D
	A.	Trypsin inhibitor	B.	Phytates	
	C.	Tannins	D.	Both trypsin inhibitor and tannin	
929)	Which is not one of the advantages of grinding				D
	A.	Improve feed utilization	B.	Improve palatability	

	C.	Increase surface area for enzymatic action	D.	Increase feed passage time	
930)	Sodium sorbate is used as…				C
	A.	Antibiotic	B.	Anthelmentic	
	C.	Antifungal additives	D.	Both antibiotic and anthelmentic	
931)	Which stomach chamber is lined with intersecting ridges that form honeycomb-like projections				A
	A.	Reticulum	B.	Rumen	
	C.	Omasum	D.	Abomasum	
932)	Signs include excitability, convulsions, muscle spasms, increased respiratory rate, and dead in pasture				A
	A.	Hypomagnesemia	B.	White Muscle Disease	
	C.	Hypocalcemia	D.	Copper Toxicosis	
933)	The esophageal groove forms a passageway from the _____ to the_____				C
	A.	Reticulum, omasum	B.	Cardia, abomasum	
	C.	Cardia, omasum	D.	Reticulum, abomasum	
934)	Vit. B2 is also called				A
	A.	Riboflavin	B.	Niacin	
	C.	Pyradxin	D.	Both Niacin and Pyradxin	
935)	Urea Toxicity is also termed as				A
	A.	NH3 toxicity	B.	Urine toxicity	
	C.	Blood toxicity	D.	Lymph toxicity	
936)	Colostrums feeding to the young born calf should be given by				A
	A.	1/10th of body wt.	B.	1/20th of body wt.	
	C.	1/5th of body wt.	D.	1/25th of body wt.	
937)	The term ……. is used for a digestive upset in cattle where large amounts of gas are trapped				D
	A.	Acidosis	B.	Founder	
	C.	Shipping fever	D.	Bloat	
938)	……. VFA is normally present in the greatest quantity in the rumen of ruminants				C
	A.	Butyric	B.	Propionic	
	C.	Acetic	D.	Lactic	
939)	The following compound is the backbone of phospholipids and triglycerides				C
	A.	Glycerin	B.	Triolein	
	C.	Glycerol	D.	Fatty acids	
940)	Vitamin B1 deficiency causes …….. a problem in feedlot lambs				A
	A.	Polioencephalomalacia	B.	Wool loss	
	C.	Acidosis	D.	Urinary calculi	
941)	White Scour is disease in				B
	A.	Heifer	B.	Calves	
	C.	Cow	D.	Buffalo	
942)	Berri Berri is the most common disease caused by the deficiency of_____				B
	A.	Vit. A	B.	Vit. B	
	C.	Vit. C	D.	Vit. C	
943)	In colostrums, Vitamin D contents are ……..times more than normal milk				C
	A.	2 times	B.	4 times	
	C.	3 times	D.	5 times	
944)	Creep ration is given before				B
	A.	Calving	B.	Weaning	
	C.	Conception	D.	Both calving and weaning	
945)	…….is called Insacco or Nylen bag technique				B
	A.	In Vivo	B.	In Situ	
	C.	In Vitro	D.	In vivo and In Vitro both	
946)	ll Vitamins are present in eggs except				C

