

## **DU MSc Botany**

Sr.No	Question Id	Question Descripti	Overtion Body	Options
1	2345	DU_J19_ MSC_BOT _Q01	Channel proteins that are located in the outer membrane of Gram-negative bacteria are known as	9377: barrels , 9378:murins , 9379:porins, 9380:granules ,
2	2346	DU_J19_ MSC_BOT _Q02	Gram-negative bacteria are more resistant to antibiotics than Gram-positive bacteria due to the presence of	9381: peptidoglycan wall., 9382:outer lipopolysacchar 9383:porin protein., 9384:teichoic acid.,
3	2347	DU_J19_ MSC_BOT _Q03	Dormant, tough, non-reproductive structure, produced by bacteria to tide over unfavourable conditions is known as:	9385: endospore , 9386: sclerotium , 9387:sporocarp , 9388:heterocyst ,
4	2348	DU_J19_ MSC_BOT _Q04	Three-dimensional structures of a cell can be studied by using which of the following microscopes?	9389: Bright field , 9390: Phase contrast , 9391:Fluorescent , 9392: Differential interfere
5	2349	DU_J19_ MSC_BOT _Q05	Algae that grow at the interface of water and atmosphere are called as	9393: epipelic , 9394:neustonic , 9395: planktonic , 9396: benthic,
6	2350	DU_J19_ MSC_BOT _Q06	Orthorhombic crystals of calcium carbonate are known as	9397: aragonite., 9398: calcite., 9399: detritus., 9400: stromatolites.,
7	2351	DU_J19_	Which one of the following amino acids has a	9401: Lysine ,



			MSC_BOT _Q07	nonpolar, aliphatic R group?	9402: Histidine , 9403: Arginine , 9404: Glycine,
8		2352	DU_J19_ MSC_BOT _Q08	Which one of the following is a phospholipid?	9405: Methionine , 9406: Valine , 9407: Proline , 9408: Lecithin ,
9		2353	DU_J19_ MSC_BOT _Q09	Majority of the enzymes are inactive	9409: at 25°C, 9410: between 25-30°C, 9411: at 15°C, 9412: above 75°C,
1	.0	2354	DU_J19_ MSC_BOT _Q10		9413: Ivan Wallin , 9414: Lynn Margulis , 9415: Konstantin Mereschk 9416: Lynn Sagan,
	1	2444	DU_J19_ MSC_BOT _Q100		9773:The grouping of taxa similarity is called phenetic 9774:Verticillaster is the chinflorescence of Lamiaceae 9775:Cypsela is characteris Poaceae, 9776:Cremocarp is charact Apiaceae,
1	2	2355	_Q11	The number of nucleosomes associated with one turn of solenoid configuration of chromatin is	9417:2, 9418:4, 9419:6, 9420:8,
1	3	2356	DU_J19_ MSC_BOT _Q12	Dolipore septum is a characteristic of	9421: Basidiomycetes. , 9422: Ascomycetes. , 9423: Zygomycetes. ,



				9424: Chytridiomycetes.,
14	2357	DU_J19_ MSC_BOT _Q13	Amphigynous antheridium is found in the genus	9425: Phytophthora., 9426: Alternaria., 9427: Fusarium., 9428: Botrytis.,
15	2358	DU_J19_ MSC_BOT _Q14		
16	2359	DU_J19_ MSC_BOT _Q15	absorption of nutrients from the host is known as	9433: sclerotium., 9434: vesicle., 9435: haustorium., 9436: sporophore.,
17	2360	DU_J19_ MSC_BOT _Q16	Which phylum contains organisms that most closely resemble the common ancestor of fungi and animals?	9437: Zygomycota , 9438: Ascomycota , 9439: Chytridiomycota , 9440: Basidiomycota,
18	2361	DU_JÍ9_ MSC_BOT _Q17	The smallest known virus is	9441:Escherichia coli , 9442:Vaccinia virus , 9443:Tobacco mosaic virus 9444:Tobacco necrosis sate
19	2362	DU_J19_ MSC_BOT _Q18	Which one of the following contributes to the formation of peatlands?	9445:Riccia , 9446:Porella , 9447:Cooksonia , 9448:Sphagnum ,
20	2363	DU_J19_ MSC_BOT _Q19	Which one of the following statements is not correct?	9449:In bryophytes, meios the gametangia to produce eggs ,
				9450:In <i>Anthoceros</i> , each single large chloroplast with



