

## ENTHUSE COURSE

PHASE : MEA,B,C,D,F,G,H,L,M,N,O,P,Q,R,S,U,V

TARGET : PRE-MEDICAL 2025

Test Type : SRG-MAJOR

Test Pattern : NEET (UG)

TEST DATE : 04-01-2025

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

### HINT - SHEET

#### SUBJECT : PHYSICS

#### SECTION - A

1. Ans (3)

$$\Delta \ell_1 = \Delta \ell_2$$

$$\ell_1 \alpha_a t = \ell_2 \alpha_s t$$

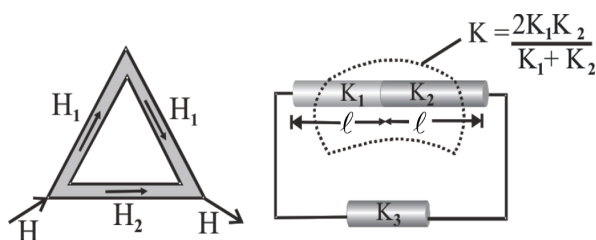
$$\ell_2 = \frac{\ell_1 \alpha_a}{\alpha_s}$$

Now,

$$\Rightarrow \frac{\ell_1}{\ell_1 + \ell_2} = \frac{\ell_1}{\ell_1 + \frac{\alpha_a}{\alpha_s} \ell_1} = \frac{\alpha_s}{\alpha_a + \alpha_s}$$

2. Ans (3)

The given arrangement of rods can be redrawn as follows



It is given that  $H_1 = H_2$

$$\Rightarrow \frac{KA(\theta_1 - \theta_2)}{2\ell} = \frac{K_3A(\theta_1 - \theta_2)}{\ell}$$

$$\Rightarrow K_3 = \frac{K}{2} = \frac{K_1K_2}{K_1 + K_2}$$

3. **Ans (1)**

$$\frac{\theta_1 - \theta_2}{t} = K \left[ \frac{\theta_1 + \theta_2}{2} - \theta_0 \right]$$

$$61^\circ\text{C to } 59^\circ\text{C} \Rightarrow \frac{61 - 59}{10} = K \left[ \frac{61 + 59}{2} - 30 \right]$$

$$K = \frac{1}{150}$$

$$51^\circ\text{C to } 49^\circ\text{C} \Rightarrow$$

$$\frac{51 - 49}{t} = \frac{1}{150} \left[ \frac{51 + 49}{2} - 30 \right]$$

$$t = 15 \text{ min}$$

4. **Ans (4)**

- (i)  $T = \text{constant}$   
 $PV = \text{constant}$   
 $\therefore P \uparrow \Rightarrow V \downarrow \Rightarrow \rho \uparrow$
- (ii)  $P = \text{constant} \Rightarrow V \propto T$   
 $\therefore T \uparrow \Rightarrow V \uparrow \Rightarrow \rho \downarrow$
- (iii)  $P \propto T \Rightarrow V = \text{constant} \Rightarrow \rho = \text{constant}$

5. **Ans (4)**

P-T graph is a straight line passing through origin.  
 Therefore,  $V = \text{constant}$ .

$\therefore$  work done on the gas = 0.

$$\text{Further, } \rho = \frac{m}{V} \propto \frac{1}{V}$$

Volume of the gas is constant. Therefore, density of gas is also constant.

$$PV = nRT$$

$$\text{or } P = \left( \frac{nR}{V} \right) T$$

i.e., slope of P-T graph (i.e., line AB)  $\propto n$

6. **Ans (3)**

$$T = \frac{PV}{nR}$$

$$P^2V = \text{const.}$$

$$PV^{1/2} = \text{const.}$$

$$x = \frac{1}{2}$$

$$C = \frac{3R}{2} + \frac{R}{1 - \frac{1}{2}} = \frac{3R}{2} + 2R = \frac{7R}{2} = 3.5R$$

