SAMPLE PAPER # 01

TARGET : PRE-MEDICAL 2022

Test Type : **SAMPLE PAPER** Test Pattern : **NEET (UG)**

ANSWER KEY

Q.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
A.	3	1	2	2	1	2	2	2	3	2	1	2	4	1	1	4	3	2	3	1	3	3	1	1	1	1	3	3	2	4
Q.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
A.	4	2	4	3	2	2	3	2	2	3	2	2	3	1	2	3	4	4	4	4	3	4	3	1	4	1	3	2	2	1
Q.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
A.	3	1	3	2	4	3	2	1	1	2	3	1	4	1	1	4	1	1	1	2	4	4	1	3	1	1	2	2	1	1
Q.	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
A.	2	3	4	4	2	4	2	4	1	1	2	3	2	4	1	3	3	3	2	3	4	4	3	2	2	4	3	4	3	4
Q.	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150
A.	2	4	2	1	3	4	3	2	3	2	2	3	4	1	2	2	3	1	4	4	2	3	3	4	3	1	3	1	1	3
Q.	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
A.	3	2	3	4	2	4	1	3	4	1	1	3	3	1	1	1	4	3	4	1	3	3	2	2	2	1	1	4	1	4
Q.	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200										
A.	4	1	3	4	3	2	4	3	3	4	2	3	1	4	3	3	4	3	4	3										

HINT – SHEET

SUBJECT : PHYSICS

SECTION-A

1. Ans (3)

$F = A \sin C t + B \cos Dx$

$[Ct] = 1 \Rightarrow [C] = [T^{-1}]$

$[A] = [F]$, $[B] = [F]$ and $[D] = [L^{-1}]$

$\Rightarrow \left[\frac{A}{B}\right] = 1$ and $\left[\frac{C}{D}\right] = [LT^{-1}]$

2. Ans (1)

When particle is thrown above its acceleration is constant equal to 'g' downwards

$\Rightarrow$ Slope $= \frac{dv}{dt} = -ve$

{as acceleration is downwards}

and at highest point ; velocity becomes zero.

3. Ans (2)

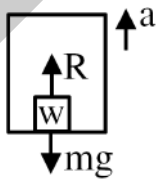
Magnitude of change in velocity = $2u\sin\theta$

$= 2 \times 50 \times \sin 37°$

$= 100 \times \frac{3}{5}$

$= 60$ m/sec

4. Ans (2)

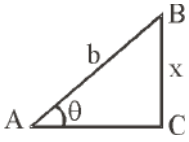


$R - mg = ma$

$R = (mg + ma)$

5. Ans (1)

As shown in the figure, let θ be the angle of banking to counteract the centrifugal force.



Now, $\tan\theta = \frac{v^2}{Rg}$

If x be the elevation required then,

$\sin\theta = \frac{x}{b}$ or $\theta = \sin\theta = \tan\theta = \frac{x}{b}$

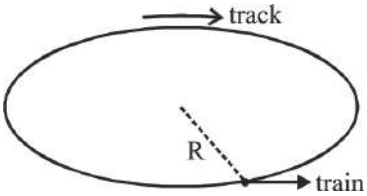
$\therefore \frac{x}{b} = \tan\theta = \frac{v^2}{Rg}$ or $x = \frac{v^2 b}{Rg}$

6. **Ans (2)**

Centre of mass may be at centre if mass density increase or decrease in symmetric way about centre.

7. **Ans (2)**

as there is no external torque



So $I_{track} \times \omega_{track} = I_{train} \times \omega_{train}$

Let $\omega_{track} = \omega$

then $\omega_{train} = \left(\frac{v}{R} - \omega\right)$

$\therefore \quad mR^2\omega = MR^2\left(\frac{v}{R} - \omega\right)$

$\Rightarrow \left(\frac{m}{M} + 1\right)\omega = \frac{v}{R} \Rightarrow \omega = \frac{v}{\left(\frac{m}{M} + 1\right)R}$

8. **Ans (2)**

$\frac{I_{Ring}}{I_{Disc}} = \frac{MR^2}{\frac{1}{2}MR^2} = 2:1$

9. **Ans (3)**

We know that $\frac{dA}{dt} = \frac{L}{2m}$ (L→angular momentum)