				9451:Amphigastria are fou 9452:In <i>Funaria</i> , the domi life cycle is gametophytic,
21	2364	MSC_BOT _Q20		9453: epidermis. , 9454: amphithecium. , 9455: endothecium. , 9456: columella. ,
22	2365		Which one of the following is not found in Marchantia ?	9457:Smooth walled as we tuberculated rhizoids , 9458:Barrel shaped epideri the thallus , 9459:Elaters , 9460:Filamentous protoner
23	2366	DU_J19_ MSC_BOT _Q22	Transfusion tissue in Cycas functions as	9461: lateral conducting ch water in the leaves. , 9462: mucilage secreting t ducts. , 9463: micropyle closing tis pollination. , 9464: nutritive tissue for e
24	2367	DU_J19_ MSC_BOT _Q23	Which type of wood is found in <i>Pinus</i> and <i>Cycas</i> ?	9465:Pycnoxylic in <i>Pinus</i> , a in <i>Cycas</i> , 9466:Manoxylic in <i>Pinus</i> , a in <i>Cycas</i> , 9467:Pycnoxylic in both , 9468:Manoxylic in both ,
25	2368		Which of the following statements is NOT correct about <i>Gnetum</i> ?	9469:The secondary wood vessels. ,



		_Q24	Afei coin	9470:Tapetal layer is comp in the microsporangium. , 9471:The female gametoph before fertilization. , 9472:There are no distinct and some free nuclei of the gametophyte function as e
26	2369		The microsporangia in the male cone and ovules in female cones of <i>Pinus</i> are positioned on the	9473:adaxial surface and a of the sporophylls, respecti 9474:abaxial surface and a of the sporophylls, respecti 9475:adaxial surface of the 9476:abaxial surface of the
27	2370	DU_J19_ MSC_BOT _Q26	Trichoblasts are	9477: cells in the root epid gives rise to root hair , 9478: epidermal outgrowth may not be glandular, 9479: cells that markedly cother cells in the same tiss 9480: excessively multiplyi root epidermis ,



28	2371	_Q27	Which of the following statement is <b>not true</b> about lenticels?	9481:They are formed by t activity of phellogen in som areas of the periderm, 9482:They permit the entr through the peridem, 9483:They are found in ste roots, 9484:They start appearing early stages of primary gro
29	2372	DU_J19_ MSC_BOT _Q28	Mesogenous stomata refers to stomata	9485:occurring in mesophy 9486:in which all the subsi- have a common origin with 9487:having subsidiary cell indistinguishable from othe cells 9488:having subsidiary cell aligned parallel to the long guard cells. ,
30	2373	DU_J19_ MSC_BOT _Q29	The term 'Glabrous' refers to	9489: lack of trichomes., 9490: presence of bristly h 9491: sparsely hairy., 9492: presence of glandula
31	2374	DU_J19_ MSC_BOT _Q30	Volatile substances that attract pollinators are emitted by	9493: osmophores , 9494: hydathodes , 9495: nectaries , 9496: myrosine cells ,



32	2375	DU_J19_	Blastozone refers to the	9497: meristematic region
		MSC_BOT _Q31		rib zone of Shoot Apical Me
			Ter. Co.	9498: intercalary meristem 9499: marginal meristem of leaves , 9500: quiescent centre of R Meristem (RAM) ,
33	2376	DU_J19_ MSC_BOT _Q32	Hygroscopic fibers located in the reaction wood are termed as	9501: substitute fibers , 9502: libriform fibers , 9503: gelatinous fibers , 9504: fiber-tracheids,
34	2377	DU_J19_ MSC_BOT _Q33	Vestures refer to	9505: resin droplets accum non-conducting vessel elen
				9506: wall ingrowths that i like appearance to pits of the
				9507: Plasmodesmatal con between any wood elemen
				9508: clogged hydathodes
35	2378	DU_J19_ MSC_BOT _Q34	Accessory cambia, the activity of which leads to formation of a series of cylinders of secondary vascular tissues are found in	9509: Chenopodiaceae , 9510: Bignoniaceae , 9511: Apocynaceae ,
36	2379	DU_J19_	Which of the following fruits do not have edible	9512: Asclepiadaceae , 9513: Carica papaya ,
30			mesocarp?	9514: Punica granatum , 9515: Tamarindus indica ,
37	2380	DU_J19_	Which one of the following is used as a sweetener?	9516: Mangifera indica , 9517: Gymnema sylvestre
		MSC_BOT		9518: Stevia rebaudiana ,