7. **Ans (4)**

FLOT for iaf

$$Q = U_f - U_i + W$$

$$U_f - U_i = Q - W = 80 - 60 = 20 \text{ cal}$$

$$U_i - U_f = -20 \text{ cal}$$

FLOT for fi

$$Q = U_i - U_f + W$$

$$= -20 - 30 = -50 \text{ cal}$$

8. **Ans (1)**

Average molecular speed,  $V \propto \sqrt{T}$

$$T \propto PV$$

$$T_1 : T_2 : T_3 = P_1 V_1 : P_2 V_2 : P_3 V_3$$

$$= P_0 V_0 : 4P_0 V_0 : 4P_0 V_0$$

$$= 1 : 4 : 4$$

$$\text{So, } V_1 : V_2 : V_3 = \sqrt{T_1} : \sqrt{T_2} : \sqrt{T_3}$$

$$= \sqrt{1} : \sqrt{4} : \sqrt{4} = 1 : 2 : 2$$

9. **Ans (2)**

Given :  $A = 25 \text{ cm}$ ,  $T = 3 \text{ s}$

Time required to move from position  $-\frac{A}{2}$  to  $+\frac{A}{2}$

$$\left( \text{where, } \frac{A}{2} = 12.5 \text{ cm} \right) = 0.5 \text{ s}$$

10. **Ans (2)**

$$Mg = Kx_1 \quad \dots\dots\dots (1)$$

$$(M + m)g = Kx_2 \quad \dots\dots\dots (2)$$

subtract eqn. (1) from eqn. (2)

$$mg = K(x_2 - x_1) = Kx$$

$$K = \frac{mg}{x}$$

$$\text{Time period, } T = 2\pi \sqrt{\frac{(M + m)}{K}}$$

$$T = 2\pi \sqrt{\frac{(M + m)x}{mg}}$$

11. **Ans (4)**

$$\frac{f + 6}{f - 6} = \frac{100}{95}$$

$$95f + 95 \times 6 = 100f - 600$$

$$570 + 600 = 5f$$

$$f = 234 \text{ Hz}$$

12. **Ans (1)**

$$y = \frac{4}{3x^2 + 48t^2 + 24xt + 2}$$

$$= \frac{4}{3[x^2 + 16t^2 + 8xt] + 2}$$

$$y = \frac{4}{3(x + 4t)^2 + 2}$$

$\therefore$  velocity of wave

$$= \frac{\text{coefficient of } t}{\text{coefficient of } x} = \frac{4m}{1s} = 4\text{m/s}$$

13. Ans (2)

String is vibrating in its 5<sup>th</sup> harmonic.

No. of nodes = 6

$$k = \frac{2\pi}{\lambda} = 62.8 \Rightarrow \lambda = \frac{6.28}{62.8} = \frac{1}{10} = 0.1 \text{ m}$$

$$\text{Length of string, } \ell = \frac{5\lambda}{2} = \frac{5 \times 0.1}{2} = 0.25 \text{ m}$$

Maximum displacement of mid-point of string = 0.01 m

$$\text{Fundamental frequency, } n = \frac{v}{2\ell}$$

$$\Rightarrow n = \frac{1}{2\ell} \times \frac{\omega}{k} = \frac{1}{2 \times 0.25} \times \frac{628}{62.8}$$

$$\Rightarrow n = 20 \text{ Hz}$$

14. Ans (2)

$$\rho_{O_2} = 16\rho_{H_2}$$

$$\rho_{\text{mix}} = \frac{V\rho_{O_2} + V\rho_{H_2}}{V + V}$$

$$= \rho_{H_2} \times \frac{(1 \times 16) + (1 \times 1)}{1 + 1} = \frac{17}{2} \rho_{H_2}$$

$$\text{Now, } \frac{v_{\text{mix}}}{v_{O_2}} = \sqrt{\frac{\rho_{O_2}}{\rho_{\text{mix}}}} = \sqrt{\frac{16}{\frac{17}{2}}} = \sqrt{\frac{32}{17}}$$