$L = mr^2\omega$

$\frac{dA}{dt} = \frac{mr^2\omega}{2m}$

$\frac{dA}{dt} = \frac{r^2\omega}{2}$

$\frac{dA}{dt} \propto \omega r^2$

10. **Ans (2)**

$V_P - V_\infty = -\frac{GM}{r}$

If $V_\infty = 0$

then $V_P = -\frac{GM}{r}$

$\Rightarrow -5 = -\frac{GM}{r} \Rightarrow \frac{GM}{r} = 5$

Now $V_\infty = 10$

then $V_P - 10 = -\frac{GM}{r}$

$V_P - 10 = -5$

$V_P = +5$ J/kg

11. **Ans (1)**

AV = constant

If A ↓ then speed ↑ and pressure ↓

12. **Ans (2)**

$F = \eta A\frac{\Delta V}{\Delta y}$

$F = 0.07 \times 1 \times \frac{0.1}{1 \times 10^{-3}}$

$= 0.07 \times 0.1 \times 10^3$

$= 7$N.

13. **Ans (4)**

$\gamma = \frac{\text{Stress}}{\text{Strain}} \Rightarrow \text{Stress} = \gamma \times \text{Strain}$

$= 2 \times 10^{11} \times 10^{-3} = 2 \times 10^8$ N/m^2

Now $\Rightarrow \text{Stress} = \frac{\text{Weight}}{\text{Area}}$

$\Rightarrow$ Weight = Stress × Area

Weight $= 2 \times 10^8 \times \pi\,(0.5 \times 10^{-3})^2$

$= 157$ N

14. **Ans (1)**

At constant volume

$P \propto T \Rightarrow \frac{\Delta P}{P} = \frac{\Delta T}{T} = \frac{1}{250}$

$\frac{\Delta P}{P} \times 100 = \frac{1}{250} \times 100 = 0.4\%$

15. **Ans (1)**

$v_{rms} \propto \sqrt{T} \Rightarrow \frac{v_1^2}{v_2^2} = \frac{T_1}{T_2}$

$\left(\frac{v}{v/2}\right)^2 = \frac{600}{T}$

$T = \frac{600}{4} = 150$ K $= -123$ °C

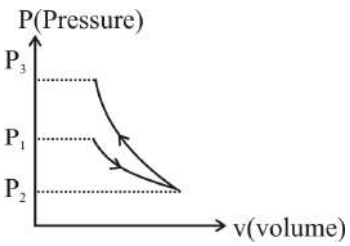
16. **Ans (4)**

$\frac{\Delta U}{\Delta Q} = \frac{nC_v\Delta T}{nC_p\Delta T} = \frac{C_v}{C_p} = \frac{1}{\gamma} = \frac{10}{14}$

$= \frac{5}{7} \approx 0.7$

17. **Ans (3)**

Here $P_3 > P_1$ and $w < 0$



18. Ans (2)

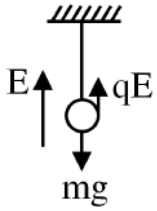
$$\eta = 1 - \frac{T_2}{T_1} = \frac{W}{Q}$$

$$1 - \frac{300}{900} = \frac{W}{3 \times 10^6}$$

$$\frac{2}{3} = \frac{W}{3 \times 10^6}$$

$W = 2 \times 10^6$ cal $= 2 \times 4.2 \times 10^6$ J $= 8.4 \times 10^6$ J

19. Ans (3)



Net downward force = (mg – qE)

$$g_{eff} = \left(g - \frac{qE}{m}\right)$$

$$T = 2\pi\sqrt{\frac{\ell}{g_{eff}}}$$

$$T = 2\pi\sqrt{\frac{\ell}{g - \frac{qE}{m}}}$$

20. Ans (1)

By simply comparing given equation by

$y = a \sin(\omega t - kx)$ and substituting the values

$\alpha = 25\pi$, $\beta = \pi$

21. Ans (3)

$V = f\lambda \Rightarrow 360$ m/s $= 500$ Hz(λ)

$\lambda = 0.72$ m

Now we know $\Rightarrow \frac{\Delta x}{\lambda} = \frac{\Delta\phi}{2\pi}$

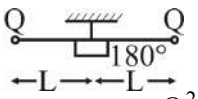
$$\frac{\Delta x}{0.72} = \frac{\pi/3}{2\pi}$$

$\Delta x = 0.12$ m

22. Ans (3)

Equal and opposite force as it is action reaction.

