

RANK BOOSTER TEST SERIES

TARGET : PRE-MEDICAL 2022

Test Type : REVIEW TEST

Test Pattern : NEET (UG)

TEST DATE : 27-02-2022

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.	2	4	2	4	4	1	3	3	4	3	3	3	2	2	4	2	2	3	4	3	2	2	1	2	2	2	2	3	3	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.	1	2	3	2	3	1	2	3	1	3	2	1	2	1	3	4	1	3	4	2	4	4	1	3	2	3	1	2	3	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	4	3	2	2	2	2	1	2	3	4	3	4	3	4	2	3	1	2	3	2	4	3	2	1	4	3	4	3
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.	3	2	2	4	3	3	1	3	3	4	1	2	2	3	2	4	3	1	1	1	1	2	2	2	3	1	3	3	2	1
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	1	3	2	1	1	3	4	1	3	2	2	1	4	3	2	3	3	4	2	3	2	1	3	2	4	2	4	2	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.	4	1	4	2	3	4	2	2	3	2	1	2	2	3	4	4	1	4	2	4	4	4	2	2	3	3	3	3	3	4
Q.	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200										
A.	3	2	1	4	1	3	4	3	3	3	3	4	1	2	3	2	2	3	1	2										

HINT - SHEET

SUBJECT : PHYSICS

SECTION-A

1. **Ans (2)**

Sum of n term of A.P. $S_n = \frac{n}{2}[2a + (n-1)d]$

here $n = 16, a = 4, d = 4$

$$S = \frac{16}{2}(2 \times 4 + (16-1)4)$$

$$= 544$$

2. **Ans (4)**

$$a = \frac{dv}{dt} = 2(t-1)$$

$$\int_0^v dv = \int_0^{10} 2(t-1) dt$$

$$V = 2 \left[\frac{t^2}{2} - t \right]_0^{10}$$

$$= 2 \times 40 = 80 \text{ m/s}$$

3. **Ans (2)**

$$\sqrt{(0.4)^2 + (0.8)^2 + \lambda^2} = 1$$

$$\lambda = \sqrt{0.2}$$

4. **Ans (4)**

If $\vec{A}$ is parallel to $\vec{B}$ then

$$\vec{A} \times \vec{B} = \vec{0} \text{ and } \hat{A} \times \hat{B} = \vec{0} \text{ also}$$

$$\vec{A} = a_1 \hat{i} + a_2 \hat{j} + a_3 \hat{k}$$

$$\vec{B} = b_1 \hat{i} + b_2 \hat{j} + b_3 \hat{k}$$

$$\vec{A} \times \vec{B} = \begin{vmatrix} \hat{i} & \hat{j} & \hat{k} \\ a_1 & a_2 & a_3 \\ b_1 & b_2 & b_3 \end{vmatrix}$$

$$= \hat{i}(a_2 b_3 - b_2 a_3) - \hat{j}(a_1 b_3 - b_1 a_3) + \hat{k}(a_1 b_2 - b_1 a_2) = \vec{0}$$

$$\text{It gives } \frac{a_1}{b_1} = \frac{a_2}{b_2} = \frac{a_3}{b_3}$$

5. **Ans (4)**

$$\text{Acceleration} = \frac{\text{distance}}{\text{time}^2} \Rightarrow A = LT^{-2}$$

$$\Rightarrow L = AT^2$$

6. **Ans (1)**

$$A = 2.5 \text{ m/s} \quad \Delta A = 0.5 \text{ m/s}$$

$$B = 0.10 \text{ s} \quad \Delta B = 0.01 \text{ sec}$$

$$\text{Let } X = AB$$

$$\frac{\Delta X}{X} = \frac{\Delta A}{A} + \frac{\Delta B}{B}$$

$$\frac{\Delta X}{2.5 \times 0.10} = \frac{0.5}{2.5} + \frac{0.01}{0.10}$$

$$\Delta X = \left(\frac{0.5}{2.5} + \frac{0.01}{0.10} \right) \times 2.5 \times 0.10$$