		_Q3b		9519: Syzygium cumini , 9520: Carica papaya ,
38	2381	DU_J19_ MSC_BOT _Q37	Which one of the following is not a constituent of an ayurvedic herbal formulation, 'Trifala'?	9521:Terminalia bellerica , 9522:Terminalia arjuna , 9523:Terminalia officinalis 9524:Emblica officinalis ,
39	2382	DU_J19_ MSC_BOT _Q38	Fruits of which of the following pair of plants possess aril?	9525:Litchi chinensis and marmelos ,  9526:Myristica fragrans and chinensis ,  9527:Vitis vinifera and Aeg
				9528:Litchi chinensis and a cosmosus ,
40	2383	DU_J19_ MSC_BOT _Q39	Which one of the following is an incorrect combination?	9529:Betula bhojpatra - b 9530:Diospyros melanoxylo beedi , 9531:Pongamia pinnata - 9532:Cichorium intybus -
41	2384	DU_J19_ MSC_BOT _Q40	Which one of the following sets of compounds is used as biopesticides?	9533:Pyrethrin, Azadiracht 9534:Azadirachtin, Taxol, ( 9535:Pyrethrin, Jatrophine 9536:Capsaicin, Citronella
42	2385	DU_J19_ MSC_BOT	Aleurone layer is rich in	9537:essential oils. , 9538:proteins. ,



		_Q41		9539:starch grains. , 9540:dietary fibers. ,
43	2386	DU_J19_ MSC_BOT _Q42	Gynobasic style is a characteristic feature of the family	9541:Papilionaceae , 9542:Asteraceae , 9543:Lamiaceae , 9544:Apiaceae ,
44	2387	DU_J19_ MSC_BOT _Q43	In a population of diploid individuals, six alleles exist for a particular gene. What is the expected number of alleles present in a chromosome; and types of alleles in a heterozygous individual and in a homozygous individual respectively?	9545:1; 2, 2 , 9546:2; 2, 1 , 9547:1; 2, 1 , 9548:2; 2, 1 ,
45	2388	DU_J19_ MSC_BOT _Q44	Which one of the following statements is false for a population that is under natural selection?	9549:The population will not Hardy-Weinberg equilibrium 9550:The genotypic freque estimated if the allele freque known.,  9551:At a given point of tir given bi-allelic gene, the suallele frequencies would be,  9552:At a given point of tir total of all genotypic frequencies to 1.,
46	2389	DU_J19_ MSC_BOT _Q45	In the fine mapping of rII locus, Benzer was able to demonstrate intragenic recombination in phages mainly because	9553:intragenic recombination only in phages., 9554:of the large number of progeny that could be screened by the screened by t



				9556:phages have haploid
47	2390		In Lymnaea peregra, coiling behaviour is controlled by a single gene. Dextral coiling behaviour is governed by dominant allele 'D' and sinistral coiling by recessive allele 'd'. When a cross is made using sinistral as female and dextral as male, all the snails are sinistral in F1 and dextral in F2. Again in F3 a ratio of 3 dextral and 1	9557:Mendelian inheritance 9558:Cytoplasmic materna 9559:Cytoplasmic materna 9560:Epistasis,
48	2391	DU_J19_ MSC_BOT _Q47	Study the following pedigree. What can be the possible inheritance pattern?	9561:X-linked inheritance, 9562:Y-linked inheritance, 9563:Mitochondrial inheritance
49	2392	DU_J19_ MSC_BOT _Q48	Which of the following is <b>not true</b> about the classic experiment carried out to study the nature of mutations by the 1969 Nobel prize-winning team of Max Luria and Salvador Delbruck?	9565:It is also called as Flu 9566:It demonstrated that mutations arise in the abse selection, and not as a resp selection.,  9567:They inoculated equa of E. coli into separate cul with and without T1 phage  9568:Equal number of T1 presistant colonies were obt the plates.,



50	2393	DU_J19_ MSC_BOT _Q49	A plant heterozygous for two tightly linked genes A and B, has the genotype AB/ab. Which of the following statements is <b>true</b> when the plant is self-pollinated?	9569:The percentage of all types of gametes (AB, ab, be equal. , 9570:Gametes with genoty will be less than those with 9571:Both loci will segrega ratio. , 9572:The segregation ratio genes will depend upon the between them. ,
51	2394	DU_J19_ MSC_BOT _Q50	Mark the correct pairing of scientists and their contributions I Nirenberg and Matthei  1 Telomerase II Sidney Altman and Thomas Cech 2 DNA Polymerase I III Arthur Kornberg 3 Ribozyme IV Elizabeth	9573:I-2; II-1; III-4; IV-3 9574:I-4; II-3; III-1; IV-2 9575:I-4; II-3; III-2; IV-1 9576:I-3; II-4; III-2; IV-1
52	2395		The factor responsible for mediating binding of core RNA polymerase to promoter is	9577:α-70 , 9578:σ-70 , 9579:Γ-55 , 9580:δ-70 ,
53	2396	MSC_BOT _Q52	Which of the following enzyme is involved in tRNA synthesis?	9581: RNA Polymerase I , 9582: RNA polymerase II , 9583: RNA Polymerase III 9584: RNA polymerase IV
54	2397		The study of man-made areas with complex, dynamic ecological systems, influenced by interconnected biological, physical and social components is called as	9585: System Ecology., 9586: Ecosystem Ecology. 9587: Urban Ecology., 9588: Social Ecology.,
55	2398	DU_J19_ MSC_BOT _Q54	Which of the following horizons in the soil profile has high amount of organic matter?	9589: O , 9590: A , 9591: B , 9592: C ,