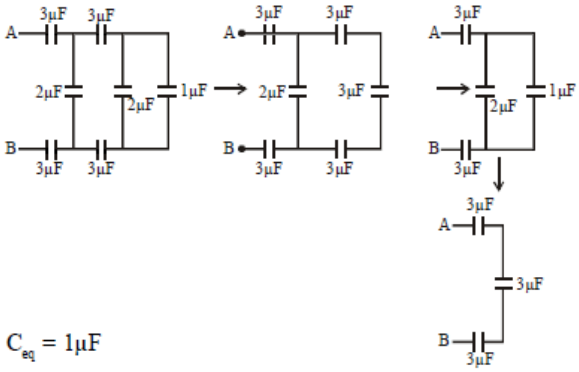
23. Ans (1)



$$T = \frac{1}{4\pi\varepsilon_0}\frac{Q^2}{(2L)^2}$$

24. Ans (1)

Equivalent circuit can be redrawn as



$C_{eq} = 1\mu F$

25. Ans (1)

According to maximum power theorem.

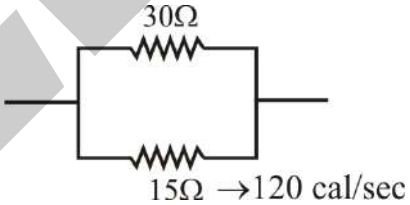
26. Ans (1)

$$r = R\left(\frac{\ell_1 - \ell_2}{\ell_2}\right)$$

$$= 10\left(\frac{55 - 50}{50}\right)$$

$r = 1\Omega$

27. Ans (3)



$\rightarrow$120 cal/sec

In parallel

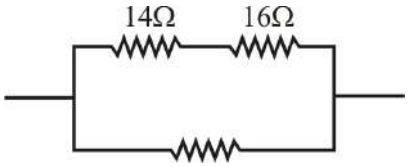
$$H \propto \frac{1}{R}$$

$$\text{So, } H_{30} = \frac{15}{30}(120)$$

= 60 cal/sec.

But in series

$H \propto R$



60 cal/sec will divide in the ratio of resistance

$$H_{14} = \left(\frac{14}{14 + 16}\right)60$$

= 28 cal/sec.

28. Ans (3)

$$R = \frac{mv}{qB} = \sqrt{\frac{2Vm}{q}}\left(\frac{1}{B}\right)$$

29. Ans (2)

By theory

30. Ans (4)

If rod is inserted, B increases to μ_r times so, magnetic flux = B × A also increases.

Also L increases to μ_r time but, rate of joule heating = i^2R remains same.

31. Ans (4)

In purely inductive circuit voltage leads the current by 90°.

32. Ans (2)

$\because Z^2=A^2 + B^2$

$\therefore [Z]=[A]=[B]$

$\therefore [AB]=[Z]^2=[\text{ohm}]^2$

Now,

$$\text{ohm} \equiv \frac{V}{i} \equiv \frac{\text{work}}{\text{charge} \times \text{current}} \equiv \frac{ML^2T^{-2}}{(AT)A}$$

$= ML^2T^{-3}A^{-2}$

$\therefore [AB]=[M^2L^4T^{-6}A^{-4}]$

33. Ans (4)

Electric & magnetic field vectors are perpendicular to each other so option (4) is false.

34. Ans (3)

From the formula $\sin C = \frac{1}{{}_1\mu_2} \Rightarrow \sin C = {}_2\mu_1$

$$= \frac{\mu_1}{\mu_2} = \frac{v_2}{v_1} \Rightarrow \sin C = \frac{10x/t_2}{x/t_1}$$

$$\Rightarrow \sin C = \frac{10t_1}{t_2} \Rightarrow C = \sin^{-1}\left(\frac{10\,t_1}{t_2}\right)$$