15. Ans (4)

At is dimensionless, so,  $[At] = 1 \Rightarrow [A] = [T^{-1}]$ .

$$\text{Also } [x] = \left[ \frac{A}{B} \right], \text{ so, } [B] = [L^{-1}T^{-1}]$$

$$\text{Therefore, } \left[ \frac{A^3}{B} \right] = \left[ \frac{T^{-3}}{L^{-1}T^{-1}} \right] = [LT^{-2}]$$

16. Ans (1)

In case of projectile motion as at the highest point

$(v)_{\text{vertical}} = 0$  and  $(v)_{\text{horizontal}} = v \cos \theta$ ,

the initial linear momentum of the system there, will be  $mv \cos \theta$ .

Now, as force of blasting is internal and force of gravity is vertical, so linear momentum of the system along horizontal is conserved, i.e.,

$$p_1 + p_2 = mv \cos \theta \text{ or } m_1 v_1 + m_2 v_2 = mv \cos \theta$$

But, it is given that  $m_1 = m_2 = \frac{m}{2}$  and as one part retraces its path,  $v_1 = -v \cos \theta$

$$\therefore \frac{1}{2} m(-v \cos \theta) + \frac{1}{2} m v_2 = mv \cos \theta$$

Solving, we get ;  $v_2 = 3v \cos \theta$

17. Ans (1)

$$\text{L.C.} = \frac{\frac{1}{2} \text{ mm}}{50} = \frac{1}{100} \text{ mm}$$

$$\text{Diameter} = 3 \text{ mm} + 35(.01 \text{ mm}) + 0.03 \text{ mm} = 3.38 \text{ mm}$$

18. Ans (3)

$$X = \frac{2k^3 \ell^2}{m\sqrt{n}}$$

$$\Rightarrow \frac{\Delta X}{X} = \frac{3\Delta k}{k} + \frac{2\Delta \ell}{\ell} + \frac{\Delta m}{m} + \frac{1}{2} \frac{\Delta n}{n}$$

$$\Rightarrow \% \text{ Error} = 3(1) + 2(2) + 3 + \frac{1}{2}(4) = 12\%$$

19. Ans (4)

$$T = \frac{2U_y}{g}, H_{\text{max}} = \frac{U_y^2}{2g} \Rightarrow \text{same, } U_y \Rightarrow \text{same}$$

$$T \Rightarrow \text{same}$$

$$\text{Range} = U_x T$$

$$R_C > R_B > R_A$$

$$U_{xC} > U_{xB} > U_{xA}$$

$$U = \sqrt{U_x^2 + U_y^2}$$

$$U_C > U_B > U_A$$

20. Ans (4)

required vector =  $A \cos \theta \hat{A}$

$$= \frac{\vec{A} \cdot \vec{B}}{|\vec{B}| |\vec{A}|} \hat{A} \quad (\theta = \text{angle b/w } A \text{ \& } B)$$

$$= \frac{(2 - 2 + 6)}{3} \frac{(\hat{i} + 2\hat{j} + 3\hat{k})}{\sqrt{14}}$$

$$= \frac{2}{\sqrt{14}}(\hat{i} + 2\hat{j} + 3\hat{k})$$

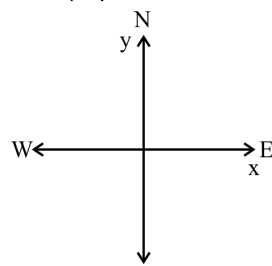
21. Ans (3)

Component of velocity perpendicular to line AB must be equal.

$$20 \sin \theta = 20 \sin 30^\circ$$

$$\theta = 30^\circ$$

22. Ans (4)



$$\vec{F}_1 + \vec{F}_2 + \vec{F}_3 = 8\hat{i} + 6\hat{j} \text{ N}$$

So,  $\vec{F}_n = -8\hat{i} \text{ N}$  (i.e.,  $|\vec{F}_n| = 8 \text{ N}$ ) is required for resultant to be along north.

