S.No	Question	Choices				Correct
1	_____estimated that incompatibility occurs in more than 3,000 species among 20 families of the flowering plants:	A.	D. De Winton	B.	M.B. Hughes	
		C.	W.H. Gabelman	D.	E.M. East	D
2	_____provides the best documented example of long time effects of selection:	A.	Sugarcane	B.	Sweet sorghum	
		C.	Sugar beet	D.	Sugar maple	C
3	_____ deteriorates drastically upon inbreeding:	A.	Carrot	B.	Okra	
		C.	Brinjal	D.	Broccoli	A
4	_____ in Ladino clover is governed by two dominant alleles, one produces cyanogenic glycoside, while the other releases the enzyme to catalyze its release from gloycoside:	A.	Oxalic acid	B.	IAA	
		C.	HCN	D.	NAA	C
5	_____ are examples of protandrous species:	A.	Avocados	B.	Walnuts	
		C.	Carrots	D.	None of these	B
6	Origin of Species by means of Natural Selection' was given by:	A.	Lamark	B.	Linnaeus	
		C.	Charles Darwin	D.	Erasmus	C
7	Radish' is an example of:	A.	Fusiform root	B.	Napiform root	
		C.	Conical root	D.	Tuberous root	A
8	"Experiments in Plant Hybridization" a paper of G. Mendal was first published in the year	A.	1905	B.	1787	
		C.	1866	D.	1896	C
9	"If a gene is represented in an infinitely large random-mating population by adaptively neutral alleles, A and a, in the ration of qA	A.	Stanford-Suneson law	B.	Weibe-Thomas law	
		C.	Briggs-Harlan law	D.	Hard-Weinberg law	D
10	2n - 1 is a:	A.	Monosomic	B.	Transonic	
		C.	Tetrasomic	D.	Alloploid	A
11	2n denotes:	A.	Number of homozygote	B.	Number of types of gametes produced	
		C.	Number of types of heterozygote	D.	None of the above	B
12	A cell or an organism having one chromosome pair in addition to the normal somatic compliment of the species is:	A.	Monosomic	B.	Nullisomic	
		C.	Tetrasomic	D.	Trisomic	C
13	A character dermined by many genes and does not show discrete variation is known as	A.	Qualitative character	B.	Oligogenic character	
		C.	Quantitative character	D.	Multiple-allelic character	A
14	A complex of communities of plants and animals of a region existing under identical climatic conditions is called as	A.	Biome	B.	Ecosystem	
		C.	Ecological complex	D.	Environment	A
15	A condition in which pollination and fertilization take place in an unopened flower is termed as:	A.	Homogamy	B.	Apogamy	
		C.	Polygamy	D.	Cleistogamy	D
16	A criss-cross inheritance is shown by:	A.	Sex-influenced character	B.	Polygamy	
		C.	Sex-linked character	D.	Sex-quantitative character	C
17	A cybrid is:	A.	A sex hybrid	B.	A hybrid formed by cell fusion	
		C.	A plant produced by cell culture	D.	Synonym to hybrid	B
18	A dry, one chambered and one seeded fruit developing from a superior ovary with the hard and woody pericarp is:	A.	Achene	B.	Caryopsis	
		C.	Composite fruit	D.	None of the above	C
19	A fruit, which develops from an inflorescence, is known as:	A.	Simple fruit	B.	Aggregate fruit	
		C.	Composite fruit	D.	None of these	C
20	A fruit, which is collection of simple fruits developing from the apocarpous pistil of a flower, is known as:	A.	Multiple fruit	B.	Aggregate fruit	
		C.	Complex fruit	D.	Simple fruit	B
21	A generative nucleus in the male gametophyte divides _____ to form two male gametes:	A.	Mitotically	B.	Meiotically	
		C.	Mitotically and Meiotically	D.	None of these	A
22	A head or capitulum's is characteristic of:	A.	Compositeae	B.	Umbelliferae	
		C.	Solanaceae	D.	Gramineae	A
23	Zamikand and Taro (Colocasia) are example of:	A.	Rhizome	B.	Tuber	
		C.	Bulb	D.	Corm	D

24	A homozygous line developed by self-fertilization in a cross-pollinated crop is termed as:	A.	Pureline	B.	Inbred	
		C.	Clone	D.	Mutant	B
25	A hybrid is always:	A.	Heterozygous	B.	Homozygous	
		C.	Both of the above	D.	Often homozygous	A
26	A large unit of natural vegetation in an area under identical condition (climatic) is called:	A.	Plant formation	B.	Association	
		C.	Community	D.	Climax	A
27	A maintainer line is:	A.	Male fertile and can restore fertility	B.	Male sterile but can restore fertility	
		C.	Male sterile but cannot restore	D.	Male fertile but cannot restore	D
28	A male child would be born to parents if	A.	The father is healthier than the	B.	The mother eats well during	
		C.	The genetic composition of the	D.	The genetic composition of the	C
29	A male gametophyte in angiosperms contains:	A.	One gamete	B.	Two male gamete only	
		C.	Two male gametes and one tube	D.	One male gamete and one tube	C
30	A mendelian population means:	A.	Self-pollinated population	B.	Inbred population	
		C.	Random-mating population	D.	Hybrid population	C
31	A method of breeding most commonly used when the desired variation is required to be induced in a vegetatively propagated crop	A.	Polyploidy	B.	Pedigree method of breeding	
		C.	Mutation breeding	D.	Backcross method of breeding	A
32	A mixture of two immiscible liquids shaken up is:	A.	Saturated solution	B.	A suspension	
		C.	An emulsion	D.	Colloid	C
33	A plant bearing both male and female flowers is said to be:	A.	Dioecious	B.	Monoecious	
		C.	Polygamous	D.	None of above	B
34	A plant breeder is interested to control pollination to:	A.	Prevent cross-pollination	B.	Control pollination	
		C.	None of these	D.	Both of these	D
35	A plant cell when put into a hypotonic solution, it unlike animal cell does not brust because:	A.	It has no semi-permeable	B.	It has inelastic cell wall	
		C.	Both (a) & (b)	D.	None of the above	B
36	A plant with 2n = 20 will have how many linkage group:	A.	20	B.	10	
		C.	40	D.	5	B
37	A plant with genotype Gg Ww will produce gametes of which of the following types?	A.	GW, gw, gW,Gw	B.	GG,WW,gg,ww	
		C.	Gw,GG,GW	D.	All of them	A
38	With the increase in temperature, the solubility of solid in a liquid:	A.	Increases	B.	Decreases	
		C.	Both (a) & (b)	D.	None of the above	A
39	A restorer gene is present in:	A.	Nucleus	B.	Cytoplasm	
		C.	Both (a) & (b)	D.	None of these	A
40	A state of meiotic cell division when homologous chromosomes separate and move to different poles is known as:	A.	Metaphase I	B.	Anaphase I	
		C.	Telophase I	D.	Anaphase II	B
41	A successful establishment of vegetation in a new locality means:	A.	Commensalisnt	B.	Ecesis	
		C.	Succession	D.	Psammosere	B
42	. Differences among the individuals of a same species is called:	A.	Variation	B.	Inheritance	
		C.	Zenia	D.	Ideotype	A
43	Wind pollination is also known as:	A.	Anemophyly	B.	Entomophyly	
		C.	Zoophyly	D.	Hydrophyly	A
44	Acclimatisation is:	A.	A process of adjustm	B.	Related with the cla	
		C.	Removal of female p	D.	Changing of climati	A
45	According to position of the ovule within the ovary, an ovule may be:	A.	Ascending	B.	Pendulous	
		C.	Suspended	D.	All of the above	D
46	Actual petrified remains of ancient plants and animals or impressions left by them in rocks are called	A.	Fossils	B.	Models	
		C.	Traces	D.	None of the above	A
47	Adjustment of individual to their environment by mean of special structures or of function of spoken of:	A.	Mutation	B.	Variation	

		C.	Heredity	D.	Adaptation	D
48	Adventitious roots grow from:	A.	Radical	B.	Plumule	
		C.	Hypophysis	D.	Any part of the plant body other	D
49	After the cell has undergone mitosis, the amount of DNA in daughter cells will be:	A.	Equal to the parent cell	B.	Half of the parent cell	
		C.	Double of the parent cell	D.	None of the above	A
50	Albinism in plants is associated with:	A.	Epistatis	B.	Recessive lethal	
		C.	Dominant lethal	D.	Chromosome duplication	B
51	Alternative forms of a gene is known a:	A.	Mutation	B.	Gamete	
		C.	Allele	D.	Genotype	C
52	An anticodon is a sequence of three nitrogenous bases found on:	A.	DNA	B.	mRNA	
		C.	r RNA	D.	t RNA	D
53	An association can be:	A.	Hydrophytic	B.	Halophytic	
		C.	Xerophytic	D.	All of the above	D
54	An egg or sperm cell in plants is called:	A.	Gene	B.	Gamete	
		C.	Zygote	D.	None of them	B
55	An embryo sac of angiosperms generally contains:	A.	Two nuclei	B.	Three nuclei	
		C.	Four nuclei	D.	Eight nuclei	D
56	An endospermic cell of a seed after somatic chromosome number (2n = 20) will have:	A.	30 Chromosomes	B.	20 Chromosomes	
		C.	10 Chromosomes	D.	40 Chromosomes	A
57	An individual having different alleles for any gene pair and producing two kinds of gametes is known as:	A.	Hemizygous	B.	Homozygous	
		C.	Heterozygous	D.	Heterogenous	C
58	An organism having the gametic chromosome numbers is called as:	A.	Genome	B.	Hybrid	
		C.	Gamete	D.	Haploid	D
59	An organism with one extra chromosome (2n + 1), is instead of the normal diploid (2n) is known as	A.	Monoploid	B.	Monosomic	
		C.	Trisomic	D.	Tetrasonic	C
60	Ascending portion of the axis of the plant, developing directly from the plumule and bears leaves, braches and flower is known as	A.	Root	B.	Steam	
		C.	Modified root	D.	None of above	D
61	At the molecular level point mutations are due to:	A.	Destruction of the bases	B.	Destruction of the double helix	
		C.	Shifting of a portion of the helix and	D.	Alterations of sequences of base	D
62	At the stage incipient plasmolysis the turgor pressure is:	A.	Zero	B.	2 atm.	
		C.	4 atm	D.	22.4 atm.	A
63	At the stage of fully turgid cell, the suction pressure will be:	A.	Equal to wall pressure	B.	Zero	
		C.	Equal to osmotic pressure	D.	Maximum	B
64	ATP synthesis occurs in	A.	Chloroplast	B.	Chloroplast and mitochondria	
		C.	Chloroplast, mitochomdria and	D.	Mitochondria	B
65	Bacteria, protozoa and other living plants and animals are	A.	Climatic factors	B.	Edaphic factors	
		C.	Biotic factors	D.	Topographic factors	C
66	Baldness in human being is a	A.	Sex linked character	B.	Sex limited character	
		C.	Sex-influenced character	D.	None of the above	C
67	Barely is a _____ pollinated crop:	A.	Often-cross	B.	Self and cross	
		C.	Cross	D.	Self	D
68	Biffin in 1905 announced, that resistance to yellow rust of wheat is governed by _____ gene in crosses:	A.	Single dominant	B.	Single recessive	
		C.	Double dominant	D.	Double recessive	B
69	Binomial system of Nomenclature means that the name of plant is made up of two words, which designate:	A.	Family and genus	B.	Order and family	
		C.	Species and family	D.	Genus and species	D
70	Bread wheat is:	A.	Haploid	B.	Diploid	
		C.	Tetraploid	D.	Auto-allopolyploid	D

71	Bulk population breeding is suitable for:	A.	Fruit crops	B.	Vegetable	
		C.	Small grains	D.	Flower crops	C
72	Mazie plant is?	A.	Haploid	B.	Diploid	
		C.	Tetraploid	D.	Auto-allopolyploid	B
73	Callus is	A.	An undifferentiated mass of cells	B.	A gamete	
		C.	A tissue	D.	A modification of leaf	A
74	Mazie plant is _____	A.	Simple plant	B.	C3 Plant	
		C.	C4 Plant	D.	None of the above	C
75	Cauliflower, cabbage, broccoli, kohlrabi and brussels sprouts have been derived from wild cabbage that, still grows in coastal regi	A.	Latin America	B.	Mesopotamia	
		C.	Europe and N. Africa	D.	South Asia and South Africa	C
76	Who is regarded as the father of botany?	A.	Theofrastus	B.	Gregor Mendel	
		C.	Carolus Linnaeus	D.	Oswald Tippo	A
77	Who is credited with the discovery of mitosis?	A.	Farmer and Moore	B.	Huxley	
		C.	Flemming	D.	Robert Hooke	C
78	Characteristic feature of xerophytes is:	A.	Long taproot	B.	Leaves and stem with thick cuticle	
		C.	Sunken stomata	D.	All of the above	D
79	Characteristic feature of the hydrophytes is:	A.	Reduced protective tissues	B.	Feebly developed root system	
		C.	Spongy stem	D.	All the above	D
80	Chauncey Goodrich was the first _____ to publish a paper dealing with resistance of potatoes to the blight diseases:	A.	Britisher	B.	German	
		C.	Dutch	D.	American	D
81	China rose is a :	A.	Herb	B.	Shrub	
		C.	Tree	D.	Climber	B
82	Chromosome numbers in somatic cells of a maize plant are:	A.	22	B.	26	
		C.	14	D.	20	D
83	Chromosome which pair at meiotic prophase and are similar size, shape, structure and function are known as:	A.	Homologous	B.	Iso-centric	
		C.	Iso-chromosome	D.	Acentric	A
84	CIMMYT is located at:	A.	Mexico	B.	England	
		C.	Spain	D.	Nigeria	A
85	Cliestogamy encourages:	A.	Self-pollination	B.	Cross pollination	
		C.	Apomixes	D.	Inbreeding depression	A
86	Clone in general is:	A.	Homozygous	B.	Heterogeneous	
		C.	Heterozygous	D.	None of the above	C
87	Commercial banana have _____ instead of 22 chromosomes of ordinary diploid varieties:	A.	13	B.	23	
		C.	33	D.	43	C
88	Helianthus anus is the botanical name of :	A.	Banana	B.	Apple	
		C.	Sunflower	D.	Coconut	C
89	Composites are developed by using:	A.	Advanced generation seed	B.	Hybrid directly from inter-varietal	
		C.	Recurrent selection for specific	D.	The hybrid of an inbred with an	A
90	Conifers are abundant in:	A.	Tropical zone	B.	Alpine zone	
		C.	Temperate zone	D.	Subtropical zone	C
91	Cotton	A.	Is a self-pollinated crop	B.	Is a cross pollinated crop	
		C.	Is an often-cross pollinated crop	D.	Is an often self-pollinated crop	C
92	Plants are directly effected by:	A.	Temperature	B.	Humidity	
		C.	Biotic factors	D.	All the above	D
93	Cross between cytoplasmic male sterile x cytoplasmic male fertile:	A.	Produce sterile F1	B.	Produce fertile F1	
		C.	Produce fertile, sterile in 1:1 ratio	D.	None of the above	A
94	Cross of F1 hybrid with either parent is called:	A.	Test cross	B.	Single cross	

		C.	Back cross	D.	None of them	C
95	Crossing over occurs at:	A.	Two strand stage	B.	Four strand stage	
		C.	Three strand stage	D.	None of the above	B
96	Cuscuta is	A.	Total stem parasite	B.	Partial stem parasite	
		C.	Partial root parasite	D.	Total root parasite	A
97	Cytogenetically, the definitive nucleus is:	A.	Haploid	B.	Diploid	
		C.	Triploid	D.	Tetraploid	B
98	Date palm is	A.	Monoecious	B.	Dioecious	
		C.	Polygamous	D.	None of the above	B
99	Degenerated parts of plants and animals, which do not serve any useful purpose, are known as:	A.	Un-useful structures	B.	Vestigial structures	
		C.	Essential organs	D.	Unwanted structures	B
100	Despite conspicuous deterioration of maize upon continuous setting, it is more tolerant to inbreeding than:	A.	Limabean	B.	Barley	
		C.	Alfalfa	D.	Buckwheat	C
101	The complete or partial absence of pigment in the skin, hair and eyes	A.	Albinism	B.	Plieotropy	
		C.	Epistatis	D.	None of the above	A
102	Development and formation of pollen grains in anther of the stamen is known as:	A.	Pollination	B.	Fertilization	
		C.	Microsporogenesis	D.	Megasporogenesis	C
102	Development of a fruit without fertilization is known as:	A.	Parthenogenesis	B.	Polyembrohy	
		C.	Budding	D.	Apomixes	A
104	Who invented first compound microscope?	A.	Robert Hooke	B.	Jansen	
		C.	Leeuwenhoek	D.	None of these	B
105	Development of seed without-sexual process is:	A.	Apomixes	B.	Polyembryony	
		C.	Both (a) & (b)	D.	None of the above	A
106	Development of the pollen tube, the seed and the 3n endosperm, double fertilization is characteristic features of:	A.	Bryophytes	B.	Pteridophytes	
		C.	Gymnosperms	D.	Angiosperms	D
107	Disease reaction is by and large, a process:	A.	Physical	B.	Chemical	
		C.	Mechanical	D.	Manual	B
108	Disease rsistance in barley is:	A.	Quantitative characteristics	B.	Qualitative characteristics	
		C.	Both (a) & (b)	D.	None of the above	B
109	DNA exists as a double helix as a result of hydrogen bonding between:	A.	Sugar molecules	B.	Phosphate groups	
		C.	Nucleohistones	D.	Nucleosides	C
110	DNA polymerase:	A.	Helps is DNA replication	B.	Helps in RNA replication	
		C.	Helps in protein synthesis	D.	None of the above	A
111	DPD is the index of sucking power and is also known as:	A.	Suction pressure	B.	Wall pressure	
		C.	Osmotic	D.	Turgor pressure	A
112	During mitotic cell division the total chromosome number	A.	Remains the same	B.	Gets halved	
		C.	Gets doubled	D.	None of them	A
113	Each cell of the female gametophyte is haploid except	A.	Egg cell	B.	Synergid cells	
		C.	Antipodal cells	D.	Definitive nucleus	D
114	The study of inheritance and variation is called:	A.	Polyploidy	B.	Triploidy	
		C.	Haploidy	D.	Genetics	D
115	Each mature anther has	A.	One pollen sac	B.	Two pollen sacs	
		C.	Three pollen sacs	D.	Four pollen sacs	D
116	Each megaspore mother cell finally produces:	A.	Four megaspores	B.	Two megaspores	
		C.	Only one megaspore	D.	None of the above	C
117	Each pollen mother cell produces four haploid cells as a result of:	A.	Mitosis	B.	Meiosis	
		C.	One mitosis and then meiosis	D.	None of the above	B