35. Ans (2)

From the diagram it is clear that object is virtual

$\therefore$ U = +12 cm

f = +20 cm

$$\frac{1}{v} - \frac{1}{u} = \frac{1}{f}$$

$$\frac{1}{v} - \frac{1}{(+12)} = \frac{1}{+20}$$

$$\frac{1}{v} = \frac{1}{20} + \frac{1}{12}$$

$$\frac{1}{v} = \left(\frac{12+20}{240}\right)$$

$$v = \frac{240}{32} = 7.5 \text{ cm}$$

SECTION-B

36. Ans (2)

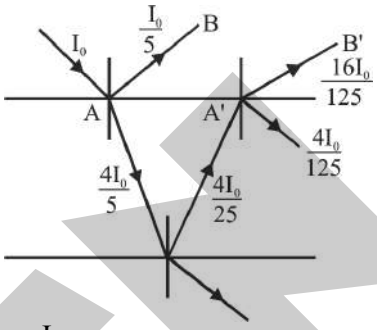
$i_1 = 15°,\ A = 30°,\ \delta = 55°,\ i_2 = ?$

$i_1 + i_2 = A + \delta \quad ; \quad 15 + i_2 = 30 + 55$

$\Rightarrow i_2 = 15 + 55 = 70°$

37. Ans (3)

According to the question, Intensity of ray AB, I_1



$= \frac{I_0}{5}$, and Intensity of ray A'B',

$I_2 = \frac{16I_0}{125}, I_{max} = \left(\sqrt{I_1} + \sqrt{I_2}\right)^2 = \frac{81}{125}I_0$

$I_{min} = \left(\sqrt{I_1} - \sqrt{I_2}\right)^2 = \frac{I_0}{125}, \frac{I_{max}}{I_{min}} = 81$

38. Ans (2)

$Z_F \leqslant \frac{a^2}{\lambda}$

Ray optics is valid

39. Ans (2)

Work function = $h\nu_0$.

40. Ans (3)

3rd excited state means n = 4

So no. of spectral line = $\frac{n(n-1)}{2} = 6$

41. Ans (2)

${}_1H^2 \rightarrow \frac{B.E}{A} = 1.11\text{MeV}$

B.E = 1.11 MeV × A

= 1.11 MeV × 2

= 2.22 MeV

B.E. (MeV) = Δm × 931 MeV

$\Delta m = \frac{2.22}{931} = 0.00238$ amu

42. Ans (2)

Ionising property depends upon the charge and mass.

43. Ans (3)

KVL in collector circuit :

$+10 - I_C \times (10^3) - V_{CE} = 0$

$\Rightarrow I_C \times 10^3 = 10.5 = 5$

$\Rightarrow I_C = 5 \times 10^{-3}$ A

Also $\beta = \frac{I_C}{I_B} \Rightarrow I_B = \frac{5 \times 10^{-3}}{100}$

KVL in base circuit :

$+10 - I_B R_B - V_B E = 0$

$\Rightarrow 10 - 5 \times 10^{-5} \times R_B - 0 = 0$

$\Rightarrow R_B = 2 \times 10^5\ \Omega$

$R_B = 200 \times 10^3\ \Omega$

44. Ans (1)

Putting (0, 0)

$A + B = 0$,

$\overline{A + B} = 1$,

$A \cdot B = 0$, $\overline{A \cdot B} = 1$

For any other value $\overline{A + B} = 0$

45. Ans (2)

Theoretical

46. Ans (3)

Fractional energy remaining in m_1 after headon elastic collision with stationary m_2 is

$= \left(\frac{m_1 - m_2}{m_1 + m_2}\right)^2 = \left(\frac{8-2}{8+2}\right)^2$

$= 0.36$

So remaining energy is = 0.36 E

47. Ans (4)

$(K.E)_{max} = \frac{1}{2} KA^2 = \frac{1}{2} (6 \times 10^5)(16 \times 10^{-4})$

$\Rightarrow (K.E.)_{max} = 480$ J

T.E. = (K.E)max + (P.E)min

$\Rightarrow 600 = 480 + PE_{min}$

$\Rightarrow (PE)_{min} = 120$J

$\Rightarrow (P.E.)_{max} = 600$ J when K.E. = 0

48. Ans (4)

Electric field due to a charged wire is

$\frac{\lambda}{2\pi\epsilon_0} \ell n(3)$

$dv = -Edr$

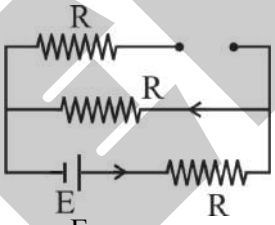
$V_B - V_A$ and $\frac{\lambda}{2\pi\epsilon_0} \ell n(3)$