23. Ans (4)

$$v_1 = \frac{v_A}{2}, v_2 = \frac{v_A + v_B}{2}$$

$$v_3 = \frac{v_B}{2} = \frac{2[v_2 - v_1]}{2}$$

24. Ans (3)

Time taken by first stone to reach maximum

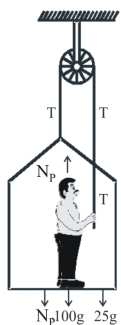
$$\text{height, } t = \frac{u}{g} = \frac{50}{10} = 5 \text{ sec.}$$

So velocity of second stone at  $t = 5$  sec,

$$v = u + at = 50 + 10 \times 5$$

$$= 100 \text{ m/s}$$

25. Ans (2)



equation for painter & crate system.

$$2T - 125g = 125a \dots (1)$$

equation for painter

$$N_p + T - 100g = 100a \quad (N_p = 450 \text{ N})$$

$$T - 550 = 100a \dots (2)$$

from equation (1) & (2)

$$a = 2 \text{ m/sec}^2$$

26. Ans (1)

$$T = \frac{2m_1m_2}{(m_1 + m_2)}(g + a) = \frac{2m_1m_2(g + g)}{m_1 + m_2}$$

$$= \frac{4w_1w_2}{w_1 + w_2}$$

27. Ans (1)

$$T = m_1a = m_2g$$

$$a = \frac{m_2g}{m_1} = \frac{F}{(m_1 + m_2 + M)}$$

$$F = (m_1 + m_2 + M) \frac{m_2g}{m_1}$$

28. Ans (1)

Here, limiting frictional force,  $f_L = \mu R$

$$= \mu mg \cos \theta$$

$$= 0.7 \times 2 \times 9.8 \cos 30^\circ$$

$$= 0.7 \times 2 \times 9.8 \times 0.866$$

$$= 11.9 \text{ N}$$

$$F_R = mg \sin 30^\circ$$

$$= 2 \times 9.8 \times 1/2 = 9.8 \text{ N}$$

$$\therefore f_L > F_R$$

$\therefore$  Friction force present will be 9.8 N.

29. Ans (1)

$$P = \frac{dW}{dt} \Rightarrow \int P dt = \int dW$$

$$Pt = \frac{1}{2}mv^2 ; t = \frac{mv^2}{2P}$$

30. Ans (1)

$$\text{By symmetry, } x_{CM} = \frac{\ell}{2}$$

$$y_{cm} = \frac{2m\left(\frac{\ell}{2}\right) + m(\ell) + 2m\left(\frac{3\ell}{2}\right) + m(2\ell)}{6m} = \frac{7\ell}{6}$$

31. Ans (4)

$$W = \int F_x dx + \int F_y dy$$

$$= \int_3^5 6x dx + \int_8^{-4} 2y dy = \left[ \frac{6x^2}{2} \right]_3^5 + \left[ \frac{2y^2}{2} \right]_8^{-4}$$

$$= \left[ 3(5)^2 - 3(3)^2 \right] + \left[ (-4)^2 - (8)^2 \right]$$

$$= 75 - 27 + 16 - 64 = 0$$

32. Ans (4)

$$\text{Tension at mean position, } mg + \frac{mv^2}{\ell} = 3mg$$

$$v = \sqrt{2g\ell} \dots (i)$$

and if the body displaces by angle  $\theta$  with the vertical, then  $v = \sqrt{2g\ell(1 - \cos \theta)} \dots (ii)$

Comparing (i) and (ii),  $\cos \theta = 0 \Rightarrow \theta = 90^\circ$ .