118	Each stamen is differentiated into:	A.	Filament	B.	Anther	
		C.	Connective	D.	All of the above	D
119	Electron microscope was invented by:	A.	Jansen	B.	Leeuwenhoek	
		C.	Knoll and Ruska	D.	None of the above	C
120	Emasculation is:	A.	Removal of male parts from a	B.	Removal of female parts	
		C.	Removal of male and female parts	D.	None of the above	A
121	Embryo-sac is:	A.	Male gametophyte	B.	Micro-gametophyte	
		C.	Saprophyte	D.	Female gametophyte	D
122	Endosperm is store house for germinating embryo and it contains:	A.	Hormones	B.	Vitamins	
		C.	Enzymes	D.	All the above	D
123	Epicalyx is the characteristic of the family:	A.	Gramineae	B.	Solanaceae	
		C.	Malvaceae	D.	Compositeae	C
124	Epistasis should be carefully distinguished from dominance, which refers to non-additivity of alleles at	A.	The same locus of a homologues	B.	Different loci of a homologous	
		C.	The same locus of non-homologous	D.	Different locus of non-homologous	B
125	Who founded the cell theory?	A.	Robert Hooke	B.	Von Mohl and Nageli	
		C.	Schwann and Schleiden	D.	Gres and Malpigi	C
126	Exchange of genetic material takes place between non-sister chromatids of homologous chromosomes during the:	A.	Four stand stage in prophase I	B.	Two strand stage in prophase I	
		C.	Metaphase I stage in meiosis	D.	Two strand stage in prophase II	A
127	Female reproductive organ in the flower is:	A.	Calyx	B.	Corolla	
		C.	Stamens	D.	Carpals	D
128	Flower colour in plants is a:	A.	Qualitative character	B.	Quantitative character	
		C.	Both of them	D.	None of them	A
129	Flower is specialized:	A.	Shoots	B.	Leaf	
		C.	Stem	D.	Tendril	B
130	Flowers having both androecium's and gynoecium's are said to be:	A.	Hermaphrodite	B.	Unisexual	
		C.	Staminate	D.	Pistilate	A
131	Two different inbred lines when crossed, results in:	A.	Hybrid	B.	Mutant variety	
		C.	Open pollinated variety	D.	Mass selected variety	A
132	Formation of new genes takes place due to:	A.	Inversion	B.	Transduction	
		C.	Transversion	D.	Mutation	D
133	Brassica campestris has chromosome number:	A.	18	B.	22	
		C.	20	D.	16	C
134	Fruit of pea is known as:	A.	Legume	B.	Follicle	
		C.	Siliqua	D.	Capsule	A
135	Fruit of sunflower is:	A.	Caryopsis	B.	Samara	
		C.	Cypsela	D.	Nut	C
136	Fruits of calotropis are:	A.	Legume	B.	Siliqua	
		C.	Capsule	D.	Follicle	D
137	Fusion of the one sperm (male gamete) and definitive nucleus results in the formation of:	A.	Endosperm	B.	Embryo	
		C.	Saprophyte	D.	Zygote	A
138	Brassica campestris is	A.	Tetraploid	B.	Diploid	
		C.	Haploid	D.	None of the above	B
139	Generally embryosac is:	A.	Monosporic	B.	Bisporic	
		C.	Tetrasporic	D.	Octosporic	B
140	Genes are made up of	A.	RNA only	B.	DNA only	
		C.	RNA and DNA	D.	Proteins	B
141	Genetics is the study of	A.	Genes	B.	Gene interaction	

		C.	Heredity and variation	D.	DNA	C
142	Genotype x Environment interaction would take place when there is/are:	A.	One genotype and two environments	B.	Two genotypes and one environment	
		C.	Three genotypes and one environment	D.	Two or more genotypes and two	B
143	Germplasm means:	A.	A breeding method	B.	A collection of genetic material	
		C.	A new disease	D.	None of the above	B
144	Gibberellins are now commercially used into increase sugarcane growth and sugar yields :	A.	China	B.	Hawaii	
		C.	Japan	D.	Korea	B
145	Ginger and Turmeric are example of modified stem:	A.	Rhizome	B.	Tuber	
		C.	Bulb	D.	Corm	A
146	Given that the somatic chromosome number of Triticum aestivum is 2n = 6x = 42, which one of the following pairs is correctly m	A.	Monosomy	B.	Trisomy	
		C.	Tetrasomy	D.	Nullisomy	C
147	Mendel is famous for:	A.	Propounding the laws of inheritance	B.	Laws of limiting factors	
		C.	The theory of mutation	D.	The discovery of penicillin	A
148	Group of plants with similar characteristics of any rank is termed:	A.	Taxon	B.	Species	
		C.	Genus	D.	Order	A
149	Gynoecium or pistil in the female whorl differentiated into:	A.	Filament	B.	Style	
		C.	Stigma	D.	All of the above	D
150	Holophytes growing on muddy swarms form special vegetation known as:	A.	Mangrove forests	B.	Coniferous forests	
		C.	Evergreen forests	D.	Riparian forests	A
151	Heritability may be defined as the:	A.	Interaction product of genotype with	B.	Sum total of hereditary material	
		C.	Degree of resemblance	D.	Proportion of phenotypic	A
152	Heterosis is commercially exploited in:	A.	Cross pollinated species	B.	Often cross-pollinated species	
		C.	Self-pollinated species	D.	Vegetatively propagated species	A
153	Heterosis over the better parent is called as:	A.	Relative heteroisi	B.	Standard heterosis	
		C.	Pseudoheterosis	D.	Heterbeltiosis	D
154	How many cells will be produced from a cell if the cell divides meiotically?	A.	1	B.	2	
		C.	3	D.	4	D
155	Sudden heritable change in the genetic makeup of an organism is called:	A.	Pleiotropy	B.	Epistasis	
		C.	Ideotype	D.	Mutation	D
156	Hybrid seeds can be produced through open pollination with the use of:	A.	Inbreds	B.	Clones	
		C.	Pure lines	D.	Synthetic lines	A
157	Hydrilla is a:	A.	Hydrophyte	B.	Mesophyte	
		C.	Hygrophyte	D.	Xerophyte	A
158	ICRISAT deals with:	A.	Cotton	B.	Maize	
		C.	Millets	D.	Wheat	C
159	If a character is cytoplasmically controlled then:	A.	The progeny resembles female	B.	The progeny resembles male	
		C.	It's segregation of 3:1 is observed in	D.	15:1 segregation in F1	A
160	If a dihybrid is test crossed, the phenotypic ratio of progeny will be:	A.	9:3:3:1	B.	9;3;4	
		C.	1:1:1:1	D.	15;1	C
161	If a dihybrid without genic interaction is selfed the following ratio is obtained in F2:	A.	1:1:1:1	B.	9:3:3:1	
		C.	9;7	D.	9;6;1	B
162	If a membrane allows the passage of both solvent and solute molecules it is said to be:	A.	Non-permeable	B.	Impermeable	
		C.	Semi-Permeable	D.	Permeable	D
163	Diameter of DNA is:	A.	2 nm	B.	0.34 nm	
		C.	1.8 nm	D.	3.4 nm	A
164	Most acceptable model for DNA replication is:	A.	Conservative	B.	Semi conservative	
		C.	Dispersive	D.	Additive	B

165	Generally _____ number of back crosses are sufficient to retain the genotype of original variety:	A.	05- 06 Backcrosses	B.	07-08 Backcrosses	
		C.	04-05 Backcrosses	D.	08-09 Backcrosses	A
166	If the cells of a plant root tip contain 16 chromosomes, then how much chromosomes will be found in its pollen grains?	A.	4	B.	8	
		C.	16	D.	32	B
167	Insect pollination is called	A.	Entomophily	B.	Hydrophily	
		C.	Anemophily	D.	None of the above	A
168	In _____, pollen dispersal is poor and seed set is likely to be low on male sterile plants	A.	Tomato	B.	Cauliflower	
		C.	Broccoli	D.	Carrot	A
169	In _____ , the first studies on artificial hybridization were reported during the period between 1877 and 1882:	A.	Sorghum	B.	Pearl millet	
		C.	Maize	D.	Carrot	C
170	In Angiosperms:	A.	Sporophyte is complex and	B.	Sporophyte simple and gametophyte	
		C.	Sporophyte and gametophyte	D.	Sporophyte and gametophyte	A
171	Brasscia napus is:	A.	Diploid	B.	Tetraploid	
		C.	Triploid	D.	Haploid	B
172	In bajra:	A.	Cytoplasmic male sterility is found	B.	Genetic male sterility is found	
		C.	Cytoplasmic genetic male sterility is	D.	Self-incompatibility is	C
173	Crossing over completes in _____ stages :	A.	3	B.	4	
		C.	5	D.	None of these	B
174	Terminalization is the stage of crossing over in which it:	A.	Starts	B.	Duplicates	
		C.	Exchange the genetic material	D.	Completes	D
175	Crossing over frequency decreases with:	A.	Mutation	B.	X- radiations	
		C.	Age	D.	None of the above	A
176	In cotton, the popularly grown commercial hybrid varalaxmi's is the product of:	A.	Intraspecific hybridization in	B.	Intraspecific hybridization in	
		C.	Interspecific hybridization	D.	Interspecific hybridization	C
177	Technical name of tobacco:	A.	Nicotiana tabacum	B.	Cajanus cajan	
		C.	Alium cepa	D.	None of the above	A
178	Technical name of cigarette tobacco:	A.	Nicotiana tabacum	B.	Cajanus cajan	
		C.	Alium cepa	D.	Nicotiana rustica	A
179	In Ficus (banyan, pepal, fig) the inflorescence is:	A.	Cyathuim	B.	Verticillaster	
		C.	Hypanthodium	D.	Spadix	C
180	Which sterility is exploited in hybrid seed production?	A.	Male genetic sterility	B.	Cytoplasmic sterility	
		C.	Cytoplasmic genetic male sterility is	D.	Genetic	C
181	Which one of the following is the site of protein synthesis?	A.	Ribosomes	B.	t-RNA	
		C.	m-RNA	D.	r-RNA	A
182	In mass selection, plants are selected on the basis of:	A.	Phenotypes	B.	Genotypes	
		C.	Homozygosity	D.	None of the above	A
183	In pedigree breeding single plants are selected in which one of the following generation:	A.	F5	B.	F3	
		C.	F2	D.	F	C
184	Chromosome numbers in potato:	A.	48	B.	46	
		C.	50	D.	44	A
185	In Primula sp:	A.	Sporophytic incompatibility	B.	Gametophytic incompatibility	
		C.	Heteromorphic incompatibility	D.	Homomorphic incompatibility	C
186	In RNA, nitrogen bases are same as in DNA except:	A.	Uracil instead of Thymlnine	B.	Cytosin instead of Thymine	
		C.	Adenine instead of Guanine	D.	Thymine instead of Adenine	A
187	In self-incompatibility system:	A.	Pollen not produced	B.	Self pollination takes place	
		C.	Pollen does not germinate on self-	D.	All are correct	C
188	Botanical name of maize is:	A.	Zea mays L.	B.	Zea maize L.	

		C.	Zey maize L.	D.	Zey mays L.	A
189	In sorghum somatic chromosome number is 20. What would be its chromosome number in the endosperm?	A.	10	B.	20	
		C.	30	D.	40	C
190	Which one of the following is not dioecious plant?	A.	Date palm	B.	Vallisnaria	
		C.	Maize	D.	Papaya	C
191	Under the seed act of 1976 seed is divided into_____ classes:	A.	3	B.	5	
		C.	4	D.	6	C
192	Back crossing of F1 with recessive homozygous parent:	A.	Back cross	B.	Test cross	
		C.	Bi parental cross	D.	None of the above	B
193	Technical name of sugar beet is:	A.	Beta vulgaris	B.	Allium cepa	
		C.	Glysine max	D.	None of the above	A
194	The designation 2n is used to indicate:	A.	Haploid chromosome	B.	Diploid chromosome	
		C.	Monoploid chromosome	D.	None of the above	B
195	In the pitcher plant, the pitcher is modification of:	A.	Stem	B.	Root	
		C.	Leaf	D.	Stem-branch	C
196	Cross in which only one trait is studied:	A.	Mono hybrid cross	B.	Bi parental cross	
		C.	Di hybrid cross	D.	None of these	A
197	In wheat and oat there are _____ genes for red versus white kernels:	A.	Two	B.	Three	
		C.	Four	D.	Five	B
198	In wheat, cross-pollination is:	A.	Less than 5%	B.	More than 5%	
		C.	15%	D.	50%	A
199	In which one of the following crops maximum exploitation of hybrid vigour during the last three decades has been done?	A.	Wheat	B.	Rice	
		C.	Maize	D.	Cotton	C
200	In which part of the cell, does protein synthesis take place?	A.	Mitochondria	B.	Nucleolus	
		C.	Nucleus	D.	Ribosomes	D
201	Inflorescence of wheat ear is:	A.	Catkin	B.	Spike	
		C.	Corymbs	D.	Raceme	B
202	International Rice Research Institute (IRRI) is situated in:	A.	Philippines	B.	Japan	
		C.	China	D.	Burma	A
203	It has been estimated that a maize tassel produces at least _____ pollen grains for each kernel.	A.	5,000	B.	15,000	
		C.	25,000	D.	35,000	C
204	It is an established fact that higher and more complex forms of plants and animals have evolved from:	A.	Recent and simpler forms	B.	Earlier and simple forms	
		C.	Recent and complex forms	D.	Xerophytic forms	B
205	Which one of the following chemicals is used to induce polyploidy?	A.	Ethyl methane sulphonate	B.	Methyl methane sulphonate	
		C.	Colchicine's	D.	Nitrous acid	C
206	One of the basic objective of plant breeding is development of:	A.	Improved varieties	B.	Increased yield	
		C.	Resistance to biotic stresses	D.	All of the above	D
207	Kreb's cycle begins with:	A.	Glycogen	B.	Lysine	
		C.	Succinic acid	D.	Acetyl COA	D
208	Botanical name of hexaploid wheat is:	A.	Triticum monocum	B.	Triticum durum	
		C.	Triticum aestivum	D.	None of the above	C
209	Vertical resistance is:	A.	Oligogenic	B.	Polygenic	
		C.	Both of the above	D.	None of the above	A
210	Magnification of an object by electron microscope is:	A.	1000 X	B.	1,00,000 X	
		C.	1,000,000 X	D.	More than 2.00.000 X	D
211	Maize is:	A.	Monoecious plant	B.	Dioecious plant	
		C.	Polygamous	D.	None of the above	A

212	Most of the mutation have effect:	A.	Deleterious	B.	Good	
		C.	Bad	D.	Both (b) & (c)	A
213	Male gamete carries _____ chromosome numbers:	A.	n	B.	2n	
		C.	3n	D.	n - 1	A
214	Mango fruit is a:	A.	Pepo	B.	Pome	
		C.	Berry	D.	Drupe	D
215	Mangrove plants show adaptation like:	A.	Stilt roots	B.	Respiratory roots or pneumatophores	
		C.	Vivipary	D.	All of the above	D
216	Mating between two individuals related by descent is:	A.	Selfing	B.	Inbreeding	
		C.	Outbreeding	D.	Maintenance of population	B
217	Megaspore mother cell produces four megaspores out of which usually:	A.	Only one megaspore is functional and the	B.	Two megaspores are functional and	
		C.	Three megaspores are functional and	D.	All the four megaspores are	A
218	Meiosis is essential for the organism for:	A.	Inducing polyploidy	B.	Growth of the organism	
		C.	Keeping the number of chromosomes	D.	Increasing the number of cells	C
219	Meiosis occurs in:	A.	Generative cells	B.	New cells	
		C.	Vegetative cells	D.	None of the above	A
220	Which one of the following categories of seeds is the farmer expected to buy afresh every time?	A.	Variety	B.	Hybrid	
		C.	Synthetic	D.	Composite	B
221	Which of the fruit is capsule?	A.	Beans	B.	Mustard	
		C.	Cotton	D.	Wheat	C
222	Which of the following type(s) of male sterility is/are used in commercial seed production of double cross hybrid maize?	A.	Cytoplasm alone	B.	Genetic alone	
		C.	Cytoplasm and genetic	D.	Cytoplasmic and genetic with	D
223	Mendok is a gametocide used for inducing male sterility in:	A.	Onion	B.	Sunflower	
		C.	Maize	D.	Cotton	C
224	Method of breeding can be used for studying the ancestral characteristic:	A.	Pure line	B.	Pedigree method	
		C.	Mass selection	D.	None of these	B
225	Microsporogenesis occurs in:	A.	Roots	B.	Stems	
		C.	Anthers	D.	Ovules	C
226	Microsporogenesis occurs in:	A.	Carpals	B.	Gynoecium	
		C.	Stamens	D.	Thalamus	C
227	Pure line is:	A.	Self-pollinated self-crop	B.	Cross-pollinated self-cross	
		C.	Self-pollinated cross-crop	D.	None of the above	A
228	Monoploid is also a:	A.	Haploid	B.	Diploid	
		C.	Monosomic	D.	None of the above	A
229	Multiline varieties are mixtures of:	A.	Several morphologically	B.	Bulked progenies of different inbred	
		C.	Several similar pure lines having	D.	Morphologically ide	C
230	Mutation is known to be due to change in genes:	A.	Loss	B.	Degeneration	
		C.	Addition	D.	All the above	D
231	Father of Genetics:	A.	Robert Shull	B.	Mendel	
		C.	Watson & Crick	D.	None of the above	B
232	Chromosomes are present in:	A.	Nucleus	B.	Cytoplasm	
		C.	Ribosomes	D.	None of the above	A
233	Interaction between two non-allelic genes:	A.	Epistasis	B.	Pleiotropy	
		C.	Crossing Over	D.	None of the above	A
234	Segment of chromosome when inserted into a non-homologous chromosome:	A.	Insertion	B.	Duplication	
		C.	Translocation	D.	None of the above	C
235	Normal female in human being is:	A.	Homogametic sex	B.	Heterogametic sex	

		C.	Homizygous for a gene	D.	Gynandromorph	A
236	Nucleus seed is:	A.	100% pure	B.	80% pure	
		C.	50% pure	D.	40% pure	A
237	Number of chromosome in endosperm is:	A.	2n	B.	3n	
		C.	n	D.	4n	B
238	Nutritional improvement for the tryptophan content has been achieved in a _____ cell-line:	A.	Tomato	B.	Cucurbits	
		C.	Coffee	D.	Tobacco	D
239	Onion and Garlic are example of:	A.	Rhizome	B.	Tuber	
		C.	Bulb	D.	Corn	C
240	Okra belongs to the family:	A.	Solanaceae	B.	Mallow	
		C.	Cucurbitaceae	D.	Liliaceae	B
241	Orange or lemon fruit is known as:	A.	Balusta	B.	Pepo	
		C.	Pome	D.	Citrus	D
242	Chromosome number of sugarcane:	A.	82	B.	80	
		C.	78	D.	84	B
243	Botanical name of sugarcane is:	A.	Saccharum officinarum L.	B.	Sorghum Biclor L.	
		C.	Zea mays L.	D.	None of these	A
244	Para-mutation in _____ is perhaps the one and only example of blending of alleles:	A.	Sorghum	B.	Maize	
		C.	Pearl millet	D.	Foxtail millet	B
245	Pea has _____ chromosomes:	A.	14	B.	16	
		C.	12	D.	18	A
246	Persons with the following blood group are universal donor:	A.	A	B.	B	
		C.	AB	D.	O	D
247	Pisum sativum is:	A.	Diploid	B.	Tetraploid	
		C.	Triploid	D.	None of the above	A
248	Physical and chemical properties of soil its water and air contents are included in:	A.	Climatic factors	B.	Edaphic factors	
		C.	Biotic factors	D.	Topographic factors	B
249	Physiologically dry soil is:	A.	Poor in moisture content	B.	With adequate water	
		C.	with saline water	D.	Normal soils	C
250	Pigment, which is responsible for skin colour, is:	A.	Melanin	B.	Glutin	
		C.	Globulin	D.	Albumin	A
251	Pink (NN) flowered plants crossed with blue (nn) flowered plants gave black (Nn) flowered plants in F1 generation. If F1 plants are selfed, which of the following will be the phenotype of F2 progeny?	A.	All blue	B.	1/2 blue and 1/2 pink	
		C.	All pink	D.	1/4 pink, 1/2 black, 1/4 blue	D
252	Which of the following scientists is called the father of genetics?	A.	Charles Darwin	B.	Robert Hooke	
		C.	Gregor Mendel	D.	Gregor Morgon	C
253	Plants that attach themselves to any neighbouring object often by means of some special devices and climb it are called:	A.	Trailers	B.	Creepers	
		C.	Climbers	D.	None of these	C
254	Plants that grown upon other plants but do not absorb food from them are called:	A.	Parasites	B.	Epiphytes	
		C.	Saprophytes	D.	Symbionts	B
255	Plants, which feed upon insects and small animals absorbing only nitrogenous compounds, are called:	A.	Symbionts	B.	Epiphytes	
		C.	Carnivorous	D.	Nocturnals	C
256	Plants that grow under average condition of temperature and moisture are:	A.	Hydrophytes	B.	Hygrophytes	
		C.	Mesophyte	D.	Xerophytes	C
257	Plasmid can:	A.	Self-replicate	B.	Integrate into host genome	
		C.	Express the genes in it	D.	Can do all the above	D
258	Pneumatophores or respiratory roots are meant for:	A.	Absorption of salts	B.	Absorption of water	
		C.	Respiration	D.	Photosynthesis	C