$= -\int_r^{3r} \frac{2k\lambda}{r} dr = -2k\lambda(\ell \mu r)_r^{3r}$

$= -2k\lambda \ell n(3)$

$V_A - V_B = 2k\lambda\ \ell n(3)$

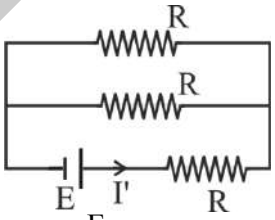
49. Ans (4)



at t = 0

$I = \frac{E}{2R}$

finally



$I' = \frac{E}{R_{eq}}$

$R_{eq} = R + \frac{R}{2} = \frac{3R}{2}$

$\frac{I}{I'} = \frac{E}{2R} \frac{(3R)}{E(2)} = \frac{3}{4}$

50. Ans (4)

$\frac{1}{v} - \frac{1}{u} = \frac{1}{f} \Rightarrow u = -\infty$, $v = -400$ cm

$f = -400$ cm

$P = \frac{100}{-400} = -0.25$ D [Concave]

SUBJECT : CHEMISTRY

SECTION-A

51. Ans (3)

Moles of gases

H_2 He O_2 O_3

1 : 1 : 1 : 1

Ratio of atoms of gases

H_2 He O_2 O_3

2 : 1 : 2 : 3

52. Ans (4)

$r \propto \frac{n^2}{z}$

53. Ans (3)

Fact

54. Ans (1)

$Q = 0$

$\Delta E = W$

55. Ans (4)

$\Delta H^\circ = \Delta U^\circ + \Delta n_g RT$

$\Delta n_g = 0$

$\Delta H^\circ = \Delta u^\circ$

For 2 moles = 2 × –185 KJ

56. Ans (1)

$2Cu\,I_2 \rightarrow 2Cu\,I + I_2$

+2 –1 +1 0

57. Ans (3)

$r_g = 2\, r_{CO_2} \Rightarrow \frac{r_g}{r_{CO_2}} = \frac{2}{1}$

As we know, rate of diffusion $\propto \frac{1}{\sqrt{M_W}}$

$\frac{2}{1} = \sqrt{\frac{44}{M_W}} \Rightarrow \frac{4}{1} = \frac{44}{M_W}$

$\Rightarrow M_W = 11$

58. Ans (2)

1 mol ..... $\frac{N_A}{4}$ unit cells

0.1 mol ..... $\frac{N_A}{4}$ × 0.1 unit cells

$= 0.025\, N_A$

59. Ans (2)

$\log k = \log A - \frac{E_a}{2.303R} \cdot \frac{1}{T}$

$\text{slope} = -\frac{E_a}{2.303R}$

60. Ans (1)

Zn is strong reducing agent compare to Fe.

61. Ans (3)

$\Lambda^\infty_{eq^+}(BaSO_4)$

$= \Lambda^\infty_{eq^+}(BaCl_2) + \Lambda^\infty_{eq^+}(H_2SO_4) - \Lambda^\infty_{eq^+}(HCl)$

62. Ans (1)

$\Delta T_f = 9.3$

$\Delta T_f = \frac{iK_f \times W_B \times 1000}{M_B \times W_A}$

$9.3 = \frac{1 \times 1.86 \times 50 \times 1000}{62 \times (200 - n)}$

200 – x = mass of solvent in the solution.

$9.3\,(200 - n) = 1500$

$1860 - 9.3n = 1500$

$n = \frac{360}{9.3} = 38.7g$

64. Ans (2)

Reactivity towards EAR ∝ e^- density in

(C = C) of alkene system $\propto \frac{+M, +H, +I}{-M, -H, -I}$

In (a) → +H, (b) → No group (c) → –I

(d) → –M

65. Ans (4)

$CH_3 - C \equiv CH + NaOH \not\longrightarrow CH_3 - C \equiv C^-Na^+ + H_2O$

H_2O is more acidic than $CH_3 - C \equiv CH$

∴ reaction will not go in forward direction and propyne does not react with NaOH.