33. Ans (2)

$$T \sin \theta = m_A (L \sin \theta) \omega^2$$

$$T = m_A L \omega^2 = m_B g$$

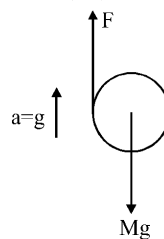
$$\omega^2 = \frac{m_B g}{m_A L} = \frac{5 \times 10}{4 \times 2}$$

$$\omega = 2.5 \text{ rad/s}$$

34. Ans (2)

$$1 = \frac{10 - V_1}{-20 - 10} \Rightarrow V_1 = 40 \text{ m/s}$$

35. Ans (4)



$$F - Mg = Mg \Rightarrow F = 2Mg$$

$$FR = I\alpha = \frac{MR^2}{2}\alpha \Rightarrow F = \frac{M}{2}(R\alpha)$$

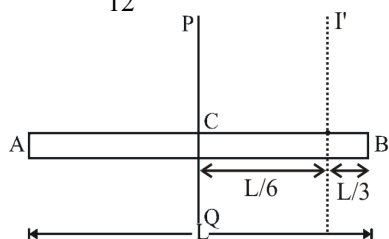
$$\Rightarrow \frac{2(2Mg)}{M} = R\alpha \Rightarrow R\alpha = 4g$$

SECTION - B

36. Ans (3)

Moment of inertia of the rod about a perpendicular axis PQ passing through the centre of the mass C,

$$I_{CM} = \frac{ML^2}{12}$$



$$I' = I_{CM} + M \left( \frac{L}{6} \right)^2 = \frac{ML^2}{12} + \frac{ML^2}{36} = \frac{ML^2}{9}$$

If K be the radius of gyration, then

$$K = \sqrt{\frac{I'}{M}} = \sqrt{\frac{L^2}{9}} = \frac{L}{3}$$

37. Ans (2)

acceleration of point of contact =  $\omega^2 R \neq 0$

38. Ans (2)

Let water equivalent of calorimeter is

$$W = ms$$

From principle of calorimetry

Heat gained by calorimeter water = Heat loss by hot water

$$W(35-30) + 0.2 \times 4200 \times (35-30) = 0.1 \times 4200 (60-35)$$

$$\Rightarrow W(5) + 4200 = 10500 \Rightarrow W = ms = 1260 \text{ J/k}$$

39. Ans (1)

$$\frac{\lambda}{4} = \ell_1 + e \text{ \& } \frac{3\lambda}{4} = \ell_2 + e$$

$$\Rightarrow \lambda = 2(\ell_2 - \ell_1)$$

speed of sound =  $f\lambda$

$$v = 512 \times 2 \times 34 \times 10^{-2} \approx 348 \text{ m/s}$$

40. Ans (3)

$$mg \ell_2 = 16 g \ell_1 \dots\dots(i)$$

$$mg \ell_1 = 4g \ell_2 \dots\dots(ii)$$

$$\Rightarrow \frac{16}{m} = \frac{m}{4} \Rightarrow m = 8 \text{ kg}$$

41. Ans (2)

$$\text{Here } B = 6\pi\eta\rho v$$

$$\Rightarrow \frac{4}{3}\pi r^3 \rho g = 6\pi\eta r v \Rightarrow \eta = \frac{2r^2 g \rho}{9v}$$

Put the values and get  $\eta = 1.66 \times 10^3$  poise

42. Ans (4)

Both assertion and reason are false as elasticity is proportional to the resistance to deformation within the range of Hook's law or elastic limit. Young's modulus is large for steel as it undergoes lesser strain for same load as compared to rubber. Rubber is more stretchable but for less elastic. Term elasticity should not be confused with amount of stretching.

43. Ans (3)

$$\text{diameter } d_1 = 3.0 \times 10^{-3} \text{ m}, d_2 = 6.0 \times 10^{-3} \text{ m}$$

$$\text{In one limb } h_1 = \frac{4T}{d_1 \rho g} \text{ and in other limb } h_2 = \frac{4T}{d_2 \rho g}$$

