DU MSc PhD Comb degree in Bio Sci N MSc in Bio Sci

Sr.No	Question Id	Question Description	Question Body	Options
1	1015	DU_J19_MSC_B	The best nucleophile among the following is	4057:I-,
		IOSCI_Q01		4058:Br-,
				4059:CI-,
				4060:OH-,
2	1016		The symmetry element present in a molecule of chloroform is	4061:C2,
		IOSCI_Q02		4062:C3,
				4063:C4,
				4064:C6,
3	1017		The symmetry element present in a molecule of benzene is	4065:C3,
		IOSCI_Q03		4066:C4,
				4067:C5,
				4068:C6,
4	1018		Which of the following atoms is essential for E1cB reaction to	4069:Fluorine,
		IOSCI_Q04	take place	4070:Bromine,
				4071:Sulfur,
				4072:selenium,
5	1019		Which metal ion is present in the active site of alcohol	4073:Ca2+,
		IOSCI_Q05	dehydrogenase	4074:Zn2+,
				4075:Mg2+,
				4076:Cd2+,
6	1020		The most basic ion among the following is	4077:Ethoxide,
		IOSCI_Q06		4078:Hydroxide,
				4079:Acetate,
				4080:Nitrate,
7	1021		The metal salt present in Ziegler natta catalyst is	4081:TiCl₃,
		IOSCI_Q07		4082:NiCl <sub>4</sub> ,
				4083:SnCl <sub>2</sub> ,
				4084:AICl <sub>3</sub> ,
8	1022		The sequence of the bacteriophage ØX174 was delineated by	4085:James Watson,
		IOSCI_Q08		4086: Francis Crick,
				4087:Frederick Sanger,

				4088:James Watson and
				Francis Crick,
9	1023		The redox potential of molecular oxygen is	4089:Positive,
		IOSCI_Q09		4090:Negative,
				4091:zero,
				4092:Fractional,
10	1024		The total number of codons in human beings is	4093:63,
		IOSCI_Q10		4094:64,
				4095:65,
				4096:66,
11	1114		Which of the following buffers can be sterilized in an autoclave at	4453:Phosphate buffered saline
		IOSCI_Q100	15ILBs pressure	with 10% glucose,
				4454:Phosphate buffered saline
				with 10% urea,
				4455:Phosphate Buffered
				Saline with 10% CaCl <sub>2</sub> ,
				4456:Phosphate buffered
				Saline with 10% serum and
				10% alucose.
12	1025	DU_J19_MSC_B IOSCI_Q11	The molecule discovered by Alexander Fleming in 1928 was	4097:Benzoic Acid,
		105C1_Q11		4098:Benzene,
				4099:Penicillin,
				4100:Aspirin,
13	1026		The geometry of [PtCl4]2- complex is	4101:tetrahedral ,
		IOSCI_Q12		4102:square planar,
				4103:octahedral,
				4104:square pyramidal,
14	1027		Porphyrins contain which of the following heterocyclic rings	4105:Pyrrole,
		IOSCI_Q13		4106:Thiophene,
				4107:Furan,
				4108:Dioxan,
15	1028		Which of the following metal ions can intercalate into graphite	4109:Sc,
		IOSCI_Q14		4110:Ti,
				4111:V,
				4112:K,