66. Ans (3)

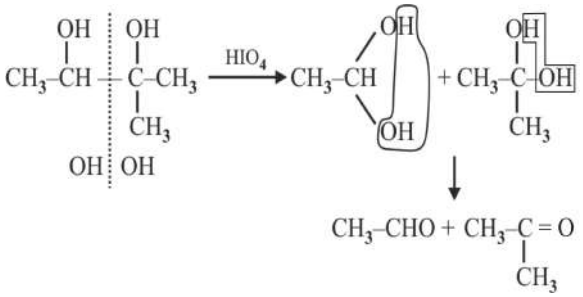
$CH_3\overset{*}{C}H(Br)-\overset{*}{C}H(Cl)-\overset{*}{C}H(I)-CH_3$

Chiral C (n) = 3, unsymmetrical compound.

No. of optically active isomers = 2^n

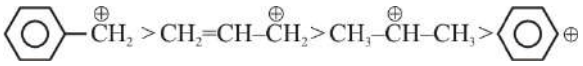
$= 2^3 = 8$

67. Ans (2)



68. Ans (1)

Reactivity towards $S_{N}1$ $\propto$ stability of carbocation.



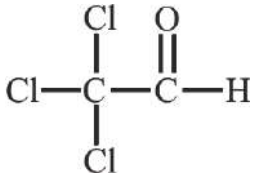
[Carbocation stability]

70. Ans (2)

$R - OH \xrightarrow{SOCl_2} R - Cl$

$R - COOH \xrightarrow{SOCl_2} R - \underset{\underset{O}{\|}}{C} - Cl$

71. Ans (3)



does not show cannizaro reaction but shows haloform reaction bcoz $-CCl_3$ is better Leaving group than – H.

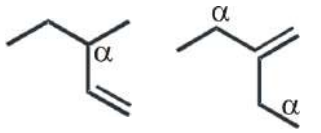
72. Ans (1)

Boiling point of alcohol is more than amine due to stronger H-bonding between alcohol molecules.

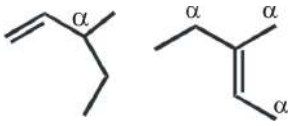
Among isomeric amine order of boiling point is :-

1° Amine > 2° Amine > 3° Amine

73. Ans (4)



1α – H 4α – H



1α – H 8α – H

(most stable)

74. Ans (1)

$N \equiv N \Rightarrow 6\ e^-$ envolved in sharing.

75. Ans (1)

Lituium is the only alkali metal which forms nitride

76. Ans (4)

MnO_2, As_2O_3, TiO_2 $\rightarrow$ acidic

$SeO_2 \rightarrow$ acidic

79. Ans (1)

NCERT XIIth Pg # 251, Para. 9.5.4

80. Ans (2)

$Gd \Rightarrow [Xe]\ 4f^7\ 5d^1\ 6s^2$

$\Rightarrow Gd^{+3} \Rightarrow [Xe]\ df^7$

unpaired $e^- = 7 \Rightarrow$ maximum unpaired e^-.

81. Ans (4)

$Al(OH)_3 \Rightarrow$ Amphoteric hydroxide

$LiOH \Rightarrow$ Basic hydroxide

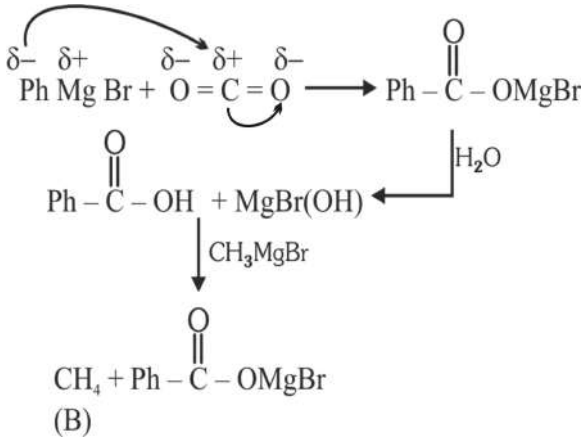
$Mg(OH)_2 \Rightarrow$ Basic hydroxide

$Be(OH)_2 \Rightarrow$ Amphoteric hydroxide

82. Ans (4)

Ca is extracted through electro metallurgy

85. Ans (1)



SECTION-B

87. Ans (2)

$AlCl_3 = Al^{+3} + 3Cl^-$

s 3s

$CaCl_2 \rightarrow Ca^{+2} + 2Cl^-$

C C 2C

$K_{sp} = [Al^{+3}] [Cl^-]^3$

$K_{sp} = (S) (2C)^3$

$S = \frac{K_{SP}}{8C^3}$

88. Ans (2)

For Adsorption

$\Delta H < 0, \Delta S < 0$

$\Delta G < 0$

89. Ans (1)

Br_2/H_2O oxidise aldehyde group of glucose to – COOH group.