	A.	Vit. A	B.	Vit. B	
	C.	Vit. C	D.	Vit. D	
947)	Nucleoprotein & glycoprotein belongs to protein group				
	A.	Derived and Conjugated	B.	Conjugated	B
	C.	Simple	D.	Simple and Conjugated	
948)	Transference of nutrient from gut to blood is called				
	A.	Absorption	B.	Diffusion	A
	C.	Effusion	D.	Active transport	
949)	The most important function of Vit. E is in				
	A.	Reproduction	B.	Respiration	A
	C.	Production	D.	Urination	
950)	The globulin in the colostrums is considered to have				
	A.	Antigen	B.	Antibody	B
	C.	Both Antigen and Antibody	D.	Nor Antigen nor antibody	
951)	Different method to measure digestibility is				
	A.	In vivo technique	B.	In Situ	D
	C.	In vitro technique	D.	All of them	
952)	Vitamin D is synthesized in skin by the action of sunlight on				
	A.	Cholesterol	B.	7-dehydrocholesterol	B
	C.	Cephalo cholesterol	D.	Cholesterol and 7-dehydrocholesterol	
953)	Molasses excellent source of minerals except				
	A.	Calcium	B.	Phosphorus	B
	C.	Magnesium	D.	Sodium	
954)	Molasses rich in vitamins				
	A.	Niacin and Pantothenic acid	B.	Niacin and Cyanocobalamin	A
	C.	Pantothenic acid and riboflavin	D.	Thiamine and Riboflavin	
955)	The inclusion of molasses in poultry and ruminants diets are				
	A.	5-10% & 10-15%	B.	2-5% & 10-15%	B
	C.	2-5% & 5-10%	D.	1-2% & 5-10%	
956)	…… only truly ketogenic amino acid				
	A.	Leucine	B.	Lysine	A
	C.	Isoleucine	D.	Tyrosine	
957)	Sulphur containing vitamins are ……				
	A.	Thiamine and Riboflavin	B.	Thiamine and Biotin	B
	C.	Biotin and Cyanocobalamin	D.	Thiamine and Cyanocobalamin	
958)	Gingin rickets in lambs & calves due to……deficiency				
	A.	Calcium	B.	Phosphorus	C
	C.	Copper	D.	Magnesium	
959)	Polyneuritis is deficiency symptom of vitamin				
	A.	B1	B.	B2	A
	C.	B6	D.	B12	
960)	NAD into NADH genesis …….moles of ATP				
	A.	0	B.	1	B
	C.	2	D.	3	
961)	FAD into FADH genesis …….moles of ATP				
	A.	0	B.	1	C
	C.	2	D.	3	
962)	GAD into GTP genesis …….moles of ATP				
	A.	0	B.	1	B
	C.	2	D.	3	
963)	…..is called as branching enzyme in glycogenesis				A

	A.	Glucosyl 4,6 transferase	B.	Amylo 1,6 glucosidase	
	C.	Glycogen phosphorylase	D.	Glycogen synthetase	
964)	……..is called as de -branching enzyme in glycogenesis				
	A.	Glucosyl 4,6 transferase	B.	Amylo 1,6 glucosidase	B
	C.	Glycogen phosphorylase	D.	Glycogen synthetase	
965)	Aminoacids are not participated in transamination reaction				
	A.	Leucine and Lysine	B.	Lysine and Methionine	A
	C.	Methionine and Threonine	D.	Leucine and Isoleucine	
966)	Mineral involved in urea cycle				
	A.	Calcium	B.	Phosphorus	C
	C.	Magnesium	D.	Manganese	
967)	1Kg TDN =…….Kcal Digestible energy				
	A.	4400	B.	3020	A
	C.	0.869	D.	5025	
968)	NFE% =100-				
	A.	Moisture%+CF%+CP%+EE%	B.	CF%+CP%+EE%+ash%	C
	C.	Moisture%+CF%+CP%+EE%+ash%	D.	CP%+CF%+EE%	
969)	Ruminants cannot convert glucose to fat due to lack of				
	A.	ATP citrate lyase	B.	NADP malate dehydrogenease	D
	C.	ATP acetate lyase	D.	Both ATP citrate lyase and NADP malate dehydrogenease	
970)	%TDN=				
	A.	dig.protein %+dig.fibre% +dig NFE% +dig EE% +ash%	B.	dig.protein %+dig.fibre% +dig NFE% +dig EE% ×2.25	B
	C.	dig.protein %×2.25+dig.fibre% +dig NFE% +dig EE%	D.	dig.protein %+dig.fibre% +moisture% +dig EE%	
971)	pH of very good silage is……4.2-4.5				
	A.	3.5-4.2	B.	4.2-4.5	A
	C.	4.5-4.8	D.	>4.8	
972)	Minimum crude protein for a calf starter should be				
	A.	20-22%	B.	23-26%	B
	C.	28-30%	D.	18-20%	
973)	For the conversion of trypsinogen to trypsin …….enzyme is needed				
	A.	Exopeptidase	B.	Enterokinase	B
	C.	Endopeptidase	D.	Chymotrypsin	
974)	4.5 gram of methane is produced by utilizing 100 g of				
	A.	Carbohydrates	B.	Protein	A
	C.	NPN	D.	Fats	
975)	The brown colour of silage is due to				
	A.	Production of lactic acid	B.	Formation of alcohol	C
	C.	A pigment phaecophytin	D.	Production of butyric acid	
976)	……. deficiency causes perosis				
	A.	Manganese and Choline	B.	Biotin and Folic acid	D
	C.	Thiamine, Manganese, Choline, Biotin and Folic acid	D.	Vitamin B12, Manganese, Choline, Biotin and Folic acid	
977)	All reactions in TCA cycle are reversible except the formation of…				
	A.	Succinyl CoA	B.	Succinate	A
	C.	α keto glutarate	D.	Fumarate	
978)	For fatty acid synthesis, Acetyl CoA comes from mitochondria to cytoplasm as				
	A.	Carnitine	B.	Malate	C
	C.	Citrate	D.	Oxaloacetate	