1.0	1000	DII 110 MCC 5	What are the three shows masses to be re-ti-	14442 B N H
16	1029	IOSCI_Q15	What are the three atoms present in borazine	4113:B, N, H,
		103C1_Q13		4114:B, N, C,
				4115:N, C, H,
				4116:B, C, H,
17	1030		Rhombic sulphur consists of	4117:S6 rings,
		IOSCI_Q16		4118:S7 rings,
				4119:S8 rings,
				4120:S10 rings,
18	1031		Wilkinson's catalyst contains the transition metal	4121:Cr,
		IOSCI_Q17		4122:Mn,
				4123:Fe,
				4124:Rh,
19	1032		1,3-butadiene contains x number of pi electrons where x is	4125:2,
		IOSCI_Q18		4126:4,
				4127:6,
				4128:8,
20	1033	DU_J19_MSC_B	Methyl orange is used as	4129:a Lewis acid,
		IOSCI_Q19		4130:a Lewis base,
				4131:an acid-base indicator,
				4132:as a strong mineral acid,
21	1034		Valeric acid the following number of carbon atoms	4133:4,
		IOSCI_Q20		4134:5,
				4135:6,
				4136:7,
22	1035	DU_J19_MSC_B	The formation of isobutylene from tert-butyl bromide is an	4137:nucleophilic substitution
		IOSCI_Q21	example of	reaction,
				4138:addition reaction,
				4139:reduction reaction,
				4140:elimination reaction,
23	1036		The reaction of benzoyl chloride with ammonia yields	4141:Benzoic acid,
		IOSCI_Q22		4142:Aniline,
				4143:Benzamide,
				4144:Benzophenone,
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24	1037	DU_J19_MSC_B IOSCI_Q23	The reaction of pyrrole with chloroform and KOH yields	4145:2-Phenyl pyrrole, 4146:2-Hydroxy pyrrole, 4147:2-Pyrrolecarboxaldehyde,
25	1038	DII 110 MCC B	2-Picoline is also known as	4148:None of these,
23	1036	IOSCI_Q24	2-ricollile is also known as	4149:2-Methyl Pyridine,
				4150:2-Hydroxypyridine,
				4151:2-carboxy pyridine, 4152:None of these,
26	1039	DII 110 MSC B	Sodio-ethylacetoacetate reacts with alkyl chloride to yield	·
20	1039	IOSCI_Q25	Sould ethylacetoacetate reacts with alkyl chilohide to yield	4153:monoalkyl ethylacetoacetate,
				4154:alkyl acetate,
				4155:acetic acid,
				4156:2 molecules of ethanol,
				4130.2 molecules of ethanol,
27	1040		LiAlH4 reacts with carboxylic acids to yield	4157:esters,
		IOSCI_Q26		4158:Alkanes,
				4159:Alcohol,
				4160:Alkenes,
28	1041		Trans-2-butene has a dipole moment of	4161:0,
		IOSCI_Q27		4162:0.5,
				4163:1,
				4164:1.5,
29	1042		Cumene is used to manufacture	4165:Benzene,
		IOSCI_Q28		4166:Toluene,
				4167:Phenol,
				4168:1,2-dimethylbenzene,
30	1043		-C=O shows a lambda max in the UV region in the range of	4169:100-130 nm,
		IOSCI_Q29		4170:150-180 nm,
				4171:270-300 nm,
				4172:400-430 nm,
31	1044		Aniline reacts with aqueous bromine to yield	4173:Bromobenzene,
		IOSCI_Q30		4174:Benzoic acid,
				4175:2,4,6-Tribromoaniline,

				4176:Phenol,
32	1045	DU_J19_MSC_B IOSCI_Q31	The antibiotic nonactin contains the following heterocyclic ring	4177:Thiophene,
				4178:Furan,
				4179:Pyrrole,
				4180:Imidazole,
33	1046		The reaction of phenyl magnesium bromide with ethylene oxide	4181:2-phenylethanol,
		IOSCI_Q32	yields	4182:Phenol,
				4183:2 molecules of Benzoic
				acid,
				4184:Phenylacetic acid,
34	1047		Binap usually forms complexes with	4185:Na & K,
		IOSCI_Q33		4186:Ca & Mg,
				4187:Sn & Fe,
				4188:Ru & Rh,
35	1048		Griesofulvin is an effective	4189:Analgesic,
		IOSCI_Q34		4190:Antipyretic,
				4191:Antifungal agent,
				4192:Antibiotic,
36	1049		Which of the following is not a G-protein coupled receptor?	4193:Glycine receptor,
		IOSCI_Q35		4194:Adrenergic receptor,
				4195:Glutamate receptor,
				4196:Muscarinic receptor,
37	1050		Protein kinase A is	4197:Completely inhibited by
		IOSCI_Q36		cyclic AMP,
				4198:Allosterically activated by
				cyclic AMP,
				4199:Affected by cyclic AMP
				only under unusual
				circumstances. 4200:Activated by covalent bin,
				4200. Activated by Covalent biri,
38	1051		Site directed mutagenesis facilitated research on	4201:Carbohydrates,
		IOSCI_Q37		4202:Proteins,
				4203:Lipids,