90. Ans (1)

Hydrolysis of ester is S_NAE reaction

Reactivity $\propto \delta^{\oplus}$ on $\backslash C = O$ carbon.

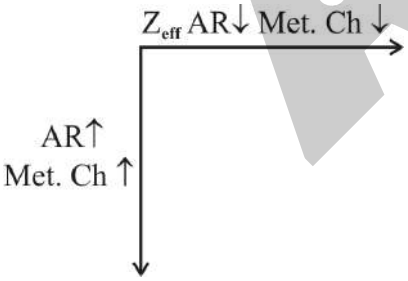
Reactivity $\propto \frac{-M, -H, -I}{+M, +H, +I}$

Reactivity $\propto$ -M > – H > – I > No group > +I > +H > +M.

91. Ans (2)

$R_f \propto$ distance moved by substance from base line.

93. Ans (4)



96. Ans (4)

$[CrBr(NH_3)_5] SO_4$ and $[Cr(SO_4) (NH_3)_5] Br$ are ionisation isomers.

97. Ans (2)

NCERT Class XII, Part-I, Pg # 224

99. Ans (1)

$\frac{W}{V}\% = \frac{W}{W}\% \times d$

$\frac{W}{W}\% = \frac{\frac{W}{V}\%}{d} \Rightarrow \frac{W}{W}\% = 50\%$

$\frac{W}{W}\% = \frac{W \text{ of solute}}{W \text{ of solution}} \times 100$

$50 = \frac{W}{46} \times 100 \Rightarrow W = 23 \text{ gm}$

100. Ans (1)

$\alpha = \frac{\Lambda_m^C}{\Lambda_m^o}$

SUBJECT : BOTANY

SECTION - A

101. Ans (2)

NCERT XII Pg # 74

102. Ans (3)

NCERT XII Pg # 112

103. Ans (2)

NCERT XII Pg # 111

104. Ans (4)

NCERT XII Pg # 90, 91

105. Ans (1)

NCERT XII Pg # 118

106. Ans (3)

NCERT XII Pg # 106

107. Ans (3)

NCERT XII Pg # 86

108. Ans (3)

NCERT XII Pg # 83 last para

109. Ans (2)

NCERT XII Pg # 96

110. Ans (3)

NCERT XII Pg # 174

111. Ans (4)

NCERT XII Pg # 171

112. Ans (4)
NCERT XI Pg # 75 & 79

113. Ans (3)
NCERT XI Pg # 71

114. Ans (2)
NCERT XI Pg # 75, 79, fig. 5.21 (a), (d) and (f)

115. Ans (2)
NCERT XI Pg # 93, 94 Fig. 6.8 a

116. Ans (4)
NCERT XII Pg # 30, fig. 2.1 (a), 34, 36, 38, 39
Nucellar adventive embryony is found in Citrus and mango.

117. Ans (3)
NCERT XII Pg # 25

118. Ans (4)
NCERT XII Pg # 27, 29, 31, 34

119. Ans (3)
NCERT XI Pg # 178, Table 11.1

120. Ans (4)
NCERT XI Pg # 211, Fig. 13.4

121. Ans (2)
NCERT XI Pg # 231, Pyruvic acid

122. Ans (4)
NCERT XII Pg # 244

123. Ans (2)
NCERT XII Pg # 264

124. Ans (1)
NCERT XII Pg # 263

125. Ans (3)
NCERT XII Pg # 271

126. Ans (4)
NCERT XII 272

127. Ans (3)
NCERT Pg # 243, 246-247

128. Ans (2)
NCERT XII Pg # 220 Fig. 13.1

129. Ans (3)
NCERT XI Pg # 133, 135, 137, 138

130. Ans (2)
NCERT XI Pg # 128, 132

131. Ans (2)
NCERT Pg # 167, 171

132. Ans (3)
NCERT XI Pg # 11 Table

133. Ans (4)
NCERT Pg # 21, 23, 24

134. Ans (1)
NCERT XI Pg # 34

135. Ans (2)
NCERT XI Pg # 30

SECTION - B

136. Ans (2)
NCERT XII Pg # 83

137. Ans (3)
NCERT XII Pg # 187

138. Ans (1)
NCERT XII Pg # 116