$$\Delta X = (0.2 + 0.1) \times 0.25$$

$$\Delta X = 0.075 = 0.08 \quad (\text{Rounding off})$$

$$\text{So } X' = X \pm \Delta X$$

$$= (0.25 \pm 0.08) \text{ m}$$

7. **Ans (3)**

$$\vec{v} = \vec{u} + \vec{a}t = (3\hat{i} + 4\hat{j}) + (0.4\hat{i} + 0.3\hat{j})(10)$$

$$= 7\hat{i} + 7\hat{j}$$

$$\text{So speed} = |\vec{v}| = 7\sqrt{2} \text{ units}$$

8. **Ans (3)**

From given v-t graph we observe that rocket start at $t = 0$ and its velocity again become zero at $t = 100 \text{ s}$ which is at maximum height, so area under given v-t graph is equal to total displacement (= maximum height)

$$H_{\max} = \left(\frac{1}{2} \times 100 \times 1000 \right) \text{ m}$$

$$= (1000 \times 50) \text{ m}$$

9. **Ans (4)**

$$h = \frac{u^2 \sin^2 \theta}{2g} \quad \text{and} \quad R = \frac{u^2 \sin 2\theta}{g}$$

$$\frac{45}{180} = \frac{1}{4} \tan \theta \quad \text{or} \quad \theta = 45^\circ$$

10. **Ans (3)**

Constant velocity means zero acceleration, no change in level of liquid.

11. **Ans (3)**

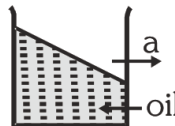
$$T_1 - (12 + 8)g = (12 + 8)(2.2)$$

$$T_1 = 20 \times 9.8 + 20 \times 2.2$$

$$T_1 = 196 + 44$$

$$T_1 = 240 \text{ N}$$

12. **Ans (3)**



14. **Ans (2)**

$$P = Fv = mav \Rightarrow \frac{P}{m} = \frac{v dv}{dt}$$

$$\Rightarrow \int v dv = \int \frac{P}{m} dt \Rightarrow v \propto t^{1/2} \Rightarrow x \propto t^{3/2}$$

15. **Ans (4)**

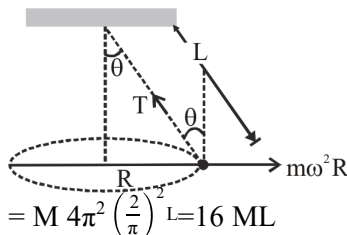
$$T \sin \theta = M\omega^2 R \quad \dots(i)$$

$$T \sin \theta = M\omega^2 L \sin \theta \quad \dots(ii)$$

From (i) and (ii)

$$T = M\omega^2 L$$

$$= M 4\pi^2 n^2 L$$



$$= M 4\pi^2 \left(\frac{2}{\pi} \right)^2 L = 16 ML$$

17. **Ans (2)**

Mass of particle might be different.

18. **Ans (3)**

$$\vec{a}_{CM} = \frac{M_1 \vec{a}_1 + M_2 \vec{a}_2}{M_1 + M_2}$$

$$a_{CM} = \frac{M(0) + M(a)}{M + M}$$

$$a_{CM} = \frac{a}{2}$$

19. **Ans (4)**

$$F = \frac{kQ_1 Q_2}{R^2} \Rightarrow F = \frac{k(Q-q)(q)}{R^2} \Rightarrow F = \frac{k(Qq - q^2)}{R^2}$$