				4204:Fats,
39	1052		Repressors in prokaryotes bind to	4205:Promoter,
		IOSCI_Q38		4206:Enhancer,
				4207:Operator,
				4208:Hormone response
				element,
40	1053		Actinomycin D is an inhibitor of	4209:Transcription,
		IOSCI_Q39		4210:Translation,
				4211:Replication,
				4212:None,
41	1054	DU_J19_MSC_B IOSCI_Q40	Role of sigma factor in bacterial RNA polymerase is	4213:Catalyzing RNA synthesis,
				4214:Positioning RNA
				polymerase correctly on the
				DNA template.
				4215:Terminating RNA
				synthesis,
				4216:Unwinding DNA template,
42	1055	DII 110 MCC B	RNA primer is removed from the Okazaki fragment by	4217. DNA al a
42	1033	IOSCI_Q41	RNA primer is removed from the Okazaki fragment by	4217:DNA polymerase I,
				4218:DNA polymerase II,
				4219:DNA polymerase III,
43	1056	DU_J19_MSC_B	Uhiquitin ic a	4220:RNA polymerase,
43	1030	IOSCI_Q42	obiquitii is a	4221:Protein kinase,
		20001_4.1		4222:Protease,
				4223:Component of the
				electron transport system,
				4224: Protein that tags another
				protein for proteolysis,
44	1057		In which phase of cell cycle is DNA replicated?	4225:G <sub>1</sub> phase,
		IOSCI_Q43		4226:S phase,
				4227:G <sub>2</sub> phase,
				4228:M phase,
45	1058	DU J19 MSC B	Which of the following bacterial operon is not controlled by	4229:Arabinose,

			attenuation?	4230:Tryptophan, 4231:Leucine, 4232:Histidine,
46	1059	IOSCI_Q45	Which of the following serves as bactericidal agent?	4233:Ribonuclease, 4234:Lysozyme, 4235:Cytochrome c, 4236:Myoglobin,
47	1060	DU_J19_MSC_B IOSCI_Q46	The $\beta$ subunit of polymerase has a function of	4237:Promoter binding, 4238:Catalytic center, 4239:Template binding, 4240:Cation binding,
48	1061	DU_J19_MSC_B IOSCI_Q47	Arrange the running pattern of plasmid in agrose gel in presence of electric field	4241:Supercoiled plasmid will lag behind toward anode, 4242:Supercoiled plasmid will move faster toward anode, 4243:Supercoiled plasmid will move faster toward cathode, 4244:Supercoiled plasmid will not move toward cathode,
49	1062	DU_J19_MSC_B IOSCI_Q48	Cancer is caused by	4245:uncontrolled mitosis, 4246:uncontrolled meiosis, 4247:rupturing of cells, 4248:loss of immunity of the cells,
50	1063	IOSCI_Q49	Migration of cancerous cells from the site of origin to other parts of the body forming secondary tumor is called	4249:diapedesis , 4250:metastasis , 4251:proliferation , 4252:mitosis,
51	1064	DU_J19_MSC_B IOSCI_Q50	Which one of the following therapies will involve only the cancerous cells not the normal cells in treatment	4253:immunotherapy, 4254:surgery, 4255:aromatherapy, 4256:chemotherapy,