259	Pointed gourd is a :	A.	Monoecious plant	B.	Hermaphrodite plant	
		C.	Dioecious plant	D.	Polygamous plant	C
260	Pollination taking place between the flowers borne by the same parent is called:	A.	Geitonogamy	B.	Allogamy	
		C.	Xenogamy	D.	None of the above	A
261	Pollination taking place between two flowers (bisexual or unisexual) borne by two separate plants of the same species is called:	A.	Self-pollination	B.	Cross pollination	
		C.	Xenogamy	D.	Geitonogamy	B
262	Polygenes affecting the same trait, with each enhancing the phenotype are termed as	A.	Amnions	B.	Alcaptonuria	
		C.	Allosteric effect	D.	Additive factors	D
263	Population improvement is used:	A.	To accumulate deleterious alleles	B.	To maintain homozygosity	
		C.	To accumulate favourable alleles	D.	To increase heterozygosity	C
264	Pototo and Jerusalem artichoke are example of:	A.	Rhizome	B.	Tuber	
		C.	Bulb	D.	Corn	B
265	In_____ flowers are hermaphrodite (bisexual)	A.	Autogamy	B.	Allogamy	
		C.	Dichogamy	D.	None of the above	A
266	Progeny of a hybrid plant:	A.	Breds true	B.	Resembles maternal plant	
		C.	Resembles paternal plant	D.	Segregation	D
267	Prop or still roots are found in:	A.	Acacia tree	B.	Tomato plant	
		C.	Mango tree	D.	Banyan tree	D
268	Protoplasm is a:	A.	True solution	B.	Unsaturated solution	
		C.	Suspension	D.	Polyphonic colloidal system	D
269	Pseudo-fertility may also occur late in the season as in:	A.	Tomato	B.	Tobacco	
		C.	Tapioca	D.	Tea	B
270	Pure line is	A.	The progeny of selfed heterozygous	B.	The progeny of selfed homozygous	
		C.	The progeny of Vegetatively	D.	The progeny of a nucleus seed	B
271	Pure line selection is:	A.	A method of accumulating	B.	Used to improve cross-pollinated	
		C.	Used to improve self-pollinated crops	D.	Used in Vegetatively	C
272	Quarantine is:	A.	The name of a plant	B.	The name of a character	
		C.	The process of observation of alien	D.	None of the above	C
273	Rainfall, temperature, light, wind and humidity are:	A.	Climatic factors	B.	Edaphic factors	
		C.	Biotic factors	D.	Topographic factors	A
274	Random assortment of genes will occur if the gene are located on:	A.	Same chromosome	B.	Different chromosomes	
		C.	Sex chromosome	D.	Autosome	B
275	Recessive lethal genes are carried in the	A.	Heterogeneous form	B.	Heterozygous form	
		C.	Homozygous form	D.	Homogenous form	B
276	Recurrent selection is mostly used in:	A.	Cross pollinated crops	B.	Self-pollinated crops	
		C.	Vegetatively propagated crops	D.	Apomictic crop plants	A
277	Botanical name of cabbage is:	A.	Brassica oleracea	B.	Brassica napus	
		C.	Brassica juncea	D.	None of the above	A
278	Registered seed is directly produced from:	A.	Foundation seed	B.	Certified seed	
		C.	Breeder's seed	D.	All the above	A
279	Replacement of purine by pyrimidine and vice-versa is known as:	A.	Transversion	B.	Transduction	
		C.	Translocation	D.	All the above	B
280	Restorer gene is needed:	A.	To make a plant correct	B.	To bring fertility in male sterile plants	
		C.	To make a plant resistant	D.	To enhance the yield	B
281	Rice varieties IR 20, IR 26 and IR 36 have shown better resistance to:	A.	Tungro	B.	Bacterial leaf blight	
		C.	Blast	D.	Brown plant hopper	D
282	Root bear:	A.	Unicelluar hairs	B.	Multicellular hairs	

		C.	Both (a) & (b)	D.	None of the above	A
283	Root has:	A.	Root cap	B.	Region of cell division	
		C.	Give proper anchorage to plant	D.	All of the above	D
284	Secondary nucleus in the embryo sac is:	A.	Haploid	B.	Diploid	
		C.	Triploid	D.	Hexaploid	D
285	Seeds of monocotyledons are:	A.	Albuminous or non-endospermic	B.	Ex-albuminous	
		C.	Both (a) & (b)	D.	Neither (a) nor (b)	A
286	Seeds of pea, gram and beans are:	A.	Albuminous or non-endospermic	B.	Ex-albuminous	
		C.	Both (a) & (b)	D.	None of the above	B
287	Selfing of a plant is done in order to:	A.	Fix the desirable characters	B.	Eliminate deletirious genes	
		C.	Both of the above	D.	None of the above	C
288	Sex in Drosophila is governed by the following mechanism:	A.	XY methods	B.	OX method	
		C.	ZZ method	D.	X autosomes ratio	D
289	Specific combining ability of the parents should be high in order to develop:	A.	Hybrids	B.	Composites	
		C.	Varieties	D.	Synthetics	A
290	Single gene affecting more than one character is:	A.	Polymorphism	B.	Pleiotropy	
		C.	Phenocopy	D.	Complete penetrance	B
291	Spikelet's are characteristic of the family:	A.	Umbelliferae	B.	Gramineae	
		C.	Malvaceae	D.	Leguminaceae	B
292	Sporogenesis means	A.	Formation of zygote	B.	Formation of embryo	
		C.	Germination of seed	D.	Development and formation of spores	D
293	Stems often bear:	A.	Unicellular hairs	B.	Multicellular hairs	
		C.	Both (a) & (b)	D.	None of above	B
294	Sterility is most pronounced in the F1 generation following:	A.	Intervarietal hybridization	B.	Intravarietal hybridization	
		C.	Intraspecific hybridization	D.	Interspecific hybridization	D
295	Sterility incompatibility of distant crosses can overcome to produce hybrids by:	A.	Pollen culture	B.	Anther culture	
		C.	Explants culture	D.	Embryo culture	D
296	Stilt roots are produced from:	A.	Main root	B.	Secondary roots	
		C.	Stem and branches	D.	None of above	C
297	Sudden and sharp change in individual and is directly inherited by the offspring is called:	A.	Mutation	B.	Adaptation	
		C.	Heredity	D.	Continuous variation	A
298	Sunflower is:	A.	Annual herb	B.	Biennial herb	
		C.	Perennial herb	D.	None of the above	A
299	Superiority of heterozygote leads to:	A.	Fixation of recessive allele	B.	Fixation of dominant allele	
		C.	Maintenance of both the alleles	D.	Depression of inbreeding	A
300	The end segments of chromosome are deleted in _____ deletion	A.	Terminal	B.	Interstitial	
		C.	Trasversion	D.	Inversion	A
301	Tetraploid potato has 48 chromosomes, whereas ordinary piploid species have _____ chromosomes:	A.	34	B.	24	
		C.	14	D.	10	B
302	Which of the following material makes the protein chain?	A.	Carbohydrates	B.	Sugars	
		C.	Fatty acids	D.	Aminoacids	D
303	Which of the following leads to the cross-pollination?	A.	Unisexuality	B.	Dichogamy	
		C.	Heterostyly	D.	All the above	D
304	The application of principles of genetics for the improvement of mankind is:	A.	Herdity	B.	Linkage	
		C.	Population genetics	D.	Eugenics	D
305	The attraction between two dissimilar molecules is:	A.	Cohesion	B.	Adhesion	
		C.	Surface tension	D.	None of the above	B

306	Which of the following is sub-aerial modification of stem?	A.	Corm	B.	Stolon	
		C.	Thorn	D.	Bulb	B
307	The basis on which evolution works is:	A.	Simplicity	B.	Complexity	
		C.	Variations	D.	Adaptation	C
308	Transfer of genetic material from parents to offsprings	A.	Genetics	B.	Variations	
		C.	Heridity	D.	None of the above	C
309	The best method to carry forward the maximum number of genotypes/genes to the advanced generations against the force of natu	A.	Pedigree method	B.	Bulk method	
		C.	Single seed descent method	D.	Back cross method	C
310	The best method to break the unfavourable linkage is:	A.	Single seed descent method	B.	Diallel selective mating	
		C.	Pedigree method	D.	Bulk method	B
311	The botanical name of the onion is:	A.	Allium sativum	B.	Allum cepa	
		C.	Pisum sativium	D.	Tagetes erecta	A
312	The branch of genetics concerned with the study of frequencies of mating populations is:	A.	Quantitative genetics	B.	Behavioural genetics	
		C.	Population genetics	D.	Eugenetics	C
313	The chromosomal aberrations include:	A.	Duplication or deficiency	B.	Translocations or inversions	
		C.	Multiplication or polyploidy	D.	All of these	D
314	The chromosomes are attached to the spindle fibre by means of:	A.	Pellicle	B.	Telomere	
		C.	Satellite body	D.	Centromere	D
315	The commonest form of the ovule is:	A.	Orthotropous	B.	Anatropous	
		C.	Amphilotropous	D.	Campylotropous	B
316	The components of synthetic population would have already been tested for:	A.	SCA	B.	Genetic advance	
		C.	GCA	D.	Both GCA & SCA	C
317	Which of the following is ploidy level of common wheat?	A.	Tetraploid	B.	Hexaploid	
		C.	Diploid	D.	Octaploid	B
318	The condition in which the anthers and stigmas of a bisexual flower mature at the same time is known as:	A.	Cleistogamy	B.	Heterogamy	
		C.	Syngamy	D.	Homogamy	D
319	The condition in which the pollen of a flower has no fertilizing effect on the stigma of the same flower is called:	A.	Herkogamy	B.	Dichogamy	
		C.	Dicliny	D.	Self-sterility	D
320	Mechanism Promoting Cross Pollination:	A.	Herkogamy	B.	Dichogamy	
		C.	Dicliny	D.	Self-sterility	C
321	The definitive nucleus on fertilization gives:	A.	Secondary	B.	Zygote	
		C.	Oospore	D.	Primary endospermic	C
322	The diffusion of water through a differentially permeable membrane is called:	A.	Osmosis	B.	Imbibition	
		C.	Diffusion	D.	Water movement	A
323	The DNA is made up of the following four bases:	A.	A.T.G.E.	B.	A.T.G.C.	
		C.	A.T.U.C.	D.	A.G.U.C.	B
324	The edible part of the apple is:	A.	Mesocarp and endocarp	B.	Endosperm	
		C.	Only mesocarp	D.	Fleshy thalamus	D
325	The effect of the genotype of the pollen grain on the phenotype of the seed is termed as:	A.	Apospory	B.	Pollinia	
		C.	Endopolyploidy	D.	Xenia	D
326	The embroid (formed by vegetative cell) develops into a plant, which, in fact, grows out of anther as in	A.	Tobacco	B.	Wheat	
		C.	Barley	D.	Sorghum	A
327	The evolutionary history of a species is referred as	A.	Phylogeny	B.	Progeny	
		C.	Organic evolution	D.	Natural selection	A
328	Hybridization is carried out in:	A.	Cross pollinated	B.	Self-polinated	
		C.	Vegetatively propaga	D.	None of the above	A
329	The fibrous fruit of coconut is dispersed by:	A.	Air	B.	Water Potential	

		C.	Animals	D.	None of the above	B
330	The first easily observed sign of a water deficit in a plant is decrease in the tugor of its:	A.	Root hairs	B.	Stem cells	
		C.	Xylem vessels	D.	Leaf cells	D
331	The first generation progeny of a hybrid are called:	A.	Pure lines	B.	Segregates	
		C.	Parents	D.	F1 plants	D
332	The first inbreeding experiments with maize were those reported by:	A.	Sprengel in 1866	B.	Darwin in 1876	
		C.	Sprague in 1886	D.	Baird 1896	B
333	Which of the following is not xerophytic plant?	A.	Aloe	B.	Cacti	
		C.	Gum tree	D.	Mango	D
334	The flattened, lateral, outgrowth of the stem or the branch, developing exogenously from a node and having a bud in its axil as known as:	A.	Tendril	B.	Thorn	
		C.	Leaf	D.	Flower	C
335	The fleshy edible part of the mango fruit is:	A.	Epicarp	B.	Endocarp	
		C.	Mesocarp	D.	Pericarp	C
336	The fleshy food storage tissue, lying immediately with in perisperm is called:	A.	Endosperm	B.	Testa	
		C.	Cruncle	D.	None of the above	A
337	The following organelles also contain DNA:	A.	Endoplasmic reticulum	B.	Centrosomes	
		C.	Vacuoles	D.	Chloroplast	D
338	The following part of the chromosome is responsible for the movement of chromosome/chromatid to different poles:	A.	Chromatin	B.	Centromere	
		C.	Chromomere	D.	Satellite	B
339	Which of the following ions is involved in the opening and closing of stomata?	A.	Mg2+	B.	Fe2+	
		C.	K+	D.	Na+	C
340	The quickest method of Plant Breeding is	A.	Introduction	B.	Hybridization	
		C.	Selection	D.	Mutation Breeding	D
341	The fruit of Acacia is:	A.	Lomentum	B.	Double samara	
		C.	Regma	D.	Cypsela	A
342	The fruit of cumin or coriander is known as:	A.	Lomentum	B.	Cremocarp	
		C.	Regma	D.	Cypsela	B
343	The fruits of cucurbitaceae is:	A.	Pepo	B.	Pome	
		C.	Berry	D.	Drupe	A
344	The fusion of a male gamete with two polar nuclei is often termed:	A.	Fertilization	B.	Syngamy	
		C.	Triple fusion	D.	Pollination	C
345	The genes that intensify or diminish the effect of major genes are known as factors:	A.	Modifying	B.	Nullifying	
		C.	Falsifying	D.	None of these	A
346	The green expanded part of leaf is called as:	A.	Leaf blade or lamina	B.	Petiole	
		C.	Pulvinous	D.	Leaf base	A
347	The group of plants, which bear flowers and seeds, are known as:	A.	Crytogams	B.	Phanerogams	
		C.	Pteridophyta	D.	None of the above	B
348	The haploid phase in plants is called :	A.	Sporophyte	B.	Gametophyte	
		C.	Zygote	D.	None of the above	B
349	The hydrophytes float on water because of the presence of:	A.	Aerenchyma	B.	Parenchyma	
		C.	Chlorenchyma	D.	Sclerenchyma	A
350	The inflorescence of banana is known as:	A.	Catkin	B.	Raceme	
		C.	Spike	D.	Spadix	D
351	The initial pool of a composite population is composed of:	A.	Inbred lines	B.	Isoline	
		C.	Pure lines	D.	None of the above	A
352	The initial gene pool of a synthetic population is composed of:	A.	Isolines	B.	Pure lines	
		C.	Inbred lines	D.	None of the above	C

353	The jointed stem with solid nodes and hollow internodes is called:	A.	Caudes	B.	Culm	
		C.	Scape	D.	None of above	B
354	The life first originated in:	A.	Air	B.	Soil	
		C.	Water	D.	All of the above	C
355	The life-cycle of an angiosperm is consist of:	A.	Sporophytic stage	B.	Gametophytic stage	
		C.	Both stages	D.	None of above	C
356	The main body of ovule is called:	A.	Hilum	B.	Chalaza	
		C.	Nucellus	D.	Integuments	C
357	When the pistil has all the carpals united together it is said to be:	A.	Apocarpous	B.	Syncarpous	
		C.	Simpler types	D.	None of the above	B
358	The main patterns concerning origin and domestication of cultivated plant species are:	A.	Mendelian variation	B.	Inter-specific hybridization	
		C.	Polyploidy	D.	All of these	D
359	The main reason for the classification of plants is:	A.	The difficulties arising in the study	B.	Their mechanical separation	
		C.	The nature of man	D.	The environmental conditions	A
360	The main type of endosperm development is:	A.	Nuclear type	B.	Cellular type	
		C.	Both (a) & (b)	D.	None of above	C
361	The majority of halophytes show:	A.	Mesomorphic character	B.	Hydromorphic character	
		C.	Xeromorphic caracter	D.	None of above	C
362	The male sterile line is a cross to produce hybrid seed is known as:	A.	A line	B.	R line	
		C.	C line	D.	None of them	A
363	The mechanism of male sterility in self-pollinated crops can be successfully utilised to obtain:	A.	Selfed seed	B.	Mutated seed without radiation	
		C.	Hybrid seed without emasculation	D.	Sterile seed	C
364	The mendel's laws of inheritance were rediscovered in 1900 by:	A.	Bateson and Punnet	B.	Beadle, Tatum and Leader-berg	
		C.	Watson and Crick	D.	Correns, de Varies and Tschermak	D
365	The minute scaly outgrowths borne at the upper end of the leaf sheath, as in Gramineae are called:	A.	Bract	B.	Bracteole	
		C.	Stipule	D.	Ligule	D
366	The mode of arrangement of ovules in the cavity of ovary is known as:	A.	Pollination	B.	Aestivation	
		C.	Placenatation	D.	Fertilization	C
367	Which of the following breeding procedures are not used for producing new varieties of self-pollined crop?	A.	Recurrent selection	B.	Mass selection	
		C.	Pure line selection	D.	Hybridization	B
368	Which is the monoecious plant?	A.	Maize	B.	Datepalm	
		C.	Rice	D.	Mango	A
369	The net movement of a substance from an area of its own high concentration into another area of lesser concentration of molecule	A.	Diffusion	B.	Osmosis	
		C.	Imbibition	D.	Plasmolysis	A
370	The normal eye colour in Drosphila is red. But mutants occur having white eye and also different shades ranging between white and red which are all recessive to red, while white colour is recessive to all others. This phenomenon is due to:	A.	Pseudodominance	B.	Pseudoallelism	
		C.	Codominance	D.	Polygenes	A
371	The nucleus of the cell was first discovered by:	A.	Robert Brown	B.	Robert hHooke	
		C.	Strasburger	D.	Boveri	A
372	The necleus of the functional megaspore divides:	A.	Meiotically	B.	Asexually	
		C.	Apomictically	D.	Mitotically	D
373	The number of chromosome in common wheat is:	A.	36	B.	38	
		C.	48	D.	42	D
374	The number of stamens is indefinite in:	A.	Cruciferae	B.	Solanaceae	
		C.	Papillionaceae	D.	Malvaceae	D
375	Wheat belongs to family:	A.	Graminaceae	B.	Solanaceae	
		C.	Papillionaceae	D.	Malvaceae	A
376	The seeded fruit of rice or maize grain is called:	A.	Berry	B.	Pepo	