139. Ans (4)
NCERT XI Pg # 75, 81
Axile placentation is found in Aloe, Colchicum, Onion, *Asparagus* and *Gloriosa* and Lemon.

140. Ans (4)
NCERT XI Pg # 88, 96, 97

141. Ans (2)
NCERT XII Pg # 4

142. Ans (3)
NCERT XII Pg # 21, 26

143. Ans (3)
NCERT XI Pg # 197

144. Ans (4)
NCERT Pg # 218

145. Ans (3)
NCERT Pg # 244 Fig. 15.7

146. **Ans (1)**
NCERT XII Pg # 236

147. **Ans (3)**
NCERT XII Pg # 263

148. **Ans (1)**
NCERT XI Pg # 167, 168
B and F are true.

149. **Ans (1)**
NCERT XI Pg # 26

150. **Ans (3)**
NCERT XI Pg # 38, 39

SUBJECT : ZOOLOGY

SECTION - A

151. **Ans (3)**
NCERT XIIth, Page # 155

152. **Ans (2)**
NCERT XIIth, Page # 158, 159

153. **Ans (3)**
NCERT XIth, Page 143

154. **Ans (4)**
NCERT XI Page # 147

155. **Ans (2)**
NCERT XI Page # 144

156. **Ans (4)**
NCERT, Page # 64

157. **Ans (1)**
NCERT Page # 60

158. **Ans (3)**
NCERT Page # 44

160. **Ans (1)**
NCERT Page # 271

161. **Ans (1)**
NCERT Page # 275

162. **Ans (3)**
NCERT Page # 289

163. **Ans (3)**
NCERT Page # 285

164. **Ans (1)**
NCERT Page # 102

165. **Ans (1)**
NCERT Page # 258

166. **Ans (1)**
NCERT Page # 260

167. **Ans (4)**
NCERT Page # 262

168. **Ans (3)**
NCERT Page # 298

169. **Ans (4)**
NCERT Page # 312

170. **Ans (1)**
NCERT Page # 131

171. **Ans (3)**
NCERT Page # 132

172. **Ans (3)**
NCERT Page # 196

173. **Ans (2)**
NCERT Page # 211

174. **Ans (2)**
NCERT Page # 197 Last para

175. **Ans (2)**
NCERT Page # 200

176. **Ans (1)**
NCERT, Page # 49(E), 48(H)

177. **Ans (1)**
NCERT, Page # 51

178. **Ans (4)**
NCERT Page # 57

179. **Ans (1)**
NCERT Page # 114(E), 115 (H)

180. **Ans (4)**
NCERT Page # 116(E), 117(H)

181. **Ans (4)**
NCERT Page # 321(E), 320(H)

182. **Ans (1)**
NCERT Page # 323

183. **Ans (3)**
NCERT Page # 331

184. **Ans (4)**
NCERT Page # 335(E), 336(H)

185. **Ans (3)**
NCERT Page # 335/336(E), 336(H)

SECTION - B

186. **Ans (2)**
NCERT XII Page # 149

187. **Ans (4)**
NCERT Biomolecules (152, 153)

188. **Ans (3)**
NCERT Page # 52

189. **Ans (3)**
NCERT Page # 272

190. **Ans (4)**
NCERT Page # 282

191. **Ans (2)**
NCERT Page # 294

192. **Ans (3)**
NCERT Page # 103

193. **Ans (1)**
NCERT Page # 313

194. **Ans (4)**
NCERT Page # 133
Hints: Except mole and lemur

195. **Ans (3)**
NCERT Page # 211 & 213

196. **Ans (3)**
NCERT Page # 211 & 213

198. **Ans (3)**
NCERT Page # 114 and 115(E)