52	1065		Which one of the following cancers does not form a solid neoplasm	4257:leukemia ,
				4258:lymphoma,
				4259:lipoma ,
				4260:sarcoma,
53	1066		Incubating EGF ligand in cultured cell promotes	4261:cellular apoptosis and
		IOSCI_Q52		activation of caspase cleavage ,
				4262:EGFR dimerization
				leading to cell survival, 4263:Inhibition of EGFR leading
				to proliferation ,
				4264:Degradation of EGF
				ligands,
54	1067		Replicative senescence is due to	4265:stabilization of
		IOSCI_Q53		telomerase,
				4266:degradation of
				telomerase,
				4267:Telomere shortening,
				4268:Telomere shortening with
	1000	DU 110 MCC B	DAC analysis a disable state to	telomerase activation,
55	1068	IOSCI_Q54	RAS protein activation leads to	4269:Activation of Tumor
		10361_Q34		suppressor pathway,
				4270:Activation of oncoprotein ,
				4271:Inactivation of MAP
				kinase pathway,
				4272:Inactivation of
				antiapoptotic proteins,
56	1069		Retinoblastoma protein phosphorylation leads to	4273:cell apoptosis,
		IOSCI_Q55		4274:G1 arrest,
				4275:G1 to S phase transition,
				4276:binding with E2F,

57	1070	DU_J19_MSC_B IOSCI_Q56	The reason why there is a sudden shift in the electrical potential of the neuron (from about -70mv to about +50mv) during an	4277:Potassium,
			action potential is largely due to the sudden influx of ions.	4278:Sodium,
				4279:Calcium,
				4280:Chloride,
58	1071		The action potential is first formed in the	4281:Cell body,
		IOSCI_Q57		4282:Axon hillock,
				4283:Dendrites,
				4284: first few nodes of Ranvier
				on the axon.,
59	1072		The term refers to the constant state of contraction of a	4285:Summation,
		IOSCI_Q58	certain number of fibers within a muscle.	4286:Hypertrophy,
				4287:Atrophy,
				4288:Tone,
60	1073		Which of the following is most likely to cause the heart to go into	4289:Increased body
		IOSCI_Q59	spastic contraction?	temperature, 4290:Decreased extracellular
				fluid potassium ions,
				4291:Excess extracellular fluid
				potassium ions,
				4292:Excess extracellular fluid
	1071	D.I. 140 1400 D		calcium ions,
61	1074	IOSCI_Q60	The term "brain of gut" refrers to :	4293:Enteric nerve plexes,
		10361_000		4294:Cells of cajal,
				4295:Autonomic nervous
				system,
62	1075	DIL 110 MCC 5	First constant to the control of the	4296: Migratory complex,
62	1075	IOSCI_Q61	Final common pathway for oxidation of carbohydrates, lipids and proteins is	4297:Glycolysis,
		103C1_Q01	proteins is	4298:Pentose phosphate
				pathway,
	I	1		4299:Krebs cycle,

				4300:Electron transport chain,
63	1076		Which micronutrient prevents neural tube defects in the	4301:Thiamine,
		IOSCI_Q62	developing Fetus	4302:Pyridoxine,
				4303:Folate,
				4304:Niacin,
64	1077		Which part of cell acts as a Capacitor?	4305:Lipid bilayer of cell
		IOSCI_Q63		membrane,
				4306:Proteins of cell
				membrane,
				4307: Nucleus,
<u></u>	1070	D.U. 140, 1400, D		4308:Golgi body ,
65	1078		The chief fuel for energy production in human brain during starvation is:	4309:Cholesterol,
		103C1_Q04	istal vation is.	4310:Fatty acids,
				4311:Ketone bodies,
				4312:Amino acids,
66	1079	IOSCI_Q65	The final acceptor of electrons during oxidative phosphorylation is:	
		103C1_Q63		4314:O <sub>2</sub> ,
				4315:CO <sub>2</sub> ,
				4316:NADH,
67	1080	DU_J19_MSC_B IOSCI_Q66	The dilution plate count	4317:Can be used only during
		105C1_Q66		the log phase of the growth
				curve since it is a viable count,
				4318:Yields valid results only in
				those phases of the growth
				curve in which cell are not
				dividina.
				4319:Uses the ability to
				produce progeny as indicator of
				viability,
60	1001	DU 110 MCC 5	Autoria Diritarya da ana kanana kanana	4320:all of these,
68	1081	IOSCI_Q67	Antonie Philips van Leeuwenhoek	4321:credited with discovering
	I	103C1_Q07		microorganism,