$$\Rightarrow \frac{dF}{dq} = 0$$

$$\Rightarrow \frac{k}{R^2} \frac{d}{dq} (Qq - q^2) = 0 \Rightarrow Q - 2q = 0$$

$$q = \frac{Q}{2}$$

$$\text{So, } Q_1 = q = \frac{Q}{2} \quad \& \quad Q_2 = Q - q = \frac{Q}{2}$$

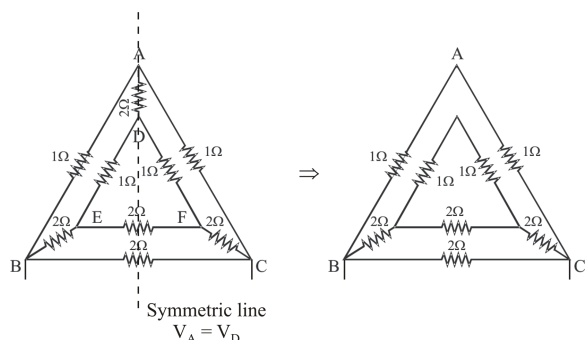
$$Q_1 = Q_2 = \frac{Q}{2}$$

22. **Ans (2)**

$$6 = \frac{q}{4\pi r^2} \frac{\sigma_1}{\sigma_2} = \left(\frac{r_2}{r_1} \right)^2$$

24. **Ans (2)**

By symmetry method/image method



25. **Ans (2)**

$$R_S = \frac{V}{I_g} - R_g = \frac{20}{0.01} - 20 = 20 \times 99$$

$$= 1980 \Omega$$

26. **Ans (2)**

Let Q be amount of heat required to heat m mass of water

$$\text{For first heater power } P_1 = \frac{Q}{t_1}$$

$$\text{For second heater power } P_2 = \frac{Q}{t_2}$$

when connected in parallel

$$P_{eq} = P_1 + P_2$$

$$\frac{Q}{t_{eq}} = \frac{Q}{t_1} + \frac{Q}{t_2} \Rightarrow t_{eq} = \frac{t_1 t_2}{t_1 + t_2}$$

$$\Rightarrow t_{eq} = \frac{10 \times 20}{10 + 20}$$

$$= \frac{20}{3} \text{ minutes}$$

28. **Ans (3)**

Voltage across capacitor = 2.5 V

$$\text{So } Q = CV_c = (5 \times 10^{-6}) (2.5)$$

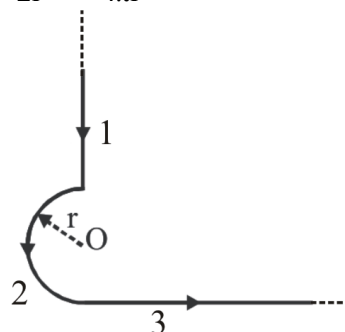
$$= 12.5 \mu C$$

29. **Ans (3)**

$$\vec{B}_0 = \vec{B}_1 + \vec{B}_2 + \vec{B}_3$$

$$\vec{B}_1 = 0; \vec{B}_2 = \frac{\mu_0 I}{2r} \odot; \vec{B}_3 = \frac{\mu_0 I}{4\pi r} \odot$$

$$B_0 = 0 + \frac{\mu_0 I}{2r} + \frac{\mu_0 I}{4\pi r}$$



30. **Ans (4)**

$$B_A = \frac{\mu_0 n I}{2} = B \quad \dots (1)$$

$$B_C = \frac{\mu_0 n \left(\frac{I}{4} \right)}{2} = \frac{B}{4}$$

31. **Ans (1)**

$$q = \sigma(2\pi ad)$$

$$I = qf$$

$$= \sigma(2\pi ad)f$$

$$B = \frac{\mu_0 I}{2r}$$

$$= \frac{\mu_0}{2a} \sigma 2\pi adf$$

$$= \mu_0 \sigma \pi df = \pi \mu_0 f \sigma d$$

32. **Ans (2)**

In order to obtain the neutral point at the centre of a current circular coil, the magnetic field produced by the coil must be equal to B_H in magnitude and directed opposite to $\vec{B}_H$.

$$B = \frac{\mu_0 N i}{2R} = B_H$$

$$\therefore i = \frac{2RB_H}{\mu_0 N} = \frac{2 \times 0.1 \times 0.314 \times 10^{-4}}{4\pi \times 10^{-7} \times 10}$$

$$= 0.5 \text{ A}$$

33. **Ans (3)**

$$e_0 = NBA\omega$$

$$= 60 \times 5 \times 20 \times 10 \times 10^{-4} \times 2 \times \pi \times \frac{1800}{60} = 113 \text{ V}$$

34. **Ans (2)**

Electrostatic field lines never form a closed loop.