MSC_BOTQ55    Social continuous continuou					
Second	56	2399		Hyperthermophiles are heat loving microbes that can live in temperature optima above	9593:80 °C ,
9595:60 °C , 9596:40 °C , 9597:Random., 9598:Regular. , 9599:Clumped. , 9600:Contiguous. , 9600:Contiguous. , 9600:Contiguous. , 9600:Contiguous. , 9600:Contiguous. , 9602:Phenols , 9602:Phenols , 9603:Terpenoids , 9604:Pheromones , 9609:Pheromones , 9606:Static life table , 9607:Cohort life table , 9607:Cohort life table , 9607:Cohort life table , 9607:Cohort life table , 9609:Dominance , 9610: General diversity 9611: Evenness , 9612: Similarity-dissim			_Q55		9594:50 °C .
2400 DU_J19_ MSC_BOTQ56 anywhere within an area is called as population have an equal chance of living anywhere within an area is called as 9597:Random. , 9598:Regular. , 9599:Clumped. , 9600:Contiguous. , 9600:Contiguous. , 9600:Contiguous. , 9600:Contiguous. , 9600:Contiguous. , 9602:Phenols , 9602:Phenols , 9603:Terpenoids , 9604:Pheromones , 9604:Pheromones , 9604:Pheromones , 9605:Survivorship curvers are secreted by some animals for communication with other members of their species? 9604:Pheromones , 9605:Survivorship curvers are secreted by some animals for communication with other members of their species? 9604:Pheromones , 9605:Survivorship curvers are secreted by some animals for communication with other members of their species? 9605:Survivorship curvers are secreted by some animals for communication with other members of their species? 9605:Survivorship curvers are secreted by some animals for communication with other members of the current year is shown in 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by some animals for communication with 9605:Survivorship curvers are secreted by 960			/	~O'	,
DU_J19_MSC_BOT_Q56   DU_J19_MSC_BOT_Q56   DU_J19_MSC_BOT_Q56   DU_J19_MSC_BOT_Q57   DU_J19_MSC_BOT_Q57   DU_J19_MSC_BOT_Q57   DU_J19_MSC_BOT_Q57   DU_J19_MSC_BOT_Q58   DU_J19_MSC_BOT_Q58   DU_J19_MSC_BOT_Q58   DU_J19_MSC_BOT_Q58   DU_J19_MSC_BOT_Q58   DU_J19_MSC_BOT_Q58   DU_J19_MSC_BOT_Q58   DU_J19_MSC_BOT_Q59   DOMINANCE, BOT_Q59   DOMINANCE, BOT_Q60   DOMINAN					,
MSC_BOT _Q56	57	2400			
anywhere within an area is called as  9599:Clumped. , 9600:Contiguous. , 9601:Alkaloids , 9602:Phenols , 9602:Phenols , 9603:Terpenoids , 9604:Pheromones , 9604:Pheromones , 9604:Pheromones , 9604:Pheromones , 9604:Pheromones , 9605:Survivorship curv 9606:Static life table , 9607:Cohort life table , 9607:Cohort life table , 9608:Natality , 9608:Natality , 9609: Dominance , 9610: General diversity , 9611: Evenness , 9612: Similarity-dissim  9614:It increases the s plasma membrane of s 9615:It controls pollen					,
9600:Contiguous.,  9601:Alkaloids ,  9602:Phenols ,  9603:Terpenoids ,  9604:Pheromones ,  9604:Pheromones ,  9605:Survivorship curv  9606:Static life table ,  9607:Cohort life table ,  9608:Natality ,  9608:Natality ,  9607:Cohort life table ,  9608:Natality ,  9608:Natality ,  9609: Dominance ,  9611: Evenness ,  9612: Similarity-dissim  9614:It increases the s  9615:It controls pollen			_Q56	anywhere within an area is called as	
DU_J19_ MSC_BOT Q57   Which of the following chemical substances are secreted by some animals for communication with other members of their species?   9601:Alkaloids		l	<b> </b>		
other members of their species?  2402 DU_J19_ The probability of death of organisms with MSC_BOT O58  59 DU_J19_ The probability of death of organisms with different ages in the current year is shown in 9606:Static life table , 9607:Cohort life table , 9608:Natality ,  60 DU_J19_ MSC_BOT O59  61 DU_J19_ Which of the following statements on filliform apparatus is not correct?  61 DU_J19_ MSC_BOT O60  62 DU_J19_ MSC_BOT O60  63 DU_J19_ MSC_BOT O60  64 DU_J19_ MSC_BOT O60  65 DOT O60  66 DU_J19_ MSC_BOT O70  66 DU_J19_ MSC_BOT O70  67 DU_J19_ MSC_BOT O70  68 DU_J19_ MSC_BOT O70  69 DU_J19_ MSC_BOT O70  69 DU_J19_ MSC_BOT O70  69 DU_J19_ MSC_BOT O70  60 DU_J19_ MSC_BOT O70  60 DU_J19_ MSC_BOT O70  60 DU_J19_ MSC_BOT O70  61 DU_J19_ MSC_BOT O70  62 DU_J19_ MSC_BOT O70  63 DU_J19_ MSC_BOT O70  64 DU_J19_ MSC_BOT O70  65 DU_J19_ MSC_BOT O70  66 DU_J19_ MSC_BOT O70  66 DU_J19_ MSC_BOT O70  67 DU_J19_ MSC_BOT O70  68 DU_J19_ MSC_BOT O70  69 DOT O70  69 DOT O70  60 DU_J19_ MSC_BOT O70	58	2401			
2402 DU_J19_ MSC_BOT Q58  2402 DU_J19_ MSC_BOT different ages in the current year is shown in Q58  60 2403 DU_J19_ MSC_BOT Q59  61 2404 DU_J19_ MSC_BOT Q60  2404 DU_J19_ MSC_BOT Q60  2405 MSC_BOT Q60  2406 Which of the following statements on filiform apparatus is not correct?  61 2404 DU_J19_ MSC_BOT Q60  2405 MSC_BOT Q60  2406 Which of the following statements on filiform apparatus is not correct?  9607:Cohort life table 9608:Natality 9609: Dominance 9610: General diversity 9611: Evenness 9611: Evenness 9612: Similarity-dissim of the micropylar portion wall. 9613:It is a highly confidence of the micropylar portion wall. 9614:It increases the splasma membrane of splasma membra					
9604:Pheromones ,  9904:Pheromones ,  9904:Pheromones ,  9904:Pheromones ,  9904:Pheromones ,  9904:Pheromones ,  9904:Pheromones ,  9905:Survivorship curves and provided in the current year is shown in 9906:Static life table ,  9907:Cohort life table ,  9908:Natality ,  9909: Dominance ,  9909: Dominance ,  9909: Dominance ,  9909: Dominance ,  9909: Similarity-dissimate and provided in the following statements on filliform apparatus is not correct?  9909: Dominance ,  9909: Dominan			_Q57	other members of their species?	
DU_J19_ MSC_BOT Q58  DU_J19_ MSC_BOT Q58  DU_J19_ MSC_BOT Q58  DU_J19_ MSC_BOT Q58  DU_J19_ MSC_BOT Q59  DU_J19_ MSC_BOT Q60  DU_J19_ M				X	
MSC_BOT_Q58  different ages in the current year is shown in Q606:Static life table , 9607:Cohort life table , 9607:Cohort life table , 9608:Natality , 9608:Natality , 9609: Dominance , 9610: General diversity 9611: Evenness , 9612: Similarity-dissim  DU_J19_MSC_BOT_Q59  Which of the following statements on filiform apparatus is not correct?  Which of the following statements on filiform apparatus is not correct?  9613:It is a highly control of the micropylar portion wall. , 9614:It increases the splasma membrane of supparatus is 9615:It controls pollen 9616:It determines the	59	2402	DU_J19_	The probability of death of organisms with	9605:Survivorship curve ,
9607:Cohort life table 9608:Natality ,  DU_J19_ MSC_BOT _Q59  DU_J19_ MSC_BOT _Q59  Which of the following statements on filiform apparatus is not correct?  MSC_BOT _Q60  DU_J19_ MSC_BOT _Q60  MSC_B				different ages in the current year is shown in	
9608:Natality ,  9609: Dominance ,  9610: General diversity ,  9612: Similarity-dissim  9613:It is a highly control of the micropylar portion wall. ,  9614:It increases the splasma membrane of specific controls pollen  9616:It determines the			_Q58		
DU_J19_ MSC_BOT _Q59  The Shannon-Weiner index measures:  9609: Dominance , 9610: General diversity 9611: Evenness , 9612: Similarity-dissim  DU_J19_ MSC_BOT _MSC_BOT _Q60  Which of the following statements on filiform apparatus is not correct?  9613:It is a highly confort wall. , 9614:It increases the splasma membrane of s 9615:It controls pollen 9616:It determines the					
MSC_BOT_Q59  2404  DU_J19_ MSC_BOT_Q60  Which of the following statements on filiform apparatus is not correct?  Q60  Which of the following statements on filiform of the micropylar portion wall.,  9613:It is a highly control of the micropylar portion wall.,  9614:It increases the splasma membrane of spla	60	2403	DU_J19_	The Shannon-Weiner index measures:	
9611: Evenness , 9612: Similarity-dissim  DU_J19_ MSC_BOT Q60  Which of the following statements on filiform apparatus is not correct?  9613:It is a highly consoft the micropylar portion wall. , 9614:It increases the splasma membrane of splasma membrane splasma memb					9610: General diversity ,
9612: Similarity-dissim  DU_J19_ MSC_BOT _Q60  Which of the following statements on filiform apparatus is not correct?  9613:It is a highly consoft the micropylar portion wall.,  9614:It increases the splasma membrane of splasma membrane splasma			_Q59		, .
61 2404 DU_J19_ MSC_BOT_Q60 Which of the following statements on filiform apparatus is <b>not correct</b> ?  9613:It is a highly condoft the micropylar portion wall.,  9614:It increases the splasma membrane of sp					9612: Similarity-dissimilari
MSC_BOT _Q60 apparatus is <b>not correct</b> ? of the micropylar portion wall. ,  9614:It increases the splasma membrane of splasma		l	<b> </b>		3012. 3
MSC_BOT _Q60 apparatus is <b>not correct</b> ? of the micropylar portion wall. ,  9614:It increases the splasma membrane of splasma	61	2404			9613:It is a highly convolut
wall. , 9614:It increases the s plasma membrane of s 9615:It controls pollen 9616:It determines the				apparatus is <b>not correct</b> ?	of the micropylar portion of
9614:It increases the splasma membrane of s 9615:It controls pollen 9616:It determines the			_Q60		
plasma membrane of s 9615:It controls pollen 9616:It determines the					
9615:It controls pollen 9616:It determines the					9614:It increases the surfa
9616:It determines the			/		plasma membrane of syner
9616:It determines the			/		
					9615:It controls pollen tub
			/		OSAS The determinant has not
l I I I legg apparatus. ,			/		· ·
			/		egg apparatus. ,
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62	2405	DU_J19_ MSC_BOT _Q61	Hypostase refers to	9617:a cap-like structure of cells above the embryo sac
			60,	9618:a group of cells below sac and above the funiculu
				9619:nucellar cells above t sac. , 9620:parietal cells. ,
63	2406	DU_J19_ MSC_BOT _Q62	The members of which of the following angiosperm families <b>do not</b> form endosperm?	9621:Poaceae , 9622:Podostemaceae , 9623:Brassicaceae , 9624:Papilionaceae ,
64	2407	DU_J19_ MSC_BOT _Q63	Which of the following parts is not observed in a mature seed-coat?	9625:Epidermis , 9626:Aerenchyma , 9627:Hypodermis , 9628:Aril ,
65	2408	DU_J19_ MSC_BOT _Q64	Which one of the following statements is not true for aposporous embryo sac development?	9629:The first and second divisions result in a tetrad of megaspores. , 9630:Three megaspores downlie functional haploid megaspores megagametoge.
				9631:All the four megaspordegenerate while an aposp forms the embryo sac., 9632:Tetrad is surrounded wall.
66	2409	DU_J19_ MSC_BOT _Q65	Polysporangiate anthers are seen in the family	9633:Amborellaceae. , 9634:Anacardiaceae. , 9635:Annonaceae. , 9636:Agavaceae. ,