979)	Poultry and ruminant animals have different digestive physiology, therefore				
	A.	Poultry use high fibrous diets and ruminants use less fibrous diets	B.	Poultry can use urea as protein substitute whereas ruminants can't	D
	C.	Poultry can synthesize certain essential vitamins whereas ruminants can't	D.	None of above	
980)	Rumen is a fermentation vat where				
	A.	Low quality proteins are converted tint high quality protein and vice versa	B.	Carbohydrates are converted into volatile fatty acids	D
	C.	Unsaturated fats are saturated	D.	All of above	
981)	Bacteria found in the rumen				
	A.	Need CO2 to survive	B.	Survive in anaerobic environment	D
	C.	Need Nitrogen for their growth and multiplication	D.	All of above	
982)	Fibrolytic bacterial population is high in the rumen when the animals are on				
	A.	High protein diet	B.	High fat diet	D
	C.	High concentrate diet	D.	High forage	
983)	New born calves are ruminants therefore can utilize				
	A.	High fibre diet	B.	NPN compound as a substitute of protei	D
	C.	Low quality forages	D.	None of above	
984)	Fibre is important in ruminant animals				
	A.	Because it can be converted into volatile fatty acids and provides energy to the animals	B.	It maintains butterfat in the lactating dairy animals	D
	C.	It maintains their digestive health	D.	All of above	
985)	Lignin is found in forages and is chemically				
	A.	A carbohydrate	B.	A protein	D
	C.	Complex of protein and carbohydrates	D.	Consists of Phenolic compounds	
986)	Ash consists of inorganic matter in a feed and is				
	A.	More digestible than carbohydrates	B.	Provides more energy than fats	D
	C.	Provides more energy than vitamins	D.	It does not provide any energy to the animal	
987)	Ruminally protected proteins are the one that are				
	A.	Highly digestible in the rumen and release pure proteins on hydrolysis	B.	Fermented in the rumen and release essential amino acids as end products	C
	C.	Pass from the rumen undigested and are available to the animal in lower gasrto-intestinal trac	D.	Digested in the large intestine and more beneficial to the host animal	
988)	During high environmental temperature				
	A.	Intake of the animals is increased	B.	Intake of the animals is decreased	B
	C.	Intake of the animal is not affected	D.	None of above	
989)	Maintenance requirements of the animals are high				
	A.	In a severe cold temperature	B.	In a thermoneutral zone	A
	C.	In a windy weather	D.	All of above	
990)	Pseudo-ruminants possess three compartmented stomach with one of the following being absent				
	A.	Rumen	B.	Reticulum	C
	C.	Omasum	D.	Abomasums	
991)	The development of rumen wall and the papillae depends on				
	A.	Fibrous diet	B.	Stimulation by volatile fatty acids	B
	C.	Inoculation by rumen bacteria	D.	All of above	
992)	What stomach compartments are not developed in a newborn calf				
	A.	Abomasum and omasum	B.	Abomasum and rumen	D
	C.	Rumen and omasum	D.	Rumen and reticulum	
993)	When the environmental temperature falls below 30°F, ro provide more energy, the normal diet of a young calf should be supplemented with				B
	A.	Protein	B.	Fats	

	C.	Vitamin A	D.	Warm Fresh Milk	
994)	What percent of crude protein should a calf starter be				
	A.	6-8	B.	10-12	C
	C.	16-18	D.	22-24	
995)	The saliva of pre-ruminant calves contains pregastric esterase which is secreted by				
	A.	Palatine glands	B.	Sub-lingual gland	A
	C.	Parotid gland	D.	Sub-mandibular gland	
996)	Total digestible nutrients (TDN) is a simplified representation of				
	A.	Gross energy (GE)	B.	Digestible energy (DE)	B
	C.	Metabolizable energy (ME)	D.	Net energy (NE)	
997)	Following minerals have important roles in erythropoiesis, except				
	A.	Iron	B.	Copper	D
	C.	Cobalt	D.	Molybdenum	
998)	Iodine is necessary to synthesis thyroid hormones that regulate the metabolism of				
	A.	Carbohydrate	B.	Fat	D
	C.	Protein	D.	Energy	
999)	Out of the following which one is regarded as dietary essential vitamin in ruminants and pre-ruminants as well				
	A.	Riboflavin	B.	Biotin	C
	C.	Ascorbic acid	D.	Choline	
1000)	Night blindness is a deficiency symptom of Vitamin				
	A.	A	B.	D	A
	C.	E	D.	K	