		C.	Siliqua	D.	Caryopsis	D
377	The only force responsible for the movement of water through a membrane is:	A.	Molecular activity	B.	Hydrostatic pressure	
		C.	Osmotic pressure	D.	All the above	D
378	Self incompatibilty promotes:	A.	Autogamy	B.	Allogamy	
		C.	Inbreeding	D.	All the above	B
379	Self incompatibilty controlled by genetic constitution of gametes:	A.	Gametophytic SI	B.	Sporophytic SI	
		C.	SI due to Heterostvlv	D.	None of the above	A
380	Self incompatibilty controlled by genotype of the pollen producing plant:	A.	Gametophytic SI	B.	Sporophytic SI	
		C.	SI due to Heterostvlv	D.	None of the above	B
381	The physical basis of heredity is termed as:	A.	Gene pool	B.	Gene frequency	
		C.	Germplasm	D.	None of the above	A
382	The place on the stem or branch where one or more leaves arise is known as:	A.	Internode	B.	Node	
		C.	Apex	D.	Sheath	B
383	The placentation is mustard is:	A.	Marginal	B.	Parietal	
		C.	Axile	D.	Basal	B
384	The plant that grow in very dry places and can withstand a prolonged period of drought uninjured are:	A.	Hydrophytes	B.	Hygrophytes	
		C.	Mesophytes	D.	Xerophytes	D
385	The plant, which is growing in saline soils or saline water with preponderance of soil in it, is said:	A.	Mesophytes	B.	Xerophytes	
		C.	Hygrophytes	D.	Halophytes	D
386	The plants, which grow in water or in very wet places, are	A.	Hydrophytes	B.	Hygrophytes	
		C.	Mesophytes	D.	Epiphytes	A
387	The plants, which grow in water deserts, are called:	A.	Mesophytes	B.	Hydrophytes	
		C.	Xerophytes	D.	Halophytes	C
388	The plants, which occur in moist shady places in forests or in the moist soil near waterlogged localities are:	A.	Hydrophyte	B.	Hygrophytes	
		C.	Xerophytes	D.	Mesophytes	B
389	The plasma membrane is:	A.	Impermeable membrane	B.	Semi-permeable	
		C.	Permeable	D.	None of the above	B
390	When the stamens and styles are of different length:	A.	Homostyly	B.	Epistyly	
		C.	Heterostyly	D.	None of the above	C
391	The pollen along with pollen tube is known as:	A.	Microspore	B.	Pollengrain	
		C.	Megaspore	D.	Male gametophyte	D
392	Which is the dioecious plant?	A.	Maize	B.	Marigold	
		C.	Date Palm	D.	Wheat	C
393	Removal of imature pollen from a female plant/flower//:	A.	Emasculation	B.	Pollination	
		C.	Hybridization	D.	None of the above	A
394	The process of formation of eggs in animals is called:	A.	Oogenesis	B.	Telophase	
		C.	Oogonium	D.	None of them	A
395	The process of formation of sperms in animals is known as:	A.	Spermatogonium	B.	Spermatogenesis	
		C.	Spematid	D.	None of them	B
396	The process of making the expression of a non-allelic gene by another gene or gene pair is known as	A.	Epistasis	B.	Hypostasis	
		C.	Nobilisation	D.	None of the above	A
397	The process of megasporogenesis occurs in:	A.	Embryosac	B.	Egg cell	
		C.	Pollensac	D.	Ovule	D
398	There are how many types of male sterilty:	A.	1	B.	2	
		C.	3	D.	5	C
399	The unability of pollen to fertilize female part:	A.	Self Incompatibility	B.	Self Sterility	
		C.	Both of the Above	D.	None of the above	B

400	Male sterility promotes:	A.	Autogamy	B.	Allogamy	
		C.	Inbreeding	D.	All the above	B
401	The production of double cross hybrid in maize was first suggested by:	A.	Megasprogenesis	B.	Microsporgensis	
		C.	Gametogenesis	D.	Sporogenesis	D
402	The production of sperms is known as:	A.	Megagametogenesis	B.	Microsporogenesis	
		C.	Microgametogenesis	D.	Megasporogenesis	C
403	The raw materials required for photosynthesis in vascular plants are:	A.	CO2 and water	B.	CO2, water and mineral	
		C.	CO2, water, mineral salts and chlorophyll	D.	CO2, water and mineral salt	C
404	The removal of apical buds and young leaves _____ branching.	A.	Decreases	B.	Increases	
		C.	Maintains	D.	No effect	B
405	The replication of DNA is:	A.	Conservative	B.	Non-conservative	
		C.	Semi-conservative	D.	Direpersive	C
406	Which is a common method used in cross-pollinated crops?	A.	Mass selection	B.	Bulk method	
		C.	Pure line method	D.	Pedigree method	D
407	The science dealing with variation and heredity is called:	A.	Immunology	B.	Cytology	
		C.	Genetics	D.	Radiology	C
408	The science, which deals with the study of interrelationship between the living organisms and the various factors of the environme	A.	Botany	B.	Biology	
		C.	Ecology	D.	Zoology	C
409	Male sterility controlled by cytoplasmic genes:	A.	Genetic MS	B.	Cytoplasmic Genetic MS	
		C.	Cytoplasmic MS	D.	None of the above	C
410	Male sterility controlled by the interaction of nuclear and cytoplasmic genes:	A.	Genetic MS	B.	Cytoplasmic Genetic MS	
		C.	Cytoplasmic MS	D.	None of the above	B
411	The scientific name of bread wheat is:	A.	T. durum	B.	T. dicoccum	
		C.	T. aestivum	D.	T. monecoccum	C
412	The scientific name of maize is:	A.	Glycine max	B.	Hordeum vulgare	
		C.	Zea mays	D.	None of them	C
413	The segregation of individuals in the F2 or in a later generation of a cross, which shows a more extreme development of a character than either parent is termed as:	A.	Hybridisation	B.	Heterosis	
		C.	Linkage	D.	Transgressive segregates	D
414	The series of changes in the vegetation of a pond, lake, marsh or a stream are together known as:	A.	Hydrosere	B.	Xerosere	
		C.	Biosphere	D.	None of above	A
415	The series of changes in the vegetation of bare rocky beds, rocky hill slopes sand beds into, extreme scarcity of water are together	A.	Hydrosere	B.	Xerosere	
		C.	Mesosere	D.	Xerophytes	B
416	The situation where an egg cell is developed into an embryo' without fertilization, is described as:	A.	Apomixis	B.	Parthenocarpy	
		C.	Sexual reproduction	D.	Parthenogenesis	D
417	The slender stalk by which ovule is attached to the placenta is known as:	A.	Funicle	B.	Hilum	
		C.	Raphe	D.	Chalaza	A
418	The structure of chromosome can best be observed during:	A.	Prophase	B.	Metaphase	
		C.	Anaphase	D.	Telaphase	B
419	The situation where a fruit develops without fertilization, is described as:	A.	Apomixis	B.	Parthenocarpy	
		C.	Sexual reproduction	D.	Parthenogenesis	B
420	Genes are present in:	A.	Nucleous	B.	Cytoplasmic	
		C.	Mitochondria	D.	All of the above	D
421	The sugar found in DNA is:	A.	Deoxyribose	B.	Ribose	
		C.	Fructose	D.	Maltose	A
422	The surface tension in any liquid is _____ related to the temperature:	A.	Universally	B.	Directly	
		C.	Indirectly	D.	Does not	A
423	The tap root system is normally meant to:	A.	Absorb water and mineral salts from	B.	Conduct water and mineral salts to the	

		C.	Give proper encharge to plant	D.	All of the above	D
424	The term epistasis was originally used by _____ in 1909 to describe genes whose effects mark or cover the effects of other genes:	A.	Wagner	B.	Bateson	
		C.	Hayman	D.	Atwood	B
425	The term genetics was coined by:	A.	Gregor Mendel	B.	Bateson	
		C.	T.H. Morgan	D.	H.J. Mujer	B
426	The term heterosis was first used by:	A.	Mendel	B.	Shull	
		C.	Bateson	D.	Punnet	B
427	The term used in sugarcane breeding to denote the crossing of Sacharum officinarum with related species followed by one or mor	A.	Mass selection	B.	Crossing over	
		C.	Cane improvement	D.	Nobilisation	D
428	The theory of independent assortment of alleles was given by:	A.	Mendel	B.	Shull	
		C.	Bateson	D.	Punnet	A
429	Plant Breeding is:	A.	Science	B.	Art	
		C.	Both A & B	D.	None of the above	C
430	Synthesis of protein from RNA is:	A.	Translocation	B.	Transcription	
		C.	Translation	D.	None of the above	C
431	The topographic factors include:	A.	Undulation	B.	Altitude	
		C.	Slope	D.	All the above	D
432	The transference of pollengrain from the anther of a flower to the stigma of the same flower is known as:	A.	Self-polliniltion	B.	Cross polination	
		C.	Fertilization	D.	Mating	A
433	The transference of pollengrains from the anther to the stigma is called:	A.	Fertilization	B.	Double fertilization	
		C.	Mating	D.	Pollination	D
434	The two integuments of a ovule develop into:	A.	Seed coats	B.	Disintegrate	
		C.	Plumule	D.	Pericarp	A
435	The type of male sterility used in hybrid seed production in pearlmilet is:	A.	Genetic male sterility	B.	Cytoplasmic male sterility	
		C.	Genetic cytoplasmic male sterility	D.	None of the above	C
436	Scientific name of rice is:	A.	Oriza Sativa	B.	Triticum aestivum	
		C.	Zea mays	D.	Pennisetum typhoids	A
437	Scientific name of pearl millet is:	A.	Oriza Sativa	B.	Triticum aestivum	
		C.	Zea mays	D.	Pennisetum typhoids	D
438	Scientific name of oat is:	A.	Oriza Sativa	B.	Avena sativa	
		C.	Zea mays	D.	Pennisetum typhoids	B
439	Scientific name of barley is:	A.	Oriza Sativa	B.	Avena sativa	
		C.	Hordeum vulgare	D.	Pennisetum typhoids	C
440	Scientific name of sorghum is:	A.	Oriza Sativa	B.	Sorghum bicolor	
		C.	Hordeum vulgare	D.	Pennisetum typhoids	B
441	The various modes in which the leaves are arranged on the stem or the branch, the term is called:	A.	Phyllotaxy	B.	Phyllode	
		C.	Phylloclade	D.	Cladode	A
442	Theory of 'Acquired characters' was proposed by:	A.	Darwin	B.	Lamark	
		C.	Bateson	D.	Weismann	B
443	Theory of overdominance states:	A.	Dominant homozygote is	B.	Recessive homozygote is	
		C.	Hetrozygote is superior to both the	D.	None of the above	C
444	There are four stage of development of Genetics upto 20th century. The correct order of their occurrence is	A.	Darwinism, Lamarckism.	B.	Lamarckism, Darwinism.	
		C.	Lamarckism, Weismannism.	D.	Weismannism, Lamarckism.	C
445	When two organisms live together for mutual help to each other are called:	A.	Saprophytes	B.	Symbionts	
		C.	Parasites	D.	Epiphytes	B
446	When two genes show independent segregation, a genotype AaBb will produce _____ types of gametes:	A.	4	B.	3	
		C.	2	D.	1	A

447	To produce hybrid seed we need:	A.	A male sterile line, restorer, maintainer	B.	A male fertile line and maintainer	
		C.	A maintainer and restorer	D.	Only male sterile line	A
448	When two alleles of a gene are identical, the plant is said to be:	A.	Recessive	B.	Dominant	
		C.	Heterozygous	D.	Homozygous	D
449	Tomato fruit is a:	A.	Drupe	B.	Berry	
		C.	Siliqua	D.	Hesperidium	B
450	Transmission of a gene in Bacterio-phase is known as:	A.	Transversion	B.	Transduction	
		C.	Inversion	D.	Fusion	B
451	Transmission of characteristics and qualities of parents of their offspring is known as:	A.	Mutation	B.	Heredity	
		C.	Adaptation	D.	Hybridization	B
452	Triticale is a cross between:	A.	Wheat & barley	B.	Barley & rye	
		C.	Wheat & rye	D.	Wheat & oat	C
453	tropical Evergreen or Rain Forests occur in areas with annual rainfall:	A.	Exceeding 2,000 mm	B.	1000 - 1,500 mm	
		C.	500 - 1,000 mm	D.	Scanty	A
454	Umbel inflorescence is characteristic of the family:	A.	Mustard family	B.	Okra family	
		C.	Pea family	D.	Coriander family	D
455	Unisexual flowers bear:	A.	Only stamens	B.	Only carpals	
		C.	Either stamens or carpals	D.	Both stamens and carpals	C
456	When the stamens are united throughout their whole length by both the filaments and the anthers, they are said to be:	A.	Syngenesious stamens	B.	Polyadelphous stamens	
		C.	Synadrous stamens	D.	Diadelphous stamens	C
457	Vivipary means:	A.	Seed germinates inside the fruit while	B.	Seed germinates as usual	
		C.	Seed dormancy is very long	D.	None of above	A
458	Wheat crop is:	A.	Cross pollinated	B.	Often cross pollinated	
		C.	Self pollinated	D.	Anemophily	C
459	Oat is said to be:	A.	Cross pollinated crops	B.	Self pollinated crop	
		C.	Mixed pollinated crop	D.	None of the above	B
460	When biological processes are made to occur outside the organism in test tube or vessel it is known as:	A.	In vivo	B.	In vitro	
		C.	In breeding	D.	Complete pentrance	B
461	When a cluster of leaves arises from the short underground item as in pineapple, such leaves are said to be:	A.	Radical	B.	Cauline	
		C.	Pellate	D.	Centric	A
462	When a group of phenotypically similar appearing plant is selected and harvested and their seeds are bulked, the process is known as:	A.	Pedigree breeding	B.	Mass selection	
		C.	Bulk method of breeding	D.	Pure line selection	B
463	When a plant heterozygous for two given characters Tt Rr, both of them are completely dominant, is self-pollinated, the resulting progeny will consist of:	A.	Six phenotypes	B.	Four phenotypes	
		C.	Three phenotypes	D.	Two phenotypes	B
464	When a Tall plant (Tt) in pea is crossed with another Tall plant (Tt), the probability of obtaining a dwarf plants is:	A.	1?2	B.	1?4	
		C.	1?8	D.	1?16	B
465	When an F1 is crossed with the recessive homozygote parent the cross is known as:	A.	Back cross	B.	Top cross	
		C.	Test cross	D.	Single cross	C
466	When an individual is having both the alleles of contrasting characters, it is said to be:	A.	Monoecious	B.	Homozygous	
		C.	Dioecious	D.	Heterozygous	D
467	When breaks occur in two chromosomes simultaneously in a nucleus and the broken chromosomes rejoin in a new manner, it resu	A.	Dedeletion	B.	Duplication	
		C.	Translocation	D.	Inversion	C
468	When homologous chromosomes fail to pair in prophase of meiosis, the phenomenon is known as:	A.	Desynapsis	B.	Non-disjunction	
		C.	Asynapsis	D.	Disjunction	C
469	When leaf fall of soon after it appears, then it is said to be:	A.	Persistent	B.	Deciduous	
		C.	Evergreen	D.	None of the above	B
470	When only one fruit develops from the single ovary of a flower it is said to be a:	A.	Simple fruit	B.	Aggregate fruit	

		C.	Multiple fruit	D.	Composite fruit	A
471	What are the repeating units of nucleic acids?	A.	phosphate molecule	B.	nucleotides	
		C.	bases	D.	sugar molecules	B
472	Chromosomes measurements are generally taken during	A.	Interphase	B.	Prophase	
		C.	Anaphase	D.	Non-of these	D
473	Resolving power of a light microscope is:	A.	0.1 micro metres	B.	0.2 micro metres	
		C.	0.3 micro metres	D.	0.4 micro metres	C
474	Mitochondria were seen first in:	A.	1850	B.	1900	
		C.	1940	D.	1975	B
475	Rice plants exposed to temperatures below _____ degree centigrade at the time of pollen-mother cell division will not produce a	A.	22	B.	20	
		C.	19	D.	16	D
476	The following percentage of water absorbed by herbaceous plants is lost in transpiration:	A.	80	B.	60	
		C.	99	D.	40	C
477	A maize plant to produce one kg of grain (dry) transpires _____ kg of water:	A.	900	B.	800	
		C.	700	D.	600	D
478	Prokaryota means:	A.	A cell with many nuclei	B.	A cell without chloroplast	
		C.	A cell with diffused nucleus	D.	A cell with one nucleus	C
479	Which one of the following factors causes an increase in transpiration rate?	A.	A hot dry windy day	B.	A cool damp windy day	
		C.	A hot damp windy day	D.	None of the above	A
480	Wilting of plant results from excessive:	A.	Absorption	B.	Photosynthesis	
		C.	Respiration	D.	Transpiration	D
481	Blue green algae are:	A.	Actinomycetes	B.	Acellular	
		C.	Prokaryotes	D.	Eukaryotes	C
482	Simplest amino acid is:	A.	Alanine	B.	Glycine	
		C.	Leucine	D.	Aspartic acid	B
483	Fermentation is conducted by:	A.	All fungi	B.	All bacteria	
		C.	Some fungi and some bacteria	D.	All microorganisms	C
484	Proteins are made up of:	A.	Amino acid	B.	Nucleic acids	
		C.	Sugars	D.	Fatty acids	A
485	In unisexual plants sex can be changed by application of:	A.	Auxins	B.	ABA	
		C.	Ethanol	D.	Cytokinins	A
486	Which of the following plants cannot fix atmosphere nitrogen directly?	A.	Bean	B.	Castor	
		C.	Pea	D.	Gram	B
487	In land plants the gaseous exchange takes place through the open stomata, in submerged hydrophytes it takes place/through:	A.	By general surface of the cells by	B.	Lenticels	
		C.	Stomata	D.	Hydathodes	A
488	Which is a micronutrient?	A.	Ca	B.	Zn	
		C.	P	D.	Mg	B
489	Which of the following is a micronutrient?	A.	Calcium	B.	Phosphorous	
		C.	Copper	D.	Magnesium	C
490	A trace element essential for plant grwoth and radio-isotope which is used in cancer therapy is known is:	A.	Calcium	B.	Cobalt	
		C.	Sodium	D.	Iron	B
491	Which pair of structures is usually found in both plant and animal cell:	A.	Cell membrane and nucleolus	B.	Cell membrance and cell wall	
		C.	Nucleus and chloroplast	D.	Nucleolus and cell wall	A
492	Which of the following structures controls the transport of the material into and out of living cell?	A.	Centrosome	B.	Cell membrane	
		C.	Cell wall	D.	Ribosome	B
493	Atmospheric nitrogen in the soil is fixed by:	A.	Cereals	B.	Pulses	
		C.	Sugarcane	D.	Cotton	B