67	2410	DU_J19_ MSC_BOT	In a pollen wall, the following enzymes serve as markers for intine and exine, respectively.	9637:Acid phosphatases ar
		_Q66		9638:Pectinases and catala
				9639:Lipases and cutinases
				9640:Kinases and β-1,3 gl
68	2411	DU_J19_ MSC_BOT	Buzz pollination is associated with flowers, wherein the anthers exhibit	9641:longitudinal dehiscen
		_Q67		9642:valvular dehiscence.
				9643:poricidal dehiscence.
			**(.0.	9644:explosive dehiscence
69	2412	DU_J19_	Fluorochromatic reaction test to ascertain pollen	9645:P. Maheshwari. ,
		MSC_BOT Q68	viability was developed by	9646:E. Strasburger. ,
		_000		9647:J. Heslop-Harrison.,
70	2442	DU 140		9648:S.G. Nawaschin. ,
70	2413	DU_J19_ MSC_BOT _Q69	Which of the following statements is not correct about aquaporins?	9649:Aquaporins are found and animal cell membranes
				9650:Phosphorylation and
				concentration regulates aq
				activity. ,
				9651:Activity of aquaporin
				by pH and reactive oxygen
				9652:Aquaporins cannot tr
				uncharged molecules like N
71	2414	DU_J19_ MSC_BOT	The water potential of pure water at atmospheric	9653:-2.3 bar. ,
1		MS( H()	pressure is	106E4. 12.2 har
				9654:+2.3 bar. ,
		_Q70		9655:0 bar. , 9656:1 bar. ,