35. **Ans (3)**

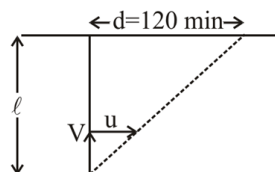
Efficiency $\eta =$

$$\frac{P_{\text{out}}}{P_{\text{in}}} \times 100 = \frac{140}{240 \times 0.7} \times 100 = 83.3\%$$

SECTION-B

36. **Ans (1)**

minimum time $t = 10 \text{ min}$



$v \rightarrow$ swimming speed

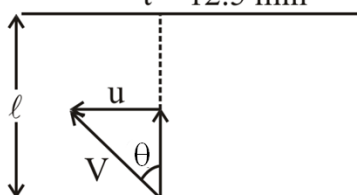
$u \rightarrow$ river speed

$$120 = u \times 10 \text{ min}$$

$$\Rightarrow u = 12 \text{ m/min}$$

$$\frac{l}{v} = 10 \text{ min} \quad \dots(1)$$

Shortest path
 $t = 12.5 \text{ min}$



$$\frac{l}{v \cos \theta} = 12.5 \text{ min} \quad \dots(2)$$

$$\frac{(1)}{(2)} \Rightarrow \cos \theta = \frac{10}{12.5} = \frac{4}{5}$$

$$\& V \sin \theta = u$$

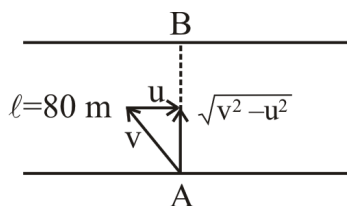
$$V = \frac{u}{\sin \theta} = \frac{12 \text{ m/min}}{3/5} = 20 \text{ m/min}$$

37. **Ans (2)**

For shortest distance

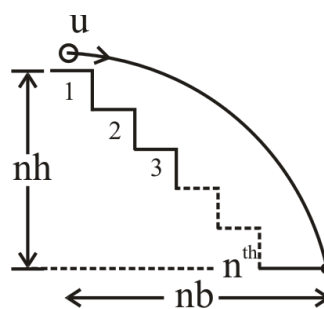
$$v = 10 \text{ m/s}$$

$$u = 6 \text{ m/s}$$



$$t = \frac{l}{\sqrt{v^2 - u^2}} = \frac{80}{\sqrt{(10)^2 - (6)^2}} = \frac{80}{8} = 10 \text{ second}$$

38. **Ans (3)**



$$\text{Range } R = u \sqrt{\frac{2H}{g}}$$

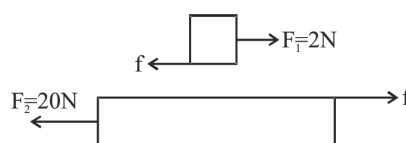
$$nb = u \sqrt{\frac{2(nh)}{g}}$$

$$\Rightarrow n^2 b^2 = u^2 \times \frac{2(nh)}{g}$$

$$n = \frac{2hu^2}{gb^2}$$

39. **Ans (1)**

Free body diagrams of the two bodies are as follows:



Let acceleration of both the blocks towards left is a. Then

$$a = \frac{f - 2}{2} = \frac{20 - f}{4}$$

$$\text{or } 2f - 4 = 20 - f$$

$$\text{or } 3f = 24 \quad \text{or } f = 8 \text{ N}$$

Maximum friction between two blocks can be:

$$f_{\text{max}} = \mu mg = 0.5 \times 2 \times 10 = 10 \text{ N}$$

Now since, $f < f_{\text{max}}$

Therefore, friction force between the two blocks is 8 N.