494	The removal of apical buds and young leaves _____ branching:	A.	Decreases	B.	Increases	
		C.	Maintains	D.	No effect	B
495	The correct sequence in protein synthesis is:	A.	DNA ? Amino acids ? RNA ? Proteins	B.	DNA ? RNA ? Amino acids ?	
		C.	Amino acid ? DNA ? RNA ? Proteins	D.	RNA ? DNA ? Amino acids ?	B
496	Functions and vital activities of the plants are studied under:	A.	Ecology	B.	Cytology	
		C.	Physiology	D.	Morphology	C
497	The condition under which transpiration would be lowest	A.	Environmental conditions are very	B.	When there is high humidity in the	
		C.	High wind velocity	D.	There is excess of water in the cells	B
498	The nucleoplasm and the cytoplasm are continuous with one another through the nuclear pores in:	A.	Eukaryotic cells	B.	Prokaryotic cells	
		C.	Cells of blue green algae	D.	Bacteria	A
499	Nitrogen is essential component of:	A.	Fat	B.	Protein	
		C.	Carbohydrates	D.	Mg	B
500	Osmosis means:	A.	Flow of solute from low concentration to	B.	Flow of solute from high	
		C.	Flow of solvent from low	D.	Flow of solvent from high	C
501	Most plants obtain their nitrogen from the soil in the form of:	A.	HNO3	B.	Nitrate	
		C.	Free nitrogen	D.	Nitrogen oxide	B
502	When a seed is placed in a suitable medium for germination, by which of the following first process water enter into the seed coat	A.	Imbibition	B.	Absorption	
		C.	Osmosis	D.	Root pressure	A
503	Plasma membrane is:	A.	Impermeable	B.	A selective barrier	
		C.	A non-selective barrier	D.	Made of up cellulose	B
504	The prokaryota are a group of organisms:	A.	In which cells are a group of organisms	B.	In which nuclear membrance.	
		C.	In which chlorophyll is lacking	D.	With a wall defined nucleus	B
505	Rotation of crops is practised in plants because:	A.	It decreases the nitrogen content of	B.	It increases the nitrogen content of	
		C.	It kills harmful bacteria of the soil	D.	It increases the water content of	B
506	Proteins are synthesized on:	A.	Mitochondria	B.	Centrosome	
		C.	Golgi bodies	D.	Ribosomes	D
507	Chlorophyll contains:	A.	Mn	B.	Fe	
		C.	K	D.	Mg	D
508	Organisms, which fix atmospheric nitrogen in the soil, are found among:	A.	Mosses	B.	Green algae	
		C.	Soil fungi	D.	Bacteria	D
509	In the nodules of roots in leguminous plants we find:	A.	N2 producer bacteria	B.	Denitrifying Bacteria	
		C.	N2 fixing bacteria	D.	Nitrifying bacteria	C
510	During 24 hours there is a time when plants neither give oxygen nor carbon dioxide. This is the time of:	A.	Night	B.	Day light	
		C.	Twilight	D.	None of these	C
511	The production of nitrates from Ammonia through Nitrosomonas is called:	A.	Nitrification	B.	Ammonification	
		C.	Nitrogen fixation	D.	Denitrification	A
512	Bacteria that change proteins to ammonia in nitrogen cycle are:	A.	Nitrogen fixing bacteria	B.	Nitrate bacteria	
		C.	Decay bacteria (ammonifying	D.	Denitrifying becteria	C
513	Bacterioids are:	A.	Nitrosomonars bacteria in soil	B.	A mobile bacterium	
		C.	A bacterial cell infected with viruses	D.	Enlarged non-mobile cellular	D
514	The loss of water in the form of vapour from aerial plant parts is known as:	A.	Osmosis	B.	Respiration	
		C.	Photosynthesis	D.	Transpiration	D
515	The loss of water in the form of vapour from aerial plant parts is known as:	A.	Osmosis	B.	Respiration	
		C.	Photosynthesis	D.	Transpiration	D
516	Stomata open because of:	A.	Oxygen in the air	B.	Increased turgidity of the guard cells	
		C.	Vacuoles in guard cells	D.	All the above	B
517	Minerals absorbed by roots move to the leaf through:	A.	Phloem	B.	Sleve rube	

		C.	Xylem	D.	None of the above	C
518	Two chief functions of leaves are:	A.	Photosynthesis and respiration	B.	Photosynthesis and transpiration	
		C.	Transpiration and respiration	D.	Respiration and digestion	B
519	Alcohol is produced during the process of:	A.	Photosynthesis and respiration	B.	Aerobic respiration	
		C.	Anaerobic respiration	D.	None of the above	C
520	Which pigment is essential for nitrogen fixation by leguminous plants?	A.	Phycocyanin	B.	Leghaemoglobin	
		C.	Phycoerythrin	D.	Anthocyanin	B
521	Which level of protein structure is affected by DNA (or for which level of protein structure DNA carries information)?	A.	Primary structure	B.	Secondary structure	
		C.	Tertiary structure	D.	Quarternary structure	A
522	In anaerobic respiration the end product is:	A.	Pyruvic acid	B.	Ethyl alcohol	
		C.	Starch	D.	Sugar	B
523	The most effective wavelength of visible light in photosynthesis is in the region of which of the following?	A.	Red	B.	Yellow	
		C.	Violet	D.	Green	A
524	In nitrogen cycle which of the following plays an important role?	A.	Rhizopus	B.	Mucor	
		C.	Nitrobacter	D.	Spirogyra	C
525	If we separate the cell organelles of a living cell which part should be alive?	A.	Ribosome	B.	Endoplasmic reticulum	
		C.	Chloroplast	D.	Cell wall	C
526	Which of the following is the site of respiration within the cell?	A.	Ribosomes	B.	Nucleus	
		C.	Golgi body	D.	Mitochondrion	D
527	Instantaneous source of energy is:	A.	Amino acid	B.	Fats	
		C.	Glucose	D.	Proteins	C
528	Chlorosis occur in plants growth in:	A.	Shade	B.	Iron free medium	
		C.	Dark	D.	Strong light	B
529	Plants synthesis protein from:	A.	Starch	B.	Sugar	
		C.	Amino acids	D.	Fatty acids	C
530	Guard cells are found in:	A.	Stomata	B.	Root tips	
		C.	Ovary	D.	Lenticels	A
531	Transpiration occurs through:	A.	Stomata	B.	Cuticle	
		C.	Lenticles	D.	All the above	D
532	A bulk of nitrogen in nature is fixed by:	A.	Symbiotic bacteria	B.	Chemical industries	
		C.	Lightning	D.	Denitrifying bacteria	A
533	Which one of the following is most limiting factor for nitrification in the soil?	A.	Temperature	B.	Tillage	
		C.	Soil reaction (pH)	D.	Moisture	C
534	A trace element is:	A.	That which draws other elements out	B.	Radoactive can be traced by Geiger	
		C.	Required in very minute amounts	D.	That which was first found in	C
535	Without adding nitrogenous manures good yield or rice crop can be obtained because:	A.	Their roots have nitorogen-fixing	B.	There are nitrogen fixing algae in rice	
		C.	Rice plants do not require nitrogen	D.	They require minute quantities	B
536	Members of bean family are of particular importance in crop rotation programmes primarily because:	A.	They add nitrates to the soil	B.	They manufacture nitrogenous	
		C.	They have nitrogen-fixing bacteria	D.	They provide green manure	C
537	It is not advisable to sleep under the trees at night because:	A.	They release carbon dioxide during night	B.	They release oxygen during	
		C.	They have nitrogen-fixing bacteria	D.	None of the above	A
538	How do most of the plants obtain air?	A.	Through a system of branches	B.	Through the tips of branches	
		C.	Through opening in the leaves	D.	From water that comes up from soil	C
539	The process by which proteins are synthesized in a cell is called:	A.	Translation	B.	Transduction	
		C.	Translocation	D.	Transcription	A
540	Which of the following leaves would dry up last?	A.	Upper surface greased	B.	Lower surface greased	
		C.	Both surface greased	D.	Both surface ungreased	C

541	Enzymes are basically:	A.	Vitamins	B.	Fats	
		C.	Protein	D.	Carbon	C
542	The normal form of a plant is maintained by the presence of:	A.	Water	B.	Gases	
		C.	Solid	D.	None of these	A
543	Which one of the following is a long day plant?	A.	Wheat	B.	Jowat	
		C.	Bajara	D.	Soyabean	A
544	Most of the _____ flowers contain carotenoid especially xanthophyll type and it is believed that they benefit certain plants by attracting pollinating insects:	A.	White	B.	Red	
		C.	Pink	D.	Yellow	D
545	Respiration is:	A.	Exothermic process	B.	Endothermic process	
		C.	Endergonic process	D.	Anabolic process	A
546	Which of the following is the source of respiration?	A.	Stored food	B.	RNA	
		C.	DNA	D.	ATP	A
547	The chances of contacting bird flu from a properly cooked (above 100°C) chicken and egg are	A.	very high	B.	high	
		C.	moderate	D.	none	D
548	(A x B) x C is:	A.	Single cross	B.	Double cross	
		C.	Three way cross	D.	Top cross	C
549	Alley cropping' means:	A.	Growing of pastures in between two	B.	Growing of field crops in between	
		C.	Growing of only short duration crops	D.	Growing of only fooder crops in	B
550	Ascent of cell sap' from root to the treetop is exercised by:	A.	Phloem	B.	Xylem	
		C.	Cambium cell	D.	Lanticles	B
551	Layering' is useful for propagation of:	A.	Rose	B.	Garlic	
		C.	Lemon	D.	Sugarcane	A
552	Range' is the measurement between:	A.	Highest and lowest	B.	Medium and owest	
		C.	Average and highest	D.	None of above	A
553	Record keeping' should be characterized by:	A.	Completeness	B.	Accuracy	
		C.	Simplicity	D.	All of the above	D
554	1 nm is equal to:	.	10-8 cm	B.	10-9 m	
		C.	10-10 m	D.	None of the above	C
555	2n + 1 state is refered to as:	A.	Monosomy	B.	Trisomy	
		C.	Tetrasomy	D.	Nullisomy	B
556	Sugars present in DNA and RNA respectively are:	A.	Glucose and Fructose	B.	Deoxyribose and Ribose	
		C.	Galactose and Raffinose	D.	Erythrose and Starchvos	B
557	A character determined by a gene present on X-chromosome is called:	A.	Sex linked character	B.	Sex-limited character	
		C.	Sex-influenced character	D.	Hollandric character	A
558	A combination of horticultural crops, field crops and tree species is called:	A.	Agro-forestry	B.	Silvi-pastoral system	
		C.	Multipurpose forest tree plantation	D.	None of the above	D
559	A recessive gene for resistance to disease can be transferred from one parent to another using:	A.	Pureline selection	B.	Backcross breeding	
		C.	Pedigree method	D.	Buld method	B
560	A short duration crop in between two main seasonal crops is termed as:	A.	Cash crop	B.	Inter crop	
		C.	Companion crop	D.	Catch crop	D
561	A single seed plant of tobacco may produce as many as:	A.	1,000 seeds	B.	10,000 seeds	
		C.	1,00,000 seeds	D.	2,00,000 seeds	B
562	A variety produced by crossing in all combination a number of lines that combine well with each other is:	A.	Composite	B.	Hybrid	
		C.	Synthetic	D.	Elite variety	C
563	A variety produced by mixing seeds of several phenotypically outstanding lines and allowing all combinations is:	A.	Synthetic	B.	Composite	
		C.	Hybrid	D.	Germplasm complexes	B
564	Aim of seed technology is:	A.	Rapid multiplication of seeds	B.	Assured high quality seeds	

		C.	Timely supply of improved seeds	D.	All of the above	D
565	All fruits are in general _____ in nature:	A.	Acidic	B.	Basic	
		C.	Neutral	D.	All of the above	A
566	An agent that causes gene mutations is known as:	A.	Mutant	B.	Mutation	
		C.	Mutagen	D.	Mutator	C
567	An area in which seeding are raised to be transplanted elsewhere is called:	A.	Brashing	B.	Shifting cultivation	
		C.	Crop rotation	D.	Nursery	D
568	An enzyme excreted by a microorganisms into the environment is called:	A.	Exoenzyme	B.	Endoenzyme	
		C.	Coenzyme	D.	None of the above	A
569	An individual having the genotype AA is known as:	A.	Heterozygote	B.	Hybrid	
		C.	Homozygote	D.	F1	C
570	An unorganized mass of cells developed on an agar medium is known as:	A.	Callus	B.	Mass	
		C.	Explant	D.	Suspension	A
571	Anthesis is a phenomenon, which occurs:	A.	When the flower opens first	B.	After pollination	
		C.	When anthers are formed in the flower	D.	When fruit drops due to low soil	A
572	Which one of the following is dioecious plant?	A.	Peach	B.	Pomegranate	
		C.	Pea	D.	Pointed gourd	D
573	Which one of the following is a warm season vegetable?	A.	Okra	B.	Pea	
		C.	Cabbage	D.	Turnip	A
574	At molecular level mutation represents a change in:	A.	Base-pair sequence	B.	Phosphate-sugar backbone	
		C.	Hydrogen bonds	D.	Deoxy-ribose	A
575	Auxin is:	A.	An enzyme	B.	A vitamin	
		C.	A hormone	D.	A protein	C
576	Bacillus thuringsis is:	A.	Virus	B.	Bacteria	
		C.	Fungi	D.	Insecticide	B
577	Bacterial diseases are controlled by use of chemicals:	A.	Antibiotics	B.	Viricides	
		C.	Fungicides	D.	Kelthane	A
578	Bacterial leaf blight of rice is caused by:	A.	Xanthomonas	B.	Erwinia	
		C.	Pseudomonas	D.	Bacillus	A
579	Blue colour tag is used for seed production:	A.	Nuclear	B.	Certified	
		C.	Foundation	D.	Registered seed	B
580	Breeder seed is produced by:	A.	Plant Breeder	B.	Government Agencies	
		C.	Registered Growers	D.	N.S.C.	A
581	Bulk population breeding is suitable for:	A.	Fruit crops	B.	Vegetable crops	
		C.	Small grain crops	D.	Flower crops	C
582	Bunchy top in sugarcane is caused by	A.	Root borer	B.	Stock borer	
		C.	Internode borer	D.	Top shoot borer	D
583	By means of 'Bulbs' which of the following crop is propagated?	A.	Rose	B.	Garlic	
		C.	Lemon	D.	Sugarcane	B
584	Cajanus cajon belongs to family:	A.	Composite	B.	Euphorbiacea	
		C.	Leguminoceae	D.	Cruciferae	C
585	Cause of deterioration of variety is:	A.	Mendelian variation only	B.	Mutation only	
		C.	Mechanical mixture only	D.	All of the above	D
586	Chloroplasts are absent in:	A.	Fungi	B.	Blue-green algae	
		C.	Photosynthetic bacteria	D.	All of the above	A
587	Chorchorus capsularis belongs to family:	A.	Tiliaceae	B.	Malvaceae	
		C.	Euphorbiaceae	D.	Compositae	A

588	Yellow coloured fruits and vegetables are rich source of:	A.	Vit. 'E'	B.	Vit. 'C'	
		C.	Vit. 'A'	D.	Vit. 'B'	C
589	Conversion of proteins into ammonia is called:	A.	Ammonification	B.	Nitrification	
		C.	Nitrogen fixation	D.	None of above	A
590	Cucurbits in early stage are mainly damaged by:	A.	Aphids	B.	Jassids	
		C.	Borers	D.	Red pumpkin beetle	D
591	Cultivation of the apical meristems, particularly of shoot apical meristem, is known as:	A.	Embryo culture	B.	Meristem culture	
		C.	Pollen culture	D.	Tissue culture	B
592	During prophase-I of meiosis crossing over occurs at:	A.	Zygotene	B.	Pachytene	
		C.	Diplotene	D.	Diakinesis	B
593	Effect of one gene on the phenotypic expression of another non-allelic gene is called:	A.	Dominance	B.	Epistasis	
		C.	Linkage	D.	Penetrance	B
594	Eubacteria belong to:	A.	Eukaryote	B.	Prokaryote	
		C.	Cyanobacteria	D.	None of these	B
595	Evaluation of an inbred includes:	A.	Single cross evaluation	B.	Top-cross test	
		C.	Phenotypic evaluation	D.	All of the above	B
596	Exchange of homologous segment of chromatin between homologous chromosomes is known as:	A.	Linkage	B.	Segregation	
		C.	Crossing over	D.	Repulsion	C
597	Factor, which affects the dormancy of seed:	A.	Dormant embryo	B.	Rudimentary embryo	
		C.	Germination inhibitor	D.	All of the above factors	D
598	For obtaining haploid plant _____ is useful:	A.	Maltiplication stage of a variety	B.	Level of genetic purity	
		C.	Level of physical purity	D.	All of the above	D
599	Foundation seed is obtained from:	A.	Certified seed	B.	Registered seed	
		C.	Farmer's seed	D.	Breeder seed	D
600	Generally seedless watermelon is:	A.	Diploid	B.	Triploid	
		C.	Tetraploid	D.	Hexaploid	B
601	Genetic basis of evolution is:	A.	Availability of genetic variability	B.	Selection from diversity	
		C.	Isolation	D.	All of the above	D
602	Genotypes of zygotes of cross-pollinated cross are:	A.	Homozygous	B.	Heterozygous	
		C.	Homogenous	D.	Hetrogenous	B
603	Grapes are good example of:	A.	Tree	B.	Shrub	
		C.	Vine	D.	Herb	C
604	Growing of honey producing trees with bee keeping is called:	A.	Sericulture	B.	Silviculture	
		C.	Apiculture	D.	Aqua-silviculture	C
605	Haploids are having:	A.	Somatic chromosome	B.	Small chromosomes	
		C.	Very long chromosomes	D.	Gametic chromosome	D
606	Heterosis can be easily fixed in:	A.	Self pollinated crops	B.	Cross pollinated crops	
		C.	Apomictic crops	D.	Cleistogamaus crops	C
607	Hormones that regulate growth are called:	A.	Growth regulators	B.	Growth hormones	
		C.	Both (a) and (b)	D.	None of above	B
608	How many genes (recessive) for short stature have been identified in sorghum?	A.	1	B.	2	
		C.	3	D.	4	D
609	Hybrid varieties are the first generations (F1) from crosses between _____ that are genetically dissimilar:	A.	Two pur lines	B.	Two inbreds	
		C.	Two open pollinated varieties	D.	All of the above	B
610	Hybrid varieties were first commercially exploited in:	A.	Bajra	B.	Tomato	
		C.	Cotton	D.	Maize	D
611	Hybridization can be:	A.	Intervarietal	B.	Interspecific	