72	2415	DU_J19_	In root nodules of legumes, leg-haemoglobin is	9657:transports oxygen to
			important because it	nodule.,
		_Q71		9658:acts as an oxygen sc
			_()`	
				9659:provides energy to the
			, _	fixing bacterium. ,
			,01	9660:acts as a catalyst in
				transamination.,
73	2416	DU_J19_	Pfr shows maximum absorption at	9661:730 nm. ,
		MSC_BOT _Q72		9662:660 nm.,
		_Q/2	.0	9663:466 nm.,
				9664:650 nm.,
74	2417	DU_J19_	In non-graminaceous plant roots, iron is	9665:Both ferrous and ferr
			transported across the plasma membrane as	
		_Q73		9666:Fe-Chelate,
		1/1/2		9667:Ferrous ions ,
				9668:Ferric ions ,
75	2418	DU_J19_	Methionine is the precursor of which of the	9669:Abscisic acid ,
			following plant growth regulators?	9670:Indole acetic acid,
		_Q74		9671:Cytokinins ,
				9672:Ethylene ,
76	2419	DU_J19_	PEP carboxylase activity in C4 and CAM plants is	9673:phosphorylation-deph
		MSC_BOT	regulated by	
		_Q75		9674:oxidation-reduction ,
				9675:carboxylation-decarb
				9676:isomerization,
77	2420	DU_J19_	One molecule of Calmodulin, a calcium binding	9677:4 ,
		MSC_BOT	protein in eukaryotic cells binds to	9678:2,
		_Q76	Ca2+ ions.	9679:8,
				9680:14,
78	2421	DU_J19_	Anabolic component of the carbohydrate	9681:Glycogenolysis,
		MSC_BOT	metabolism includes which one of the following	9682:Citric Acid Cycle ,
		_Q77	processes?	9683:Glyconeogenesis,