40. **Ans (3)**

$$U = \frac{F^2}{2k} \Rightarrow \frac{U_1}{U_2} = \frac{k_2}{k_1} \quad [\text{If force are same}]$$

$$\therefore \frac{U_1}{U_2} = \frac{3000}{1500} = \frac{2}{1}$$

41. Ans (2)

Let R be the radius of the circle; then,

$$\text{velocity at B} = \sqrt{5gR}$$

$$\text{or } \sqrt{2g\ell} = \sqrt{5gR}$$

$$\text{or } R = \frac{2}{5}\ell$$

$$\text{But, } d + R = \ell \text{ or } d + \frac{2}{5}\ell = \ell$$

$$\text{or } d = \ell - \frac{2}{5}\ell = 0.6\ell.$$

42. Ans (1)

By conservation of momentum

$$mu + M(0) = m\left(\frac{u}{2}\right) + M\sqrt{5g\ell}$$

$$\frac{mu}{2} = M\sqrt{5g\ell} \Rightarrow u = \frac{2M}{m}\sqrt{5g\ell}$$

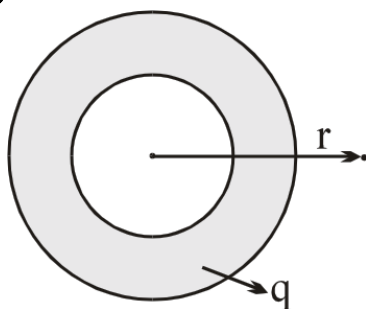
43. Ans (2)

$$\vec{E}_{\text{axis}} = \frac{2kP}{r^3} \Rightarrow \vec{E}_0 = \frac{2kP}{r^3} \Rightarrow \frac{kP}{r^3} = \frac{\vec{E}_0}{2}$$

$$\text{Now, } \vec{E}_{\text{equ.}} = \frac{-kP}{(r^1)^3} \text{ if } r^1 = 2r$$

$$\begin{aligned} \Rightarrow \vec{E}_{\text{equ.}} &= \frac{-kP}{(2r)^3} \Rightarrow E_{\text{equ.}} = \frac{-1}{8} \frac{kP}{r^3} \\ &= \frac{-1}{8} \times \frac{\vec{E}_0}{2} \\ &= -\frac{\vec{E}_0}{16} \end{aligned}$$

44. Ans (1)



$$q = \left(\frac{Q}{(4/3)\pi R^3} \right) \left(\frac{4}{3}\pi(R^3 - d^3) \right)$$

$$= \frac{Q(R^3 - d^3)}{R^3}$$

$$V = \frac{1}{4\pi\epsilon_0} \frac{q}{r}$$

$$= \frac{1}{4\pi\epsilon_0} \frac{Q(R^3 - d^3)}{rR^3}$$

45. Ans (3)

$$i_1 + i_2 + i_3 = 0$$

$$\Rightarrow \frac{10 - V}{10} + \frac{6 - V}{20} + \frac{5 - V}{30} = 0$$

$$\Rightarrow 6(10 - V) + 3(6 - V) + 2(5 - V) = 0$$

$$\Rightarrow 88 - 11V = 0, V = 8 \text{ volt}$$

46. Ans (4)

As resistance of ideal moving coil voltmeter is infinite, so No current will flow in circuit and given voltmeter measure Potential difference across cell which is equal to emf of cell. ($\therefore I = 0$)

47. Ans (1)

$$\frac{1}{C_{\text{eq}}} = \frac{1}{2\mu} + \frac{1}{3\mu} + \frac{1}{6\mu} \Rightarrow C_{\text{eq}} = 1\mu\text{F}$$

$$\begin{aligned} \text{Charge on each capacitor } Q &= C_{\text{eq}} V \\ &= 1\mu \times 24 \\ &= 24 \mu\text{c} \end{aligned}$$