		C.	Intergeneric	D.	All of the above	D
612	IBRD is synonyms to:	A.	World Bank	B.	Asian Development Bank	
		C.	International Monetary Fund	D.	World Trade Organization	A
613	If n inbreds were to be tested in all possible single cross combinations, there would be _____ single crosses.	A.	n (n-1)/2	B.	n2/2	
		C.	n(n-2)/2	D.	n(n+1)/2	A
614	Importance of fruits and vegetables in human diet is primarily because they are:	A.	Good source of carbohydrates	B.	Good source of proteins	
		C.	Good source of fats	D.	Good source of vitamins and	D
615	Important achievements of plant breeding are:	A.	Production of dwarf cereal varieties	B.	Production of hybrid varieties	
		C.	Development of disease and pest	D.	All of the above	D
616	In an apomictic plant:	A.	Heterosis is increased	B.	Heterosis is fixed	
		C.	Heterosis is reduced	D.	Heterosis is eliminating	B
617	In C4 plants the initial acceptor of CO2 is:	A.	Phosphoenol pyruvic acid	B.	Rubulose 1 - 5 biphosphate	
		C.	Both (a) and (b)	D.	None of above	A
618	Which one is not correctly matched?	A.	Ginger - Rhizome	B.	Garlic - Bulb	
		C.	Potato - Tuber	D.	Sweet potato - Stolon	D
619	In normal production of hybrid maize seed which class of seed is produced?	A.	Inbred	B.	Single cross	
		C.	Double cross	D.	All of the above	D
620	In sugarcane breeding the initial selection after hybridisation is done in the generation:	A.	F0	B.	F1	
		C.	F2	D.	F6	B
621	In which of the plot design the number of replications equals the number of varieties:	A.	In systematic design	B.	Randomized block design	
		C.	Latin square design	D.	None of the above	C
622	Incompatibility can be:	A.	Heteromorphic	B.	Homomorphic	
		C.	Both (a) and (b)	D.	None of the above type	B
623	Introduced material can be utilized by:	A.	Releasing directly as a variety	B.	Using it in hybridization	
		C.	Keeping it as a germplasm	D.	All of above methods	D
624	Isolation depends upon:	A.	The nature of material to be	B.	The nature of contaminant	
		C.	The direction and speed of the	D.	All of the above factors	D
625	Isolation distance for the production of double cross seed in maize should be at least:	A.	100 to 200 m	B.	200 to 300 m	
		C.	300 to 400 m	D.	400 to 500 m	B
626	Which of the following media can be used for vegetative propagation?	A.	Soil	B.	Sand	
		C.	Coconut coir	D.	All of the above	D
627	Which of the following is visible through nacked eyes?	A.	Mould	B.	Yeast	
		C.	Bacteria	D.	None of the above	A
628	Lateral roots formation is the root hairs zone of:	A.	Cortex	B.	Pericycle	
		C.	Endodermis	D.	Epidermis	B
629	Which of the following is stem vegetable?	A.	Potato	B.	Tomato	
		C.	Cauliflower	D.	Spinach	A
630	Linkage groups in maize are:	A.	5	B.	10	
		C.	20	D.	40	B
631	Which of the following are often cross-pollinated?	A.	Wheat	B.	Rice	
		C.	Soyabean	D.	Pigeon pea	A
632	Meiosis leads to:	A.	Reduction in cell number	B.	Reduction in chromosome	
		C.	Doubling of the chromosome	D.	Doubling of cell number	B
633	Mendel's laws of inheritance operate during:	A.	Mitosis	B.	Meiosis	
		C.	Plant gametogenesis	D.	Fertilization	B
634	Meristem culture is useful for:	A.	Vegetative propagation	B.	Recovery of virus-free stocks	
		C.	Germplasm conservation	D.	All of the above	D

635	Mitchondria and chloroplast both:	A.	Are basically lipoprotein	B.	Contain respiratory enzymes	
		C.	Produce ATP	D.	All of the above	D
636	Mitochondria are found in:	A.	Vacuole of eukaryotic cells	B.	Cytoplasm of prokaryotic cells	
		C.	Cytoplasm of prokaryotic cells	D.	Cytoplasm of eukaryotic cells	D
637	Most serious disease of pea is:	A.	Early blight	B.	Powdery mildew	
		C.	Late blight	D.	Anthracnose	B
638	Movements of a plant organ in response to directional fluxes or gradients in environmental stimuli are called:	A.	Nastic movement	B.	Epinasty	
		C.	Mutation	D.	Tropism	D
639	Mulching is an importnt agricultural practice. One of the chief aim of this practice is to:	A.	Decrease the evaporation of	B.	Prevent insect pests from attacking	
		C.	Provide support for the plant	D.	Encourage the plant to grow taller	A
640	Multiple effects of a gene are called:	A.	Pleiotropy	B.	Multiple	
		C.	Crossing over	D.	Polygenic effects	A
641	Nitrogen fixation is done by:	A.	Bacillus	B.	Striga	
		C.	Agrobacterium	D.	Rhizobium	D
642	Number of ATP molecules released from the oxidation of one molecule of glucose is:	A.	Two	B.	Thirty eight	
		C.	Eight	D.	Sixteen	B
643	Which of the following is genetically heterogeneous?	A.	Hybrid	B.	Composite	
		C.	Clone	D.	Pure line	B
644	Objectives of hybridization are:	A.	To create genetical variability	B.	To know the pattern of	
		C.	To produce hybrid varieties	D.	All of the above	D
645	Photoperiod required to induce flowering in plants is called :	A.	Short day period	B.	Long day period	
		C.	Critical day length	D.	Photoinductive cycle	C
646	Photosynthetically, Triticum aestivum is a:	A.	C3 plants	B.	C4 plants	
		C.	CAM plants	D.	SD plant	A
647	Photorespiration takes place in:	A.	Cristae	B.	Glyoxisomes	
		C.	Peroxisomes	D.	Lysosomes	C
648	Photorespiration is the characteristic of:	A.	C3 plants	B.	C4 plants	
		C.	CAM plants	D.	None of the above	A
649	Physical needs of a person is:	A.	Physical assets	B.	Food, shelter and clothing	
		C.	Education	D.	Entertainment	B
650	Plant food manufactured by the process of photosynthesis in the presence of a nutrient in chlorophyll is:	A.	Calcium	B.	Magnesium	
		C.	Iron	D.	Boron	B
651	Plants affected by seed born disease in certified seed production field must not be more than:	A.	1.50%	B.	1.00%	
		C.	0.50%	D.	2%	C
652	Which of the following is a ripening hormone?	A.	Ethylene	B.	Cytokinin	
		C.	Auxin	D.	Gibberellin	A
653	Powdery mildew disease is a serious problem in:	A.	Capsicum	B.	Okra	
		C.	Cusurbits	D.	Pea	D
654	Pure line may be defined as the progeny of:	A.	Any individual	B.	A homozygous individual	
		C.	A self-fertilized individual	D.	A homozygous and self-fertilized	D
655	Which of the following factors affects the dormancy of seed?	A.	Seed coat impermeable to	B.	Mechanical resistance of seed	
		C.	Seed coat impermeable to	D.	All of the above	D
656	Quantasomes are present in the:	A.	Chloroplast	B.	Nucleus	
		C.	Mitochondria	D.	Phytochromes	A
657	Rancidity in sunflower oil is caused by:	A.	Reduction	B.	Oxidation	
		C.	Esterification	D.	Nitrification	B
658	Registered seed is produced from:	A.	Foundation seed	B.	Registered seed	

		C.	Both (a) and (b)	D.	Certified seed	C
659	Relationship between phenotypic variance (Vp) genotypic variance (Vg) and environmental variance Ve can be shown as:	A.	Vp = Vg + Ve	B.	Vg = Vp + Ve	
		C.	Ve = Vp + Vg	D.	None of these	A
660	Relationship among micro organisms where one organism hinders the growth of other, is known as:	A.	Antibiosis	B.	Symbiosis	
		C.	Synergism	D.	Commensalism	A
661	Relationship in which one organism gets benefited without affecting the other is called:	A.	Symbiosis	B.	Commensalism	
		C.	Synergism	D.	Antibiosis	B
662	Rhizobium bacteria is:	A.	Symbiotic bacteria	B.	Non-symbiotic bacteria	
		C.	Anaerobic bacteria	D.	Autotrophic bacteria	A
663	Breeder seed is the progeny of:	A.	Foundation seed	B.	Registered seed	
		C.	Nucleus seed	D.	Certified seed	C
664	Certification is not required for:	A.	Nucleus seed	B.	Breeder seed	
		C.	Foundation seed	D.	Certified seed	B
665	Headquarters of the Union for the Protection of New Plant varieties is in:	A.	Thailand	B.	USA	
		C.	Denmark	D.	Switzerland	D
666	Improved seed includes:	A.	Nucleus seed	B.	Breeder seed	
		C.	Foundation seed	D.	All of the above	D
667	Seed coat is derived from:	A.	Testa	B.	Embryo	
		C.	Endosperm	D.	Nucellus	A
668	Initial seed of an improved variety is called:	A.	Nucleus seed	B.	Breeder seed	
		C.	Foundation seed	D.	Certified seed	A
669	Plant Breeders' Rights are operaating in:	A.	Germany	B.	Denmark	
		C.	Netherlands	D.	All of the above	D
670	Progeny of a nucleus seed is referred to as:	A.	Certified seed	B.	Foundation seed	
		C.	Registered seed	D.	Breeder seed	D
671	Seed certification requires:	A.	An improved variety	B.	Genetic purity	
		C.	Physical purity	D.	All of the above	D
672	Seed meant for generation distribution to the farmers for commercial crop production refers to:	A.	Foundation seed	B.	Breeder seed	
		C.	Certified seed	D.	Nucleus seed	C
673	Freedom from inert matter and defective seeds:	A.	Genetic purity	B.	Physical purity	
		C.	Defective purity	D.	Normal purity	B
674	International Crop Improvement Association (ICIA) in _____ classified seed into different categories:	A.	1964	B.	1946	
		C.	1963	D.	1972	B
675	Seed is a:	A.	Immature embryo	B.	Mature embryo	
		C.	Developed embryo	D.	Undeveloped embryo	B
676	Cotyledons in monocots are called:	A.	Endosperm	B.	Mega-gametophyte	
		C.	Embryo	D.	Integuments	A
677	First private seed company was:	A.	Monsanto	B.	Namdhari	
		C.	Sutton & Sons	D.	Takii	C
678	The hybrids developed by Government Agencies or Government Institutions and Agricultural Universities are called:	A.	Private hybrids	B.	Institutional hybrids	
		C.	Public hybrids	D.	Government hybrids	C
679	Breeder seed is _____ % pure:	A.	99	B.	100	
		C.	70	D.	99.99	B
680	In flowering plants a second seed coat is known as:	A.	Integument	B.	Aleurone layer	
		C.	Tegamen	D.	Inner ventral scale	C
681	A pure breeding tall pea plant was crossed to dwarf plant what will be the frequency of dwarf plants in F1	A.	0.25	B.	0.5	
		C.	0.75	D.	0	D

682	A pure breeding tall pea plant was crossed to dwarf plant what will be the frequency of dwarf plants in F2:	A.	0.25	B.	0.5	
		C.	0.75	D.	0	A
683	How many pairs of homologous chromosomes are present in Pisum sativum	A.	Five pairs	B.	Six pairs	
		C.	Seven pairs	D.	Eight pairs.	C
684	Which of the following characters of pea plant is dominant?	A.	Axial flowers	B.	Yellow pods	
		C.	White flowers	D.	Wrinkled seeds	A
685	A pea plant with yellow seed was crossed to a plant having green seeds. What will happen in F1; if plants are true breeding	A.	All seeds will be yellow	B.	Half of seeds will be yellow	
		C.	All the seeds will be green	D.	Both will be present in ratio of	A
686	The position of a gene on chromosome is called	A.	Habitat	B.	Position	
		C.	Locus	D.	Location	C
687	Filial is a Latin word. It means:	A.	Spring	B.	Issue	
		C.	Progeny	D.	Descendent	C
688	Which of the following condition is hybrid	A.	TT	B.	Tt	
		C.	tt	D.	All of these	B
689	Which of the following is monohybrid cross	A.	TT x tt	B.	TTYy x Ttyy	
		C.	Both of these	D.	None of these	A
690	A pure breeding tall plant was crossed to dwarf plant. What would be probability of "Tt" genotype in F2	A.	0.25	B.	0.5	
		C.	0.75	D.	0	B
691	A monohybrid cross yielded 3:1 in F2. What could be mode of inheritance?	A.	Segregation	B.	Independent assortment	
		C.	Both of these	D.	None of these	A
692	If a heterozygous individual shows the complete effect of both alleles, the type of inheritance would be	A.	Complete dominance	B.	Non dominance	
		C.	Incomplete dominance	D.	Co-Dominance	D
693	The gene which controls ABO group has how many alleles in an individual	A.	One	B.	Two	
		C.	Three	D.	Four.	C
694	How many genes control Rh blood group system?	A.	One	B.	Two	
		C.	Three	D.	Four	C
695	The trait "Kernel colour in corn" in controlled by how many pairs of genes	A.	One pair	B.	Two pairs	
		C.	Three pairs	D.	Many pairs.	C
696	Baldness is most frequent in	A.	Men	B.	Women	
		C.	Children	D.	Girls.	A
697	In nature, Garden pea is	A.	Self-fertilized	B.	Cross fertilized	
		C.	Cross pollinated	D.	None of these	A
698	The genes which do not follow law of independent assortment	A.	Crossed genes	B.	Linked genes	
		C.	Recessive genes	D.	Dominant genes	B
699	Phenotype represents	A.	Morphology	B.	Physiology	
		C.	Genetics	D.	None of these	A
700	During test cross, if all offsprings are phenotypically dominant then parents are	A.	Homozygous	B.	Heterozygous	
		C.	One homozygous other heterozygous	D.	None of these	A
701	True breeding variety is produced by	A.	Self fertilization	B.	Cross fertilization	
		C.	Both of these	D.	None of these	A
702	Which of the following is universal donor?	A.	A	B.	B	
		C.	AB	D.	O	D
703	Such inheritance in which traits vary quantitatively is	A.	Continuously varying trait	B.	Incomplete dominance	
		C.	Test cross	D.	Polygenic inheritance	D
704	Genes that affect growth rate in humans influencing both weight and height are	A.	Codominant	B.	Epistasis	
		C.	Pleiotropy	D.	Polygene	C
705	All of the following are continuously varying traits except	A.	Kernel colour in wheat	B.	Skin colour in humans	

		C.	Height in humans	D.	Tongue rolling in humans	D
706	The number of linkage groups in humans is	A.	12	B.	23	
		C.	46	D.	92	B
707	Recombination frequency between two linked genes can be calculated by	A.	Back cross	B.	Test cross	
		C.	Normal cross	D.	None of these	A
708	Which of the following is male determining gene in humans?	A.	tfm	B.	SRY	
		C.	Both of these	D.	None of these	B
709	The place of attachment of leaf with the shoot is called:	A.	Pith.	B.	Pit.	
		C.	Pulvinus.	D.	Ecdysone.	C
710	Roots of a plant show	A.	Positive phototropism and	B.	Negative phototropism and	
		C.	Negative tactic movement and	D.	Positive geotropism of stem	B
711	The site/s where most of the uptake of water and minerals take place is/are	A.	Root hairs	B.	Root cells	
		C.	Underground stem	D.	All of these	A
712	The uptake of water in plants involves	A.	Active transport	B.	Passive transport	
		C.	Both of these	D.	None of these	B
713	In plants, the neighbouring cells are connected with one another by.	A.	Plasmodesmata	B.	Cell walls	
		C.	Vacuoles	D.	Both 'a' & 'b'	D
714	The movement of water molecules from a region of higher water potential to a region of lower water potential (through membran	A.	Deffusion	B.	Osmosis	
		C.	Active transport	D.	None of these	B
715	All plants do not possess	A.	Lenticels	B.	Cuticle	
		C.	Stomata	D.	All of these	A
716	Aerating openings formed in the bark through which exchange of gases takes place and water is lost in the form of vapours are	A.	Hydathods	B.	Stomata	
		C.	Lenticels	D.	None of these	C
717	Stomatal transpiration is _____ of total transpiration	A.	90%	B.	91%	
		C.	93%	D.	95%	A
718	Pulling upward of water and dissolved minerals towards the leaves through the xylem tissue is called	A.	Transpiration pull	B.	Root pressure	
		C.	Ascent of sap.	D.	All of these	A
719	Period between two consecutive divisions is called	A.	Interphase	B.	Resting phase	
		C.	Mitotic phase	D.	Cell cycle	A
720	DNA is synthesized and chromosome number is doubled in	A.	G1 phase	B.	S phase	
		C.	G2 phase	D.	None of the above	B
721	Mitosis occurs in	A.	Diploid cells only	B.	Haploid cells only	
		C.	Both diploid and haploid cells	D.	Monoploid cells	C
722	From each pair of centrioles _____ sets of microtubules originate	A.	2	B.	3	
		C.	4	D.	5	B
723	Reverse of prophase is	A.	Interphase	B.	Metaphase	
		C.	Anaphase	D.	Telophase	D
724	Meiosis occur in	A.	Diploid cells only	B.	Haploid cells only	
		C.	Both diploid and haploid cells	D.	Monoploid cells only	A
725	Meiosis occurs at the time of	A.	Gamete formation in animals	B.	Spore formattion in plants	
		C.	Growth in animals	D.	Both a and b	D
726	Homologous chromosomes are	A.	Similar and identical	B.	Identical but not similar	
		C.	Not similar and not identical	D.	Similar but not identical	D
727	The longest phase of meiosis I is	A.	Metaphase	B.	Anaphase	
		C.	Prophase	D.	Telophase	C
728	Pairing of homologous chromosomes is completed in	A.	Leptotene	B.	Zygotene	
		C.	Pachytene	D.	Diplotene	C

729	Each bivalent has	A.	3 chromatids	B.	4 chromatids	
		C.	5 chromatids	D.	2 chromatids	B
730	Crossing over occurs between	A.	Sister chromatids	B.	Non sister chromatids	
		C.	Independent chromatids	D.	Each and every chromatid	B
731	Inability of chromosomes to segregate during anaphase and telophase of meiosis is called	A.	Crossing over	B.	Chromosomal disjunction	
		C.	Chromosomal nondisjunction	D.	None of these	C
732	Apoptosis	A.	Cell death due to tissue damage	B.	Causes inflammation	
		C.	Internal programme of events by which	D.	Damages neighboring cells	C
733	A cell of human being has 46 chromosomes; it divides to form some daughter cells, each having 23 pairs of chromosomes. The di	A.	Mitosis	B.	Meiosis	
		C.	Amitosis	D.	Budding	A
734	Mitosis takes place during	A.	Healing of wound	B.	Development and growth	
		C.	Vegetative propagation	D.	All of these	D
735	Morphology of chromosomes is best studied during	A.	Telophase	B.	Metaphase	
		C.	Prophase	D.	All of these	B
736	Cytokinins refers to	A.	Division of nucleus	B.	Division of cytoplasm	
		C.	Division of cell	D.	All of these	C
737	A significant happening of meiosis is / are	A.	Crossing over	B.	Random assortment	
		C.	Both of these	D.	None of these	C
738	Chromosomes are composed of	A.	40% protein and 60% DNA	B.	50% protein and 50% DNA	
		C.	70% protein and 30% DNA	D.	60% protein and 40% DNA	D
739	Chromosome is made of	A.	2 chromatids +1 centromere	B.	1 chromated + 1 centromere +	
		C.	2 chromatids + 1 centromere +	D.	2 chromatids + 2 centromere +	A
740	Histones have abundance of amino acids	A.	Valine and lysine	B.	Arginine and lysine	
		C.	Valine and arginine	D.	Histidione and threonine	B
741	A portion of chromatin that is condensed only during cell division is	A.	Euchromatin	B.	Heterochromatin	
		C.	Biochromatin	D.	Nucleochromatin	A
742	Transfer of genetic material from one cell to another that can alter the genetic makeup of recipient cell is called	A.	Mutation	B.	Transuction	
		C.	Replication	D.	Variation	B
743	DNA contains	A.	Purines (A and G) pyrimidines (U and	B.	Purines (T and (c) pyrimidines (A and	
		C.	Purines (A and (c) pyrimidines (U and	D.	Purines (A and G) pyrimidines (T and	D
744	In DNA	A.	A forms two bonds with T	B.	G forms three bonds with C	
		C.	A forms three bonds with T	D.	Both a and b	D
745	DNA has a helical shape with the diameter of	A.	3 nm	B.	4 nm	
		C.	2 nm	D.	5 nm	C
746	In semi-conservative replication	A.	Sequence of original duplex is conserved	B.	Gererate DNA copies of entirely	
		C.	Parental DNA become completely	D.	Each strand of daughter molecules	A
747	Repliication always proceeds in a direction	A.	3' ? 5'	B.	5' ? 3'	
		C.	Both directions	D.	None of these	B
748	Which statement is correct?	A.	Leading strand elongates away from	B.	Lagging strand elongates towards	
		C.	Lagging strand is constructed	D.	Both a and b	C
749	The sequence of nucleotides that determines the amino acid sequence of a protein is	A.	Chromosome	B.	DNA	
		C.	RNA	D.	Gene	D
750	In prokaryotes there are	A.	Three types of DNA polymerases	B.	One type of RNA polymerase	
		C.	Three types of RNA polymerase	D.	Both a and b	D
751	Methionine is specified by	A.	Stop codon	B.	AUG	
		C.	Start codon	D.	Both b and c	D
752	Point mutations are represented as	A.	Presence of an extra chromosome	B.	Loss of chromosome	