			9684: Uronic Acid Pathways
2422	DU_J19_ MSC_BOT	High activity of sucrose synthase is present in	9685:tissues that synthesiz
	_Q78	cO.,	9686:tissues that utilize su
		₹ .	9687:photosynthetic leaves
			9688:sucrose exporting tis
2423	DU_J19_ MSC_BOT	Which one of the following is considered to be a signal metabolite that regulates the partitioning	9689:Fructose-2, 6-bispho
	_Q79	between sucrose and starch synthesis?	9690:Fructose-1, 6-bispho
			9691:Fructose 6-phosphate
	6/1		9692:Fructose 2-phosphate
2424	DU_J19_ MSC_BOT _Q80	Two different DNA molecules were isolated from a bacterial sample. Further experiments demonstrated that one of these (X) was composed of 40%A, 40%G, 10%T and 10%C but could not be cut by an exonuclease. The second DNA sample (Y) could be cut by the exonuclease and was found to be composed of 30%A, 30%T, 20%G and 20%C. Which one of the following statements can be correctly deduced from the above?	9693:DNA X has a double- linear structure ,
			9694:DNA Y has a double-s circular structure ,
			9695:DNA X has a single-s linear structure ,
			9696:DNA X has a single-s circular structure ,
2425		The 5' - 3' nucleotide sequence of one of the strands of a double stranded DNA molecule is given below: 5' - ATGACGATGGACACATGACATAGACGATAATGCCGTG AC - 3' In the absence of Tm effects, which one of the following sets of primers could, theoretically, be used to amplify the target sequence by PCR?	9697: 5' - ATGACGA - 3' a GTCACGG - 3' , 9698: 5' - TACTGCT - 3' a GGCACTG- 3' , 9699: 5' - TCGTCAT - 3' a CCGTGAC - 3' ,
	2423	2423 DU_J19_ MSC_BOTQ79  2424 DU_J19_ MSC_BOTQ80  2425 DU_J19_ MSC_BOT	MSC_BOT Q78  DU_J19_ MSC_BOT signal metabolite that regulates the partitioning between sucrose and starch synthesis?  DU_J19_ MSC_BOT Q79  Two different DNA molecules were isolated from a bacterial sample. Further experiments demonstrated that one of these (X) was composed of 40%A, 40%G, 10%T and 10%C but could not be cut by an exonuclease. The second DNA sample (Y) could be cut by the exonuclease and was found to be composed of 30%A, 30%T, 20%G and 20%C. Which one of the following statements can be correctly deduced from the above?  DU_J19_ MSC_BOT Q81  The 5' - 3' nucleotide sequence of one of the strands of a double stranded DNA molecule is given below: 5' - ATGACGATGGACACATGACATAGACGATAATGCCGTG AC - 3' In the absence of Tm effects, which one of the following sets of primers could, theoretically,