		'		4322:Recognized that
		'		animalcules could be present
				like seeds in the air,
		'		4323:discovered the process of
				attenuation in microorganisms
				which he scraped from his
				teeth 4324:All of these,
69	1082		Gram positive bacteria responsible for food poisoning is/are	4325:Mycoplasma,
		IOSCI_Q68		4326:Pseudomonas,
		'		4327:Clostridium,
		'		4328:All of these,
70	1083		Which of the following is best used for long term storage of	4329:Storage in a freezer at -
		IOSCI_Q69	microbial samples	10degC,
		'		4330: Iyophillization of samples ,
				4331:storage in a refrigerator
				in an agar plate ,
				4332:storage on a petriplate at
		'		room temperature ,
71	1084	DU_J19_MSC_B	Gram staining was introduced by	4333:Christian Gram,
		IOSCI_Q70		4334:Alfred Gram,
		'		4335:Robert cook,
		'		4336:Louis Pasteur,
72	1085	DU J19_MSC_B		4337:Clostridium perfringes,
_		IOSCI_Q71		4338: Vibrio Cholera,
		'		4339:Escherichia coli,
		'		4340:Bordetella pertusis,
73	1086	DU J19 MSC B		4341:Antibiotic,
J			and a second of the bullions of the bullions of the bullions of the bullions of	4342:Analgesic,
		'		4343: Antitoxin,
		'		4344: Antipyretic,
74	1087	DII 119 MSC B	Large parasite such as helminthes may be killed extracellularly by	1 / .
/ 4	1007			13 13 12 43 57 1113 /
		10001_4, 5	the delight of	4346:Monocytes,

			4347: Eosinophils, 4348: Neutrophils,
75	1088	DU_J19_MSC_B Coir of commerce is	4349:a fibre derived from
		IOSCI_Q74	coconut endosperm., 4350:a fibre made from
			coconut stems, 4351:a fibre derived from
			coconut mesocarp, 4352:a fibre derived from
			coconut epicarp,
76	1089	DU_J19_MSC_B The meaning of the word callous is	4353:Brave,
		IOSCI_Q75	4354:heartless,
			4355:rude,
			4356: None of these,
77	1090	DU_J19_MSC_B The meaning of the word ephemeral is	4357:Gossamer like,
		IOSCI_Q76	4358:Transient,
			4359:Transparent,
			4360:Opaque,
78	1091	DU_J19_MSC_B The meaning of the word cumbersome is	4361:Burdensome,
		IOSCI_Q77	4362:Light,
			4363:Clear,
			4364:Sorrowful,
79	1092	DU_J19_MSC_B The meaning of the word renegade is	4365:Brave,
		IOSCI_Q78	4366:Coward,
			4367:Traitor,
			4368:Soldier,
80	1093	DU_J19_MSC_B The meaning of the word dither is	4369:Vacillate,
		IOSCI_Q79	4370:State,
			4371:Foretell,
			4372:Strength,
81	1094	DU_J19_MSC_B The word opposite in meaning to the word zeal is	4373:lethargy,
		IOSCI_Q80	4374:enthusiasm,
			4375:courage,
			4376:ill,
82	1095	DU_J19_MSC_B The word opposite in meaning to the word stoic is	4377:emotional,