		C.	Alteration in sequence of DNA	D.	Insertions and inversion of genes	C
753	A sugarcane cell has _____ chromosomes.	A.	20	B.	32	
		C.	40	D.	80	D
754	Centromere represents	A.	Primary constriction	B.	Secondary constriction	
		C.	Tertiary constriction	D.	Quaternary constriction	A
755	Which of the following statement about plants is incorrect?	A.	All are eukaryotes	B.	They are multicellular.	
		C.	Non-motile organisms	D.	Are heterotrophes	D
756	The part of sporophyte which is called sporangium is	A.	Capsule	B.	Foot	
		C.	Stalk	D.	None of these	A
757	Sporophyte is	A.	Monoploid	B.	Haploid	
		C.	Diploid	D.	Polyploidy	C
758	Production of two types of spores is known as	A.	Heterospory	B.	Homospory	
		C.	Heterogamy	D.	Gamospory	A
759	Plant breeding originated with:	A.	Human civilization	B.	Ancient history	
		C.	Human history	D.	Classical breeding	A
760	An example of a heterozygous but homogenous population is	A.	Pureline	B.	Inbred Line	
		C.	Hybrid	D.	Synthetic Variety	C
761	Green revolution in India occurred during	A.	1965	B.	1963	
		C.	1970	D.	1960	D
762	Selection of homozygous plants is	A.	Mass selection	B.	Pure line	
		C.	Both of these	D.	None of the above	B
763	Which of the following is not true for inbreeding?	A.	Always increases productivity	B.	Leads to inbreeding depression	
		C.	Expression of deleterious alles	D.	None of the above	A
764	Breeding crops for improved nutritional quality is referred to as	A.	Biochromatin	B.	Biofortification	
		C.	Bioinformatics	D.	All of the above	B
765	Triticale is developed through intergeneric hybridization of	A.	Wheat & Rye	B.	Wheat & Barley	
		C.	Barley & Rye	D.	Rye & Oat	A
766	Heterosis lost due to continuous inbreeding known as	A.	Inbreeding depression	B.	Outbreeding depression	
		C.	Inbreeding vigor	D.	None of the above	A
767	Semi dwarf rice variety IR8 was developed in	A.	Sri Lanka	B.	India	
		C.	Pakistan	D.	Philphines	D
768	Which system is used for hybrid seed production in onion?	A.	Cytoplasmic male sterility	B.	Genetic male sterility	
		C.	Cytoplasmic Genetic Male	D.	Both b and c	A
769	Centre of diversity refers to the area where cultivated plant species and or their wild relatives show	A.	low competition with	B.	highest variation	
		C.	high ecosystem diver	D.	highest variation and	D
770	Triticale is	A.	interspecific cross	B.	intraspecific cross	
		C.	intergeneric cross	D.	intrageneric cross	C
771	A mating among the following can not lead to heterosis	A.	AAbb x aaBB	B.	AABBccdd x AABI	
		C.	AABBccdd x aabbC(	D.	aaBBcc x AABBCC	B
772	Study of the structure of organisms, looking at cells, tissues:	A.	Plant anaotmy	B.	Plant Physiology	
		C.	Plant Bioinformatics	D.	Plant Genetics	A
773	Study of the function of cells, tissues, organs of living things	A.	Plant anaotmy	B.	Plant Physiology	
		C.	Plant Bioinformatics	D.	Plant Genetics	B
774	Plant _____ are the basic building blocks:	A.	Cells	B.	Tissues	
		C.	Organs	D.	All of the above	A
775	The outer most layer of plant tissues is:	A.	Dermal	B.	Ground	
		C.	Vascular	D.	None of the above	A

776	The inner most layer of plant tissues is:	A.	Dermal	B.	Ground	
		C.	Vascular	D.	None of the above	B
777	Vascular tissues consists of :	A.	Xylem	B.	Phloem	
		C.	Epidermis	D.	Both a and b	D
778	The main function of root is:	A.	Provide support for t	B.	Conduct water and r	
		C.	Srtorage of food	D.	All of the above	D
779	That part of leaf which connects blade to the stem and transport minerals to the leaf:	A.	Blade	B.	Petiole	
		C.	Midrib	D.	Vertex	B
780	_____ promote cell growth and involved in gravitropism & phototropism:	A.	Auxin	B.	Gibberellin	
		C.	Cytokinin	D.	Ethylinine	A
781	_____ promote cell elongaion:	A.	Auxin	B.	Gibberellin	
		C.	Cytokinin	D.	Ethylinine	B
782	_____ promote cell division and organ differnciation:	A.	Auxin	B.	Gibberellin	
		C.	Cytokinin	D.	Ethylinine	C
783	Sonalika and Kalyan Sona are high yielding varieties of :	A.	Wheat	B.	Maize	
		C.	Oat	D.	Barley	A
784	Breeding for disease resistance requires:	A.	Good source of resist	B.	Disease test	
		C.	Planned Hybridizatio	D.	All of the above	D
785	Genetic information is carried in the linear sequence of nucleotides in:	A.	DNA	B.	RNA	
		C.	mRNA	D.	Both DNA & RNA	A
786	Genetic information contains instructions to synthesize	A.	DNA	B.	RNA	
		C.	Proteins	D.	mRNA	C
787	_____is in nucleus in eukaryotes	A.	DNA	B.	RNA	
		C.	Proteins	D.	mRNA	A
788	_____ are carried by Chromosomes	A.	Genes	B.	Proteins	
		C.	Lipids	D.	mRNA	A
789	Genetic material must have the ability to:	A.	Store information	B.	Express itself	
		C.	Replicate itself	D.	All of the above	D
790	There are _____ nucleotides in one complete turn of DNA	A.	10.4	B.	10.2	
		C.	10.5	D.	10	A
791	The basic set of chromosome present in an organism	A.	Autosome	B.	Genome	
		C.	Sex Chromosome	D.	Genotype	B
792	Total length of DNA about _____ meters long in a human cell	A.	2	B.	2.4	
		C.	2.2	D.	2.3	A
793	Non-coding region of a gene:	A.	Intron	B.	Exon	
		C.	Centromere	D.	Primary Constrictio	A
794	Highly condensed bead like structures on chromosome :	A.	Chromomere	B.	Centromere	
		C.	Primary constriction	D.	None of the above	A
795	Histones are of _____ types:	A.	4	B.	5	
		C.	3	D.	6	B
796	_____ chromosomes are a special form of chromosome found in the growing oocytes (immature eggs) of most anir	A.	Lampbrush	B.	Artificial	
		C.	Oocytes	D.	None of the above	A
797	_____ is involved in the sorting of various proteins prior to their delivery	A.	Mitochondria	B.	Ribosomes	
		C.	Golgi apparatus	D.	Endoplasmic reticul	C
798	Peroxisomes are so called because of their ability to produce or utilize:	A.	H2O	B.	H_2O_2	
		C.	HCL	D.	All of the above	B
799	The smaller chromatid of chromosome is called_____ chromatid:	A.	P	B.	Y	

		C.	Q	D.	R	A
800	The larger chromatid of chromosome is called_____ chromatid:	A.	P	B.	Y	
		C.	Q	D.	R	C
801	Polyploidy is induced through	A.	Irradiation	B.	Mutagenic chemical	
		C.	Ethylene	D.	Colchicine	D
802	The quickest method of plant breeding is	A.	introduction	B.	Selection	
		C.	Hybridisation	D.	Mutation Breeding	D
803	The new varieties of plants are produced by	A.	Introduction and mut	B.	Selection and hybrid	
		C.	Mutation and Selecti	D.	Selection and Introd	B
804	Pure line breeding refers to	A.	heterozygosity only	B.	homozygosity only	
		C.	homozygosity and se	D.	heterozygosity and l	B
805	A scientist wants to study the viral effects on plants. Which of the following part of the plant should be excluded?	A.	pith	B.	shoot apex	
		C.	phloem	D.	cortex	B
806	Somatic hybridisation is achieved through	A.	Grafting	B.	Conjugation	
		C.	Protoplast fusion	D.	Recombinant DNA	C
807	Bagging is done to	A.	Avoid cross pollinati	B.	Avoid self pollinatic	
		C.	Achieve desired polli	D.	Prevent contaminati	D
808	Down syndrome is a condition in which there is _____ chromosome:	A.	One extra	B.	One less	
		C.	One extra pair	D.	One less pair	A
809	_____is a test to identify and evaluate the size, shape, and number of chromosomes in a sample of body cells	A.	Ideotype	B.	Idiotype	
		C.	Karyotype	D.	None of the above	C
810	_____is a biological model which is expected to perform or behave in a particular manner within a **defined** environment:	A.	Ideotype	B.	Idiotype	
		C.	Karyotype	D.	None of the above	A
811	The DNA is supported and neatly packaged by _____ bound to it.	A.	Proteins	B.	Ribosomes	
		C.	Lipids	D.	Fats	A
812	Each chromosome has a central constricted region called a _____ that serves as an attachment point for the machinery of m	A.	Centromere	B.	Chromosomal disju	
		C.	Chromomere	D.	Secondary constricti	A
813	Diploid cells have _____ copies of each chromosome, one from each parent	A.	Half	B.	One	
		C.	Two	D.	Four	C
814	_____ is the longest stage of mitosis, lasting about 20 minutes.	A.	Metaphase	B.	Prophase	
		C.	Anaphase	D.	Cytokinisis	A
815	_____ is the shortest stage of mitosis, lasts only a few minutes.	A.	Metaphase	B.	Prophase	
		C.	Anaphase	D.	Cytokinisis	C
816	Cleavage of cell into two halves occurs during:	A.	Metaphase	B.	Prophase	
		C.	Anaphase	D.	Cytokinisis	D
817	An average eukaryotic cell has about _____ times more DNA then an average prokaryotic cell.	A.	10	B.	100	
		C.	1000	D.	500	C
818	_____ synthesize the growing RNA molecule	A.	DNA Polymerases	B.	RNA Polymerases	
		C.	DNA Helicases	D.	All of the above	B
819	_____change the amount of super coiling in DNA, helping it wind and unwind	A.	DNA Polymerases	B.	RNA Polymerases	
		C.	DNA Helicases	D.	Topoisomerases	D
820	_____ is the first step of gene expression, in which a particular segment of DNA is copied into RNA (mRNA) by the enzyn	A.	Transcription	B.	Transuction	
		C.	Translation	D.	Replication	A
821	Following _____ are nucleic acids, which use base pairs of nucleotides	A.	RNA and DNA	B.	DNA and Proteins	
		C.	RNA and Proteins	D.	RNA, DNA and pro	A
822	During transcription, a DNA sequence is read by an RNA polymerase, which produces a complementary, anti-parallel RNA strand	A.	Secondary transcript	B.	Tertiary transcript	
		C.	primary transcript	D.	None of the above	B

823	Only one of the two DNA strands serve as a _____ for transcription	A.	Transcript	B.	Template	
		C.	Source	D.	Site	B
824	The WIPO secretariat is based in	A.	Singapore	B.	Holland	
		C.	Geneva	D.	Germany	C
825	_____ seeks to "promote the protection of intellectual property throughout the world."	A.	GATT	B.	IP	
		C.	WIPO	D.	WTO	C
826	Cotton belongs to family:	A.	Malvaceae	B.	Gramineae	
		C.	Cocurbitaceae	D.	Paphilonaceae	A
827	_____ upland cotton, native to Central America, Mexico, the Caribbean and southern Florida (90% of world production).	A.	Gossypium barbaden	B.	Gossypium hirsutun	
		C.	Gossypium arboreun	D.	Gossypium herbace	B
828	_____ is known for extra-long staple cotton	A.	Gossypium barbaden	B.	Gossypium hirsutun	
		C.	Gossypium arboreun	D.	Gossypium herbace	A
829	_____ is native to India and Pakistan (less than 2%)	A.	Gossypium barbaden	B.	Gossypium hirsutun	
		C.	Gossypium arboreun	D.	Gossypium herbace	C
830	Corchorus olitorius and Corchorus capsularis are the species of _____	A.	Line seed	B.	Jute	
		C.	Colocacia	D.	Ginger	B
831	Jute belongs to family _____	A.	Malvaceae	B.	Tilliaceae	
		C.	Fabaceae	D.	Gramineae	B
832	Corchorus capsularis is _____	A.	Diploid	B.	Haploid	
		C.	Tetraploid	D.	Amphidiploid	A
833	Corchorus capsularis have _____ chromosomes	A.	10	B.	18	
		C.	16	D.	14	D
834	Most historians believe maize was domesticated from _____	A.	Australia	B.	South-East Asia	
		C.	Mexico	D.	Central Asia	C
835	In maize, female inflorescences, tightly enveloped by several layers of ear leaves commonly called _____	A.	Tassel	B.	Cob	
		C.	Husk	D.	Spike	C
836	In mazie, the apex of the stem ends in the _____, an inflorescence of male flowers.	A.	Tassel	B.	Cob	
		C.	Husk	D.	Spike	A
837	There are _____ species of cultivated sugarcane.	A.	3	B.	4	
		C.	5	D.	6	A
838	There are _____ species of wild sugarcane.	A.	3	B.	4	
		C.	5	D.	2	D
839	Sacchharam officinarum was grown by the natives of _____ region.	A.	Hawai	B.	New Guinea	
		C.	Barbadose	D.	South Pacific	B
840	The Saccharam species are extremely _____	A.	Simple Diploids	B.	Complex Polyploids	
		C.	Rarely Amphidiploid	D.	Complex Triploids	B
841	The most common basic chromosome numbers in Sugarcane are _____	A.	9 & 10	B.	7 & 10	
		C.	8 & 10	D.	7 & 8	C
842	_____ can usually be made among the 5 species of sugarcane	A.	Interspecific cross	B.	Intraspecific cross	
		C.	Intervarietal	D.	Intravarietal Crosses	A
843	Breeding work, emasculation and pollination in sugarcane is _____	A.	Very easy	B.	Very Sipmle	
		C.	Laborious	D.	Both a and b	C
844	The term variety in cultivated sugarcane refers to a particular_____	A.	Hybrid	B.	Apomictic Specie	
		C.	Clone	D.	Synthetic Variety	C
845	Sugarcane is propagated vegetatively by stem cuttings called :	A.	Fuzz	B.	Seed	
		C.	Setts or seedcanes	D.	Both a and b	C
846	Sugarcane flowers very rarely except:	A.	Tropical areas	B.	Subtropical areas	

		C.	Temperate areas	D.	None of the above	A
847	The sugarcane inflorescence consists of an open branched panicle called_____	A.	Fuzz	B.	Flup	
		C.	Spike	D.	Arrow	D
848	In sugarcane normally _____ pollination occurs	A.	Cross	B.	Self	
		C.	Partial cross	D.	Both a and c	A
849	The seeds produced in sugarcane are small in size and _____	A.	Viable	B.	Inviable	
		C.	Poorly developed	D.	Both b and c	D
850	Chromosome number of sugar beet is:	A.	16	B.	20	
		C.	18	D.	28	C
851	Originally sugarbeet was _____	A.	Tetraploid	B.	Diploid	
		C.	Triploid	D.	Hexaploid	B
852	The genetic material must meet _____ criterias	A.	3	B.	4	
		C.	5	D.	6	B
853	_____ are composed of a five-carbon sugar to which one or more phosphate groups and a nitrogen-containing base	A.	Nucleotides	B.	Nucleosides	
		C.	Nuclic acid	D.	Both b and c	A
854	Purines consists of :	A.	Adenine & Guanine	B.	Adenine & Cytosine	
		C.	Thymine, Cytosine &	D.	Thymine & Uracil	A
855	Pyrimidines consists of:	A.	Adenine & Guanine	B.	Adenine & Cytosine	
		C.	Thymine, Cytosine &	D.	Thymine & Uracil	C
856	Purines consists of _____	A.	Double ring structure	B.	Single ring structure	
		C.	Triple ring structures	D.	Four ring structures	A
857	Pyrimidines consists of _____	A.	Double ring structure	B.	Single ring structure	
		C.	Triple ring structures	D.	Four ring structures	B
858	Watson & Crick model of DNA was published in:	A.	1954	B.	1951	
		C.	1952	D.	1953	D
859	The sugar-phosphate backbones are on the_____ of the helix of the DNA	A.	Outside	B.	Inside	
		C.	Backside	D.	Above	A
860	X ray diffraction studies show that DNA can exist in _____ different forms	A.	4	B.	3	
		C.	2	D.	1	B
861	_____ form of DNA is dehydrated and normally not found in cells	A.	A-DNA	B.	B-DNA	
		C.	Z-DNA	D.	mt-DNA	A
862	_____ form of DNA is hydrated and normally not found in cells	A.	A-DNA	B.	B-DNA	
		C.	Z-DNA	D.	mt-DNA	B
863	The type of DNA with zigzag sugar-phosphate backbone:	A.	A-DNA	B.	B-DNA	
		C.	Z-DNA	D.	mt-DNA	C
864	4 stranded DNA:	A.	Telomeric DNA	B.	mt-DNA	
		C.	A-DNA	D.	Z-DNA	A
865	The _____ DNA is right handed, double stranded and anti parallel	A.	B-DNA	B.	mt-DNA	
		C.	A-DNA	D.	Z-DNA	A
866	_____ has never been found in living cells	A.	A-DNA & B-DNA	B.	mt-DNA	
		C.	B-DNA	D.	A-DNA & Z-DNA	D
867	Simple telomeric sequences are short, species-specific and _____ repeated	A.	Tandemly	B.	Nucleosides	
		C.	Nucleotides	D.	None of the above	A
868	According to Erwin Chargaff ratio of base pairs, if there is 30% Adenine then what will be the percentage of Guanine:	A.	10%	B.	20%	
		C.	30%	D.	40%	B
869	Adenine pairs with Thymine/Uracil via:	A.	Single Bond	B.	Double Bond	
		C.	Triple Bond	D.	Both b and c	A