Potential difference between plates of $6\mu\text{F}$

$$\begin{aligned} \text{Capacitor } V' &= \frac{Q}{6\mu} \Rightarrow V' = \frac{24\mu}{6\mu} \\ V' &= 4 \text{ volt} \end{aligned}$$

48. Ans (3)

Magnetic force on charge is given by

$$\vec{F} = q(\vec{V} \times \vec{B}) = qVB \sin \theta$$

where $\vec{V} \neq 0$ i.e. charge is moving

$$\theta \neq 0^\circ$$

49. Ans (4)

Like poles together

$$T_1 = 2\pi \sqrt{\frac{(I_1 + I_2)}{(m_1 + m_2) B_H}}$$

Unlike poles together

$$T_2 = 2\pi \sqrt{\frac{I_1 + I_2}{(m_1 - m_2) B_H}}$$

SUBJECT : CHEMISTRY

SECTION-A

51. Ans (4)

3σ & $3\ell p$ species (i.e. XeF_3^-) are nonexisting.

ClF_7 , $\text{SiCl}_6^{2-} \Rightarrow$ Not exist due to steric hinderence.

52. **Ans (4)**

$H_2O < HF$; H bond strength
 $HF < H_2O$; extent of H bond
 $HF < H_2O$; order of M.P
 $H_2O > HF$; order of B.P

53. **Ans (1)**

Urea $\Rightarrow$ Intermolecular H bond

54. **Ans (3)**

$\delta^+ \delta^-$ $\delta^+ \delta^-$
 $H-Cl - - - H-Cl \Rightarrow$ weak dipole-dipole attraction.

55. **Ans (2)**

Size of Cl $>$ F
 $\therefore P-Cl > P-F$ (B.L.)
Bond angle ; $\theta_1 > \theta_2$

56. **Ans (3)**

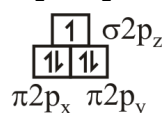
Number of ions and electronic structure are same so, NaF, MgO are isomorphous.

57. **Ans (1)**

$O_2^+ = 15 e^- \rightarrow$ Bond order = 2.5
Bond length $\propto \frac{1}{\text{Bond order}}$

58. **Ans (2)**

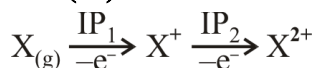
$N_2^+, C_2^- \Rightarrow 13e^-$; B.O = 2.5



59. **Ans (3)**

101 $\rightarrow$ Md (Mendelevium)
105 $\rightarrow$ Db (Dubnium)
109 $\rightarrow$ Mt (Meitnerium)
115 $\rightarrow$ Mc (Moscovium)

60. **Ans (1)**



61. **Ans (3)**

EN of Al = 1.5
Be = 1.5
diagonal relationship

62. **Ans (1)**

$\Delta H_{eg1} \Rightarrow S > Se > Te > O$

63. **Ans (4)**

Atomic size $\Rightarrow$
 $B < Ga < Al < In < Tl$
T.C

64. **Ans (3)**

$Ga_2O_3 \rightarrow$ Amphoteric oxide

65. **Ans (2)**

Biggest jump between
3rd 4th I.P ($\therefore$ 3 valence e^-)
So, element is B ($1s^2 2s^2 2p^1$)