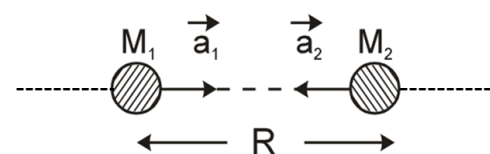
$$\Delta h = h_1 - h_2 = \frac{4T}{\rho g} \left[ \frac{1}{d_1} - \frac{1}{d_2} \right]$$

$$= \frac{(4)(72 \times 10^{-3})}{10^3 \times 10} \left[ \frac{1}{3} - \frac{1}{6} \right] \times 10^3$$

$$\Delta h = \frac{(4)(72)}{6} \times 10^{-4} \text{ m}$$

$$= 4.8 \times 10^{-3} \text{ m} = 4.8 \text{ mm}$$

44. Ans (2)



$$a_1 = \frac{GM_1 M_2}{R^2} / M_1 \quad a_2 = \frac{GM_1 M_2}{R^2} / M_2$$

$$a_{\text{rel.}} = a_1 + a_2$$

$$= \frac{G(M_1 + M_2)}{R^2} = \frac{GM}{R^2}$$

45. Ans (3)

By conservation of energy

$$\frac{-GM_e m}{R_e} + \frac{1}{2} m (nV_e)^2 = \frac{-GM_e m}{(R_e + h)}$$

$$\frac{-GM_e m}{R_e} + \frac{1}{2} m n^2 \frac{2GM_e}{R_e} = \frac{-GM_e m}{(R_e + h)}$$

$$\frac{1}{R_e} [n^2 - 1] = \frac{-1}{R_e + h}$$

$$R_e + h = \frac{-R_e}{n^2 - 1}$$

$$h = \frac{R_e}{1 - n^2} - R_e ; h = R_e \left[ \frac{n^2}{1 - n^2} \right]$$

Alternate :

$$h = \frac{V_e^2 R}{V_e^2 - V^2} = \frac{(nV_e)^2 R}{V_e^2 - (nV_e)^2} = \frac{n^2 R}{1 - n^2}$$

46. Ans (3)

$$P_{N_2} = 6 \text{ atm} ; P_{O_2} + P_{N_2} = 9 \text{ atm}$$

$$P_{O_2} = 3 \text{ atm}$$

$$PV = \mu RT$$

$$V, R, T = \text{Const.} \Rightarrow P \propto \mu$$

47. Ans (4)

$$\frac{mvR}{\frac{1}{2}mv^2} \text{ where } v = \sqrt{\frac{GM}{R}}$$

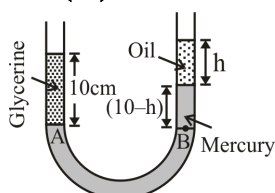
48. Ans (2)

$$\frac{W}{m_0} = \vec{I} \cdot d\vec{r} ; d\vec{r} = 5\hat{i} + 4\hat{j}$$

$$\frac{W}{2} = 10(\hat{i} + \hat{j}) \cdot (5\hat{i} + 4\hat{j})$$

$$W = 2(50 + 40) \text{ J}$$

49. Ans (4)



$$P_A = P_B$$

$$(1.3)g(10) = (0.8)gh + (13.6)g(10-h)$$

$$13 = 0.8h + 136 - 13.6h$$

$$12.8h = 123$$

$$h = \frac{123}{12.8} = 9.6 \text{ cm}$$

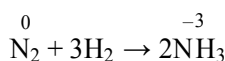
50. Ans (2)

$$\frac{t_1}{t_2} = \frac{\sqrt{H} - \sqrt{\frac{H}{4}}}{\sqrt{\frac{H}{4}} - 0} = 1$$

## SUBJECT : CHEMISTRY

### SECTION - A

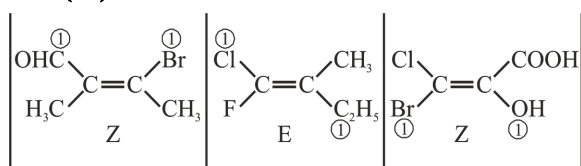
56. Ans (4)



60. Ans (2)

Enthalpy of neutralisation is  $-57.2 \text{ kJ eq}^{-1}$  for a strong acid and a strong base.