870	Guanine pairs with Cytosine via:	A.	Single Bond	B.	Double Bond	
		C.	Triple Bond	D.	Both b and c	B
871	Most DNA has a _____ twist with 10 base pairs in a complete turn:	A.	Right Hand	B.	Left Hand	
		C.	Zigzag	D.	None of the above	A
872	Left twisted DNA is called Z-DNA or _____ DNA	A.	southpaw	B.	Rightpaw	
		C.	Leftpaw	D.	Both b and c	A
873	DNA has to be copied _____ a cell divides	A.	After	B.	During	
		C.	before	D.	Ago	C
874	DNA is copied during the S or synthesis phase of :	A.	Metaphase	B.	Prophase	
		C.	Anaphase	D.	Interphase	D
875	Prokaryotes (bacteria) have a _____ origin of replication	A.	single	B.	Double	
		C.	Multiple	D.	Triple	A
876	Eukaryotes (bacteria) have a _____ origin of replication	A.	single	B.	Double	
		C.	Multiple	D.	Triple	C
877	Enzyme _____ unwinds and separates the 2 DNA strands by breaking the weak hydrogen bonds	A.	Helicase	B.	Topoisomerases	
		C.	DNA Polymerases	D.	Both b and c	A
878	_____is the enzyme that synthesizes the RNA Primer	A.	DNA Polymerases	B.	Topoisomerases	
		C.	Primase	D.	Helicase	C
879	DNA polymerase can only add nucleotides to the _____ of the DNA	A.	3’ end	B.	5' end	
		C.	Both 3' & 5' ends	D.	Forward Direction	A
880	The _____ is synthesized as a single strand from the point of origin toward the opening replication fork	A.	Lagging Strand	B.	DNA	
		C.	Leading Strand	D.	RNA	C
881	The _____ is synthesized discontinously away from the point of origin/relication fork:	A.	Lagging Strand	B.	DNA	
		C.	Leading Strand	D.	RNA	A
882	Okazaki Fragments are series of short segments on the _____	A.	Lagging Strand	B.	DNA	
		C.	Leading Strand	D.	RNA	A
883	The enzyme_____ joins the Okazaki fragments together to make one strand	A.	Topoisomerases	B.	Primase	
		C.	Helicase	D.	Ligase	D
884	DNA polymerase and DNA ligase replace and bond the new _____ together	A.	nucleosides	B.	mt-DNA	
		C.	nucleotides	D.	mRNA	C
885	What would be the complementary DNA strand for this 5’-CGTATG-3’ DNA sequence?	A.	5'-GCAT	B.	3’-GCT	
		C.	3’-GCAT	D.	3'-GCA	C
886	_____(also called restriction enzymes) recognize and cleave DNA at specific DNA sequences	A.	Restriction endonucl	B.	Topoisomerases	
		C.	DNA Polymerases	D.	Helicase	A
887	The DNA fragment to be cloned can be joined to a suitable cloning vector by using :	A.	DNA Polymerases	B.	DNA ligases	
		C.	Restriction endonucl	D.	Helicase	B
888	There are howmany types of restriction enzymes:	A.	Three	B.	Two	
		C.	Four	D.	Five	A
889	Some restriction endonucleases make staggered cuts on the two DNA strands, leaving two to four nucleotides of one strand unpaired at each resulting end, these unpaired strands are called:	A.	Sticky ends	B.	Blunt ends	
		C.	Unmodified ends	D.	Both b and c	A
890	Some restriction endonucleases cleave both strands of DNA at the opposing phosphodiester bonds, leaving no unpaired bases on t	A.	Sticky ends	B.	Blunt ends	
		C.	Unmodified ends	D.	Both b and c	B
891	Blunt ends can also be ligated, but less efficiently as compare to:	A.	Sticky ends	B.	Modified ends	
		C.	Unmodified ends	D.	Open ends	A
892	Plasmids are _____ molecules that replicate separately from the host chromosome:	A.	Single Stranded DNA	B.	Double stranded DN	
		C.	B-DNA	D.	Circular DNA	D
893	The recombinant DNA can be introduced into bacterial cells by a process called:	A.	Transcription	B.	Translation	

		C.	Transformation.	D.	Modification	C
894	A virus which parasitizes a bacterium by infecting it and reproducing inside it:	A.	Bacteria	B.	Virus	
		C.	Bactriophage	D.	Phage	C
895	BACs stands for:	A.	Blood Alcohol Conte	B.	Bacterial Artificial C	
		C.	Blood Alcohol Conc	D.	Breath Alcohol Concentration	B
896	YACs stands for:	A.	Youth Advisory Cou	B.	Youth Activity Cent	
		C.	Yeast Artificial Chro	D.	All of these	C
897	A _____ is a method used in molecular biology for detection of a specific DNA sequence in DNA samples.	A.	Nothern blot	B.	Western blot	
		C.	Southern blot	D.	Eastern blot	C
898	A _____ is a method used in molecular biology for detection of a specific RNA sequence	A.	Nothern blot	B.	Western blot	
		C.	Southern blot	D.	Eastern blot	A
899	A _____ is a method used in molecular biology for detection of a specific RNA sequence	A.	Nothern blot	B.	Western blot	
		C.	Southern blot	D.	Eastern blot	B
900	In DNA extraction from plants, the breaking of the cell wall and cellular membranes is called:	A.	Wash	B.	Precipitation	
		C.	Resuspension	D.	Lysis	D
901	During _____phenol denatures proteins and dissolves denatured proteins	A.	Wash	B.	Precipitation	
		C.	Resuspension	D.	Lysis	B
902	Centrifugation is a process that uses _____ to separate and purify mixtures of biological particles in a liquid medium.	A.	Centripetal force	B.	Gravitational force	
		C.	Centrifugal force	D.	Mechanical force	C
903	The more dense a biological structure is, the faster it sediments in:	A.	Centripetal field	B.	Gravitational field	
		C.	Centrifugal field	D.	Mechanical field	C
904	The sedimentation rate of a given particle will be _____ when the density of the particle and the surrounding medium are equa	A.	Zero	B.	High	
		C.	Low	D.	Normal	A
905	The denser the biological buffer system is, the _____ the particle will move in a centrifugal field	A.	Slower	B.	Faster	
		C.	Moderate	D.	Normal	A
906	_____contains sequences of ribonucleotides which code for the amino acid sequences of proteins.	A.	mRNA	B.	mt-DNA	
		C.	rRNA	D.	tRNA	A
907	_____ forms part of the structure of ribosomes, which are the sites of protein synthesis	A.	mRNA	B.	mt-DNA	
		C.	rRNA	D.	tRNA	C
908	Pulses belong to the family :	A.	Graminaceae	B.	Fabaceae	
		C.	leguminosae	D.	Tilliaceae	C
909	_____ have a wide range of usage, some are used as fodder or green manure, some are used as silage, while others are extra	A.	Legumes	B.	Fiber Crops	
		C.	Cereals	D.	Sugar Crops	A
910	Symbiotic nitrogen fixation is the mutually beneficial relationship between the _____ host and Rhizobium bacteria.	A.	Cereals	B.	Fiber Crops	
		C.	Sugar crops	D.	pulse (or any legum	D
911	Peanut is:	A.	Legumes	B.	Fiber Crops	
		C.	Cereals	D.	Sugar Crops	A
912	_____ plant can also form symbiosis with nitrogen-fixing bacteria	A.	Legumes	B.	Non-leguminous	
		C.	Sugar crops	D.	None of the above	B
913	Symbiosis is readily observable when the nodules are :	A.	Two to Five	B.	Few	
		C.	Small	D.	numerous	D
914	Poor nodulation may occur even if good _____ practices were used	A.	Sed sowing	B.	Seed Planting	
		C.	seed inoculation	D.	Seed rate	C
915	The rhizobia–legume symbiosis is the_____ source of biologically fixed nitrogen for agricultural system	A.	Secondary	B.	primary	
		C.	Tertiary	D.	All of these	B
916	The interaction between a particular strain of rhizobia and legume is mediated by a:	A.	seed inoculation	B.	Mode factor	
		C.	pH value	D.	Nod factor	D

917	Most legume species have a_____ rhizobia strain that maximizes N_2 fixation	A.	More	B.	Common	
		C.	specific	D.	All of these	C
918	Effective root nodules are big and have a _____ color	A.	pink	B.	Red	
		C.	White	D.	Brown	A
919	In-effective root nodules that remain small and have_____color	A.	pink	B.	Red	
		C.	White	D.	Brown	C
920	N_2 fixation starts between _____days after infection:	A.	10 to 21	B.	05 to 10	
		C.	3 to 9	D.	8 to 12	A
921	Nodules occur at __ days after sowing	A.	6	B.	7	
		C.	8	D.	9	D
922	Nodulation of cowpea occurs at _____ DAS	A.	7	B.	8	
		C.	9	D.	10	A
923	Among environmental factors that influence the quantity of nitrogen fixed, the _____ is essential for nodule formation	A.	humidity	B.	temperature	
		C.	pH	D.	Atmospheric pressu	B
924	Legume productivity is limited by :	A.	soil acidity	B.	soil salinity	
		C.	soil pH	D.	Bacteria	A
925	Most leguminous plants require a _____ soil for growth	A.	neutral	B.	acidic	
		C.	basic	D.	Both b and c	A
926	Plants have _____relationships with several groups of bacteria that help make nitrogen more available.	A.	Parasitic	B.	Mutual	
		C.	Commensalism	D.	None of the above	B
927	No mineral nutrient is more limiting to plant growth than _____, which is required in large amounts for synthesizing proteins an	A.	nitrogen	B.	Phosporus	
		C.	Magnese	D.	Potassium	A
928	Roots emit chemical signals that attract :	A.	Virus	B.	Fungi	
		C.	Rhizobium bacteria	D.	E. coli	C
929	The bacteria then emit signals that stimulate root hairs to elongate and to form:	A.	Infection	B.	Thread like structure	
		C.	Holes	D.	infection thread	D
930	The infection thread containing the bacteria penetrates the :	A.	pith	B.	root cortex	
		C.	Epidermis	D.	Vascular bundle	B
931	_____ parts of the plant are “cleaner” than underground parts	A.	Aerial	B.	Stem	
		C.	Leaf	D.	None of the above	A
932	The smaller the _____ the better the chances to overcome specific phytopathological problems	A.	Sample	B.	Tissue	
		C.	explant	D.	Container	C
933	_____ tissues are less contaminated than exposed ones	A.	Inner	B.	Underground	
		C.	Terminal	D.	Meristemetic	A
934	Growing seed aseptically in vitro on artificial media:	A.	Seed culture	B.	Tissue Culture	
		C.	Embryo culture	D.	Bud Culture	A
935	Growing embryo aseptically in vitro on artificial nutrient media	A.	Seed culture	B.	Tissue Culture	
		C.	Embryo culture	D.	Bud Culture	C
936	Any plant organ used as an explant to initiate cultures is called:	A.	Seed culture	B.	Tissue Culture	
		C.	Embryo culture	D.	Organ culture	D
937	Production of virus free germplasm is known as:	A.	Seed culture	B.	Tissue Culture	
		C.	Shoot apical merister	D.	Organ culture	C
938	Preservation in cold storage or in vitro conservation of germplasm :	A.	Cryopreservation	B.	InVitro Preservation	
		C.	Ex Sito Preservation	D.	Both b and c	A
939	Production of haploid plants via:	A.	Shoot apical merister	B.	Ovary or ovule cultu	
		C.	Anther Culture	D.	Both b and c	D
940	Killing or excluding microorganisms or their spores with heat, filters, chemicals or other sterilants	A.	Fileration	B.	Sterilization	

		C.	Disintegration	D.	Terminalization	B
941	Which one of the following is not aseptic condition:	A.	Sterile	B.	Presence of pathoge	
		C.	Conditions establishe	D.	Free from the living	B
942	The isolation and culture of plant protoplasts in vitro :	A.	Protoplast culture	B.	Chloroplast culture	
		C.	Cytoplasmic culture	D.	All of these	A
943	PCR stands for:	A.	Polymorphic chain re	B.	Polymerase chain r	
		C.	Poly chain reaction	D.	Polymer chain react	B
944	It is a _____ aim to amplify a single or few copies of the DNA to thousands or millions of copies	A.	Breeding	B.	Plant hybridization	
		C.	molecular technology	D.	Clonning	C
945	_____is now a common and often indispensable technique used in medical and biological research labs for a variety of applicati	A.	Biotechnology	B.	Clonning	
		C.	PCR	D.	Plant hybridization	C
946	Sequencing, Genetic Engineering, DNA fingerprinting are the applications of :	A.	Clonning	B.	PCR	
		C.	Hybridization	D.	Plant Breeding	B
947	Specific sequences are amlpified for:	A.	To monitor gene exp	B.	To identify an indiv	
		C.	To diagnose a genetic	D.	All of these	D
948	Requirments for PCR are:	A.	Template DNA	B.	Primers	
		C.	Thermo-stable DNA	D.	All of these	D
949	A ____ is a strand of nucleic acid that serves as a starting point for DNA synthesis	A.	DNA Polymerases	B.	RNA Polymerases	
		C.	primer	D.	Topoisomerases	C
950	Usually inverted repeats and self-complementary sequences are _____ in the primers	A.	Allowed	B.	Avoided	
		C.	Added	D.	Needed	B
951	*Thermus aquaticus* is example of :	A.	Thermostable DNA p	B.	Thermostable RNA	
		C.	DNA Polymerases	D.	Both b and c	A
952	DNA can be extracted from:	A.	Roots	B.	Shoots	
		C.	Stems	D.	Any plant part	D
953	CTAB buffer is used for:	A.	Cell lysis	B.	Precipitation	
		C.	Protein removal	D.	Dehydration	A
954	DNA can survive for:	A.	10 minutes	B.	10 Days	
		C.	10 years	D.	May survive up to 1	D
955	DNA can be stored in:	A.	cold storage	B.	Fresh water	
		C.	Refrigerator	D.	At any place	D
956	Methods Used for Plant Transformation	A.	Microinjection	B.	.Pollen Tube Pathwa	
		C.	Gene Gun Microproj	D.	All of these	D
957	Transformation elements are:	A.	Explant	B.	Agrobacterium tume	
		C.	Selection marker and	D.	All of these	D
958	Agrobacterium rhizogenes is _____ Plasmid:	A.	Root	B.	Shoot	
		C.	Leaf	D.	Stem	A
959	The Gram-negative soil bacterium as pathogen results in crown gall tumors in plants	A.	E. Coli	B.	Agrobacterium tume	
		C.	Agrobacterium rhizo	D.	Virus	B
960	The systems to select the transformed cells, tissues or organisms from the non-transformed ones :	A.	selectable marker ger	B.	Clones	
		C.	Recombinant DNA te	D.	Both b and c	A
961	In genetics, a _____ is a region of DNA that initiates transcription of a particular gene	A.	Marker	B.	Promoter	
		C.	DNA Polymerases	D.	RNA Polymerases	B
962	The specific promoter activity is controlled by_____	A.	Exons	B.	Codons	
		C.	Introns.	D.	Anticodon	C
963	A _____is a tag which allows to identify a place in a genome (locus).	A.	Proteins based marke	B.	Physical marker	
		C.	Promoter	D.	genetic marker	D

964	Without polymorphism, _____ are useless.	A.	Promoter	B.	Markers	
		C.	Codons	D.	Anticodon	B
965	A marker should be :	A.	Neutral	B.	Codominant	
		C.	Polymorphic	D.	All of these	D
966	Markers are of _____ types:	A.	2	B.	3	
		C.	4	D.	5	B
967	Molecular markers are:	A.	DNA based	B.	RNA Based	
		C.	Protein Based	D.	Phenotypic Based	A
968	Biochemical markers are:	A.	DNA based	B.	RNA Based	
		C.	Protein Based	D.	Phenotypic Based	C
969	Morphological Markers are:	A.	DNA based	B.	RNA Based	
		C.	Protein Based	D.	Phenotypic Based	D
970	Mitochondrial DNA is:	A.	Circular	B.	Linear	
		C.	Double stranded	D.	Single stranded	A
971	Simple sequence repeats (SSRs) or _____ are tandemly repeated	A.	macrosatellites	B.	Codons	
		C.	microsatellites	D.	SNPs	C
972	Mendel did not observed linkage due to:	A.	Mutations	B.	Synopsis	
		C.	Crossing over	D.	Independent assortm	D
973	Crossing over in diploid organisms is responsible for	A.	Dominance of genes	B.	Segregation of allele	
		C.	Recombination of lin	D.	Linkage between ge	C
974	Complete linkage has been reported in	A.	Male Drosophila	B.	Maize	
		C.	Wheat	D.	Female Drosophila	A
975	The experimental material Pea used by Mendel was:	A.	Cross fertilized	B.	self fertilized	
		C.	Both A & B	D.	may vary with ecoty	B
976	A cross in which parents differ in a single pair of contrasting character is called:	A.	Monohybrid cross	B.	Dihybrid Cross	
		C.	Trihybrid cross	D.	Tetrahybrid cross	A
977	The Hybrid progeny in the first generation is called	A.	F0	B.	F1	
		C.	F2	D.	F3	B
978	Reason for success of Mendelian Experiments is:	A.	Pea was true breedin	B.	Pea was cross breed	
		C.	pea was heterozygou	D.	pea was easily availa	A
979	When allles of two contrasting characters are present, one of the character expresses itself and other remains hidden. This is called	A.	Law of heredity	B.	Law of Inheritance	
		C.	Law of dominance	D.	All of these	C
980	The character that expresses itself in F1 is called	A.	Dominant character	B.	Resessive character	
		C.	Co dominant charact	D.	All of these	A
981	Resessive character will epress in	A.	F1	B.	F2	
		C.	F3	D.	Both b and c	B
982	F3 generation is obtained by crossing:	A.	Selfing of F1	B.	Selfing of F2	
		C.	Crossing of F1 and F	D.	None of the above	B
983	The genotypic ratio of monohybrid cross is	A.	3:01	B.	2:02	
		C.	1:02:01	D.	None of the above	C
984	A dihybrid condition is	A.	Polygeneic Inheritanc	B.	dominance	
		C.	segregation	D.	Independent assortm	A
985	Number of gametes produced by monohybrid cross	A.	2	B.	3	
		C.	4	D.	1	A
986	Undesirable effects of Plant breeding are	A.	Reduction in diversit	B.	Narrow genetic base	
		C.	Danger of uniformity	D.	All of these	D
987	The _____ institutions are World Bank and International Monitory Fund	A.	Bretton woods	B.	WTO	

		C.	GATT	D.	ITO	A
988	There are how many types of epistasis:	A.	2	B.	3	
		C.	4	D.	None of the above	A
989	Botanically Plant Kingdom is classified into _____ groups.	A.	2	B.	3	
		C.	4	D.	5	C
990	_____ are the lowest form of plants	A.	Thallophytes	B.	Bryophytes	
		C.	Teridiophytes	D.	Spermatophytes	A
991	_____ form of plants are classified into genus and species	A.	Thallophytes	B.	Bryophytes	
		C.	Teridiophytes	D.	Spermatophytes	D
992	which of the following is extranuclear inheritance:	A.	Maternal inheritance	B.	Organelle inheritanc	
		C.	Plastid inheritance	D.	All of these	D
993	Mirabilis jalapa is also called:	A.	Red rose	B.	White rose	
		C.	4 o'clock plant	D.	Motia	C
994	In Mirabilis jalapa inheritance occurs via:	A.	Plastid inheritance	B.	Nuclear inheritance	
		C.	Mitochondria inherita	D.	None of the above	A
995	When centromere is locted in centre of chromosome:	A.	Metacentric	B.	Submetacentric	
		C.	Telocentric	D.	Acrocentric	A
996	When centromere is locted on one side of chromosome:	A.	Metacentric	B.	Submetacentric	
		C.	Telocentric	D.	Acrocentric	B
997	When centromere is locted near the telomere of chromosome:	A.	Metacentric	B.	Submetacentric	
		C.	Telocentric	D.	Acrocentric	D
998	When centromere is locted at one end of chromosome:	A.	Metacentric	B.	Submetacentric	
		C.	Telocentric	D.	Acrocentric	C
999	Folded Fiber Model of chromosome was presented by:	A.	D. De Winton	B.	Du Praw	
		C.	W.H. Gabelman	D.	E.M. East	B
###	Giant chromosome is example of:	A.	Lampbrush chromos	B.	Normal chromosom	
		C.	special chromosome	D.	None of the above	C