		1		9700: 5' - ATGACGA - 3' a
				CCGTGAC - 3',
83	2426	DU_J19_	In plant tissue culture, a high cytokinin : auxin	9701:roots.,
		MSC_BOT _Q82	ratio promotes the formation of	9702:callus. ,
		_Q02		9703:embryos. ,
			, -	9704:shoots.,
84	2427	DU_J19_	Which one of the following genes does not confer	9705:EPSPS ,
			resistance to a herbicide?	9706:pat ,
		_Q83		9707:ALS ,
				9708:nptII ,
85	2428	DU_J19_	Which one of the following statements about cDNA	9709:They are generally co
			libraries is not correct?	larger fragments as compa
		_Q84	*(	genomic DNA libraries ,
		- (		9710:They can be used to
		6/1		alternatively spliced forms
		1		9711:They can be used to
				quantitative variations in g
				expressions levels between
				tissues .
				9712:They can be used to
				variations in gene expressi
				between different developn
				of a plant ,
86	2429	DU_J19_	Which one of the following crops was the first to	9713:Maize ,
			have its nuclear genome sequenced?	9714:Wheat ,
		_Q85		9715:Rice ,
				9716:Barley ,
87	2430		The term "Bio-pharming" refers to	9717:genetically modified f
	- 1	MSC_BOT		plants.,



		_Q86		9718:synthesis of drugs fro plants/animals. ,
				9719:recombinant drugs fr
			₹ ·	9720:large scale farming o
88	2431	DU_J19_	Which of the following is the regulatory body	9721:NBPGR ,
		MSC_BOT	conferring approval for transgenic plants?	9722:NBA ,
		_Q87		9723:GEAC ,
				9724:NBRI ,
89	2432	DU_J19_ MSC_BOT	Identify the incorrect combination from the following:	9725:Protoplast – E.C. Coc
		_Q88		9726:Edible vaccine – C.J.
		650		9727:Somaclonal variation
		1/1/2		Steward ,
				9728:GUS reporter system
20	2433	DU 110	Circle in the second of the se	Jefferson ,
90	2433	DU_J19_ MSC_BOT	Similarity resulting from common ancestry is called	
		_Q89		9730:homology,
		_405		9731:homonym,
				9732:convergence,
91	2434	DU_J19_	Which one of the following is the most	9733:Amborella ,
		MSC_BOT _Q90	primitive basal angiosperm?	9734:Nymphaea ,
		_090		9735:Magnolia ,
				9736:Hibiscus ,
92	2435	DU_J19_	In species where pollen matures and is released	9737:protogyny ,
		MSC_BOT	prior to the maturation and receptivity of the	9738:protoandry,
		_Q91	gynoecium, the condition is called	9739:dichogamy,
				9740:androdioecy,
	2436	DU_J19	Which one of the following statements is	9741:All taxonomic keys ar
93	2430	00_315_		137 TITALI CONDITION REYS OF



		_Q92	-010-	9742:All keys comprise sec contrasting statements, ea is known as a lead. ,
				9743:In a taxonomic key, together comprise a couple
				9744. Neys are based on pr
94	2437	DU_J19_ MSC_BOT _Q93	Glucosinolates do not occur in	9745:Brassicaceae , 9746:Papaveraceae , 9747:Capparaceae , 9748:Fabaceae ,
95	2438	DU_J19_ MSC_BOT _Q94	A pollen grain with colpi occurring in the equatorial region is called	9749:zonocolpate , 9750:zonoporate , 9751:zonoaperturate , 9752:colporate ,
96	2439	DU_J19_ MSC_BOT _Q95	A binomial in which the genus name and specific epithet are identical in spelling is called	9753:Autonym , 9754:Tautonym , 9755:Synonym , 9756:Basionym ,
97	2440	DU_J19_ MSC_BOT _Q96	Which one of the following <b>is not</b> a member of Poaceae?	9757:Hordeum vulgare , 9758:Triticum aestivum , 9759:Cynodon dactylon , 9760:Secale cereale ,
98	2441	DU_J19_ MSC_BOT _Q97	Lloyd Botanical Garden is located at	9761:Darjeeling , 9762:Ootacamund , 9763:Srinagar (Kashmir) , 9764:Dehra Dun ,
99	2442	DU_J19_ MSC_BOT _Q98	Which series is not included in the Gamopetalae in Bentham and Hooker's system of classification?	9765:Inferae , 9766:Heteromerae , 9767:Bicarpoellatae , 9768:Thalamiflorae ,
100	2443	DU_J19_	Syngenesious stamens are characteristic of the	9769:Ranunculaceae ,



MSC_BOT   family   _Q99	9770:Malvaceae , 9771:Asteraceae , 9772:Brassicaceae ,
Te, "	
E. Panker con.	
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