		IOSCI_Q81		4378:stolid, 4379:unpleasant,
				4380:quarrelsome,
83	1096		Factors of 42 are	4381:1,12,
		IOSCI_Q82		4382:1,9,
				4383:1,6,
				4384:1,4,
84	1097		The sum of the coefficients in the monomials 3a2b and -2ab2 is	4385:5,
		IOSCI_Q83		4386:-1,
				4387:1,
				4388:-6,
85	1098		What should be added to 3x2+4 to get 9x2-7	4389:6x <sub>2</sub> -11,
		IOSCI_Q84		4390:6x <sub>2</sub> +11,
				4391:12x <sub>2</sub> -11,
				4392:12x <sub>2</sub> +11,
86	1099	DU_J19_MSC_B	15x=21; x=?	4393: 7/5,
		IOSCI_Q85		4394: 5/7,
				4395: 3/7,
				4396: 7/3,
87	1100		(x/2)-1=(x/3)+4; x=?	4397:15,
		IOSCI_Q86		4398:30,
				4399:45,
				4400:60,
88	1101		The genetic material of Tobacco Mosaic Virus is a	4401:dsDNA,
		IOSCI_Q87		4402:ssRNA,
				4403:ds RNA,
				4404:ss DNA,
89	1102		The fruiting bodies in <i>Agaricus</i> and <i>Morchella</i> are	4405:Ascocarps,
		IOSCI_Q88		4406:Basidiocarps and
				Ascocarps, respectively,
				4407:Basidiocarps,
				4408:Ascocarps and
				Basidiocarps, respectively,

90	1103		Which of the following macroscopic disease symptoms is NOT typical of virus infections in plants?	4409:Stunting due to reduction in internode lengths,
				4410:Mosaics, ring spots and vein clearing of leaves, 4411:Epinasty and
				development of leaf enations,
				4412:Pustules, streaks and blotches on leaves,
91	1104	DU_J19_MSC_B IOSCI_Q90	In bryophytes, meiosis occurs in the	4413:gametophyte to produce gametangia, 4414:spores to produce
				protonema, 4415:gametangia to produce sperm and egg, 4416:sporogenous tissue to
	1105	DII 140 1400 D		produce spores,
92	1105	IOSCI_Q91	In Gymnosperms, the female gametophyte develops from the	4417:Haploid megaspore, 4418:Diploid megaspore, 4419:Nucellus cells,
				4420:Haploid megaspore mother cell,
93	1106	DU_J19_MSC_B IOSCI_Q92	"Kewda oil" is obtained from which one of the following plant species?	4421:Pandanus odoratissimus,
				4422:Lavandula angustifolia ,
				4423:Rosmarinus officinalis ,
				4424:Nardostachys jatamansi ,
94	1107	DU_J19_MSC_B	Recombinant frequency of 1% is equivalent to	4425:10 m.u,
		IOSCI_Q93		4426:20 m.u,
				4427:1 m.u,
				4428:5 m.u,
95	1108	DU_J19_MSC_B	ALU elements are	4429:Transposons ,

		IOSCI_Q94		4430:Jumping gene , 4431:SINEs , 4432:LINEs ,
96	1109	DU_J19_MSC_B IOSCI_Q95	Multiple alleles of a gene control inheritance of	4433:skin color, 4434:colour blindness, 4435:sickle cell anaemia, 4436:blood groups.,
97	1110	DU_J19_MSC_B IOSCI_Q96	Bacterial flagella imparts motility to the cell by	4437:undulating movement, 4438:rotatory movement, 4439:gliding movement, 4440:both, undulating movement & rotatory movement.
98	1111	DU_J19_MSC_B IOSCI_Q97	Viral replication within the cells is inhibited by	4441:IL-4, 4442:IL-1, 4443:IFN alpha, 4444:TNF alpha,
99	1112	DU_J19_MSC_B IOSCI_Q98	Which of the following toxicity can occur due to single exposure?	4445:Acute toxicity, 4446:Sub-acute toxicity, 4447:Sub-chronic toxicity, 4448:Chronic toxicity,
100	1113	DU_J19_MSC_B IOSCI_Q99	Which of the following statement is incorrect	4449:In ion exchange chromatography, the bound protein is eluted using NaCl solution 4450:In affinity chromatography, lectins are used to purify alycoproteins. 4451:The separation in gel filtration chromatography in based on size, shape and net charge of the protein. 4452:All of these,