66. **Ans (2)**

$_{57}La = [Xe] 6s^2, 5d^1$

67. **Ans (2)**

$_{71}Lu = [Xe] 6s^2 4f^{14} 5d^1$
unpaired e^- s = 1

68. **Ans (2)**

$$W = 8 \times \frac{1}{8} = 1$$

$$O = 12 \times \frac{1}{4} = 3$$

$$Na = 1 \times 1 = 1$$



69. **Ans (1)**

$$d = \frac{Z \times M}{a^3 \times 6.02 \times 10^{23}}$$

$$Z = \frac{d \times a^3 \times 6.02 \times 10^{23}}{M}$$

$$= \frac{4 \times 5.0^3 \times 10^{-24} \times 6.02 \times 10^{23}}{72}$$

$$= 4.18 \simeq 4$$

72. **Ans (4)**

$$\frac{p_A^0 - p_s}{p_s} = \frac{n_B}{n_A}$$

$$\frac{3/(M_w)_B}{19.5/78} = \frac{800 - 760}{760} = \frac{40}{760}$$

$$(M_w)_B = \frac{3 \times 760 \times 78}{19.5 \times 40} = 228 \text{ g}$$

74. **Ans (4)**



$$\alpha = \frac{\Lambda_M}{\Lambda_M^\infty} = \frac{4.8}{400} = 1.2 \times 10^{-2}$$

$$K_a = \frac{c\alpha^2}{(1-\alpha)} \simeq c\alpha^2 = 0.2 \times (1.2 \times 10^{-2})^2$$

$$= 2.88 \times 10^{-5}$$

75. **Ans (3)**

$$E_{\text{cell}} = -\frac{0.0591}{2} \log \frac{(0.01)^2 y}{(0.1)^2 x}$$

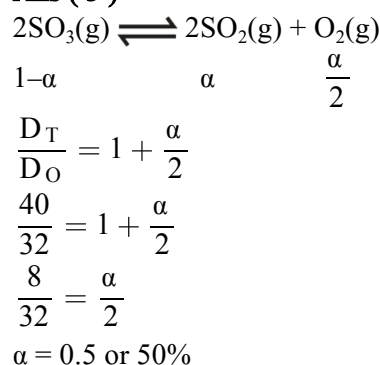
76. **Ans (4)**

$$\begin{aligned} \text{Unit of } k &= (\text{mol L}^{-1})^{1-n} \text{time}^{-1} \\ &= (\text{mol L}^{-1})^{-2} \text{min}^{-1} \\ &= \frac{\text{L}^2}{\text{mol}^2 \text{min}} \end{aligned}$$

77. **Ans (2)**

$$\begin{aligned} x &\rightarrow y + z(g) \\ t=20 & \quad 10\text{cc} \\ t=\infty & \quad 50\text{cc} \\ t_{1/2} &\propto [x], 1^{\text{st}} \text{ order} \\ K &= \frac{2.303}{t} \log \frac{[x]_0}{[x]_t} \\ &= \frac{2.303}{20} \log \frac{50}{50-10} \\ &= \frac{2.303}{20} \log 1.25 \end{aligned}$$

81. **Ans (3)**



85. **Ans (2)**

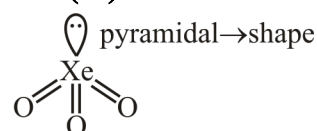
$$\begin{aligned} \text{Number of molecule} &= \frac{80}{16} = 5 \\ \text{Number of atoms} &= \text{molecule} \times \text{atomicity} \\ &= 5 \times 5 = 25 \end{aligned}$$

SECTION-B

86. **Ans (1)**

$\text{SO}_4^{2-} \rightarrow$ tetrahedral non-planar
 $\text{BrF}_3 \rightarrow$ T-shape Polar and planar
 $\text{IF}_5 \rightarrow$ Square pyramidal non planar & polar
 $\text{SO}_3 \rightarrow$ Trigonal planar & Non polar

87. **Ans (4)**



88. **Ans (3)**

As per M.O.T.

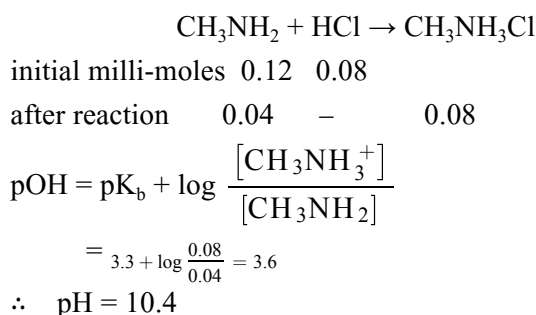
89. **Ans (4)**

Size $\Rightarrow \text{H}^- > \text{Li}^+ \geq \text{Mg}^{+2} > \text{Al}^{+3}$

90. **Ans (3)**

IE_1 of N $>$ IE_1 of O
 EA_1 of P $<$ EA_1 of S
 EN of $\underline{\text{C}}\text{H}_4 < \underline{\text{C}}\text{O}_2$

91. **Ans (3)**



92. **Ans (2)**

$$\begin{aligned} \therefore \Delta n_g &> 0 \\ \therefore \Delta S &> 0 \end{aligned}$$

93. **Ans (2)**

$$\begin{aligned} V_1 &= \frac{nRT}{P} = \frac{5 \times 0.0821 \times 300}{10} = 12.315 \text{ L} \\ V_2 &= 123.15 \text{ L} \\ w_{\text{im}} &= -P_{\text{ex}}(V_2 - V_1) \\ &= -1(123.15 - 12.315) \text{ L atm} \\ &= -110.835 \times 101.3 \text{ J} \\ &= -11.227 \text{ kJ} \end{aligned}$$

98. **Ans (3)**

$$g \text{ equivalent of } \text{H}_2\text{SO}_4 = 0.001 \times \frac{100}{1000} = 10^{-4}$$

99. **Ans (3)**

Element which has high negative SRP can replace element from its salt solution which has less negative SRP.

SUBJECT : BOTANY

SECTION-A

101. **Ans (1)**

NCERT-XI - Page No. 4

105. **Ans (2)**

NCERT XI, Page # 33

110. **Ans (1)**

NCERT-XI # Chapter - 5 ; Page No. 81

113. **Ans (2)**

NCERT-XI, Pg # 76; para-5.6 3rd paragraph-2 line

114. **Ans (2)**

NCERT XI, Pg, # 92

115. **Ans (3)**

NCERT Pg.#93

116. **Ans (1)**

NCERT Pg.#97, Fig.-6.10(a)

117. **Ans (3)**

NCERT-XI, Pg. # 130

118. **Ans (3)**

NCERT-XI, Pg#135

122. **Ans (1)**

NCERT Pg. # 163

124. **Ans (2)**

NCERT XI, Pg.# 179

127. **Ans (3)**

NCERT Eng. Page # 215 (3rd para)

129. **Ans (1)**

In one Kreb's cycle 2-CO₂ molecule release.
NCERT Pg # 232, Fig 14.3

SECTION-B

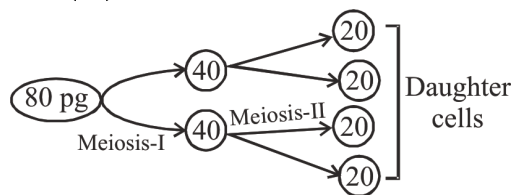
137. **Ans (3)**

NCERT XI(E)/(H) Page No. # 24

142. **Ans (2)**

NCERT XI, Page # 85

146. **Ans (4)**



148. **Ans (4)**

NCERT (XI) Pg. # 231

150. **Ans (3)**

NCERT-XI, Pg#212

SUBJECT : ZOOLOGY

SECTION-A

155. **Ans (3)**

NCERT Pg. # 53

157. **Ans (2)**

NCERT Pg. # 56

161. **Ans (1)**

NCERT XIth P.No. 101

162. **Ans (2)**

NCERT XI Pg # 103

163. **Ans (2)**

NCERT XI, Pg. # 103

SECTION-B

191. **Ans (3)**

NCERT XIth P.No. 112

199. **Ans (1)**

NCERT-XI Pg. # 304, 305