68. Ans (1)



70. Ans (3)

Stability of free radical  $\propto +M, +H, +I$

$$\propto \frac{1}{-M, -H, -I}$$

72. Ans (2)

Rate  $\propto$  Stability of Carbanion

77. Ans (2)

NCERT Pg. No. # 87 Part-I

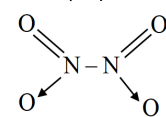
78. Ans (3)

NCERT Pg. No. # 86 Part-I

79. Ans (3)

NCERT Pg. No. # 94, Part-I

80. Ans (3)



only  $p\pi - p\pi$  bond

81. Ans (4)

NCERT Pg. No. # 132, Part-I

82. Ans (1)

NCERT Pg. No. # 112, Part-I

83. Ans (4)

NCERT Pg. No. # 116, 117, Part-I

84. Ans (4)

NCERT Pg. No. # 131, Part-I

85. Ans (2)

NCERT Pg. No. # 131, 132, Part-I

### SECTION - B

87. Ans (2)

NCERT Pg. # 187

88. Ans (3)

$$\begin{aligned} X &\rightleftharpoons 2Y & Z &\rightleftharpoons P + Q \\ \therefore \alpha_1^2 &= \frac{KP_1}{4P_1} & \therefore \alpha_2^2 &= \frac{KP_2}{P_2} \\ \alpha_1 &= \sqrt{\frac{KP_1}{4P_1}} & \alpha_2 &= \sqrt{\frac{KP_2}{P_2}} \\ \therefore \alpha_1 &= 2\alpha_2 \\ \sqrt{\frac{KP_1}{4P_1}} &= 2\sqrt{\frac{KP_2}{P_2}} \Rightarrow \frac{KP_1}{4P_1} &= & \frac{KP_2}{P_2} \\ &= 4 \times \frac{KP_2}{P_2} \Rightarrow \frac{P_1}{P_2} = \frac{KP_1}{16 \times KP_2} \\ &= & \frac{1}{64} \end{aligned}$$

90. Ans (2)

$$\Delta H = (BE)_{\text{reactant}} - (BE)_{\text{product}}$$

96. Ans (1)

NCERT Pg. No. # 88 Part-I

97. Ans (4)

NCERT Pg. No. # 90 Part-I

98. Ans (2)

NCERT Pg. No. # 90, Part-I

99. Ans (3)

NCERT Pg. No. # 105, Part-I

100. Ans (1)

NCERT Pg. No. # 112, Part-I

**SUBJECT : BOTANY****SECTION - A**

101. Ans (4)

NCERT-XI Pg. No. # 127

102. Ans (1)

NCERT (XI) Pg # 122

103. Ans (4)

NCERT XI Pg. # 126

104. Ans (3)

NCERT-XI Pg. No. # 88

105. Ans (2)

XI-NCERT Page No. # 96

106. Ans (4)

NCERT-XI, Pg # 7

107. Ans (2)

NCERT-XI, Pg. # 4

108. Ans (3)

NCERT-XI Page No. 4,5

109. Ans (1)

NCERT - XI Pg. No. - 21

110. Ans (3)

XI NCERT Pg. No. # 12

111. Ans (2)

NCERT-XI Pg. # 27, 28, 135

112. Ans (3)

NCERT XI Pg. # 13,14

113. Ans (1)

NCERT XI, Pg. # 17

114. Ans (4)

NCERT XI, Pg # 27, 31, 32

115. Ans (4)

NCERT XI, Pg # 29

116. Ans (1)

NCERT-XI, Pg. # 14, 29, 33

117. Ans (2)

NCERT-XI, Pg. # 12,14,16,21

118. Ans (2)

NCERT Pg. # 87,88,126

119. Ans (2)

NCERT-XI, Pg. # 100, 93, 121, 125

120. Ans (3)

NCERT, Pg # 121,123,91,94

121. Ans (4)

NCERT-XI, Pg. # 117

122. Ans (4)

NCERT XI Pg # 113, 114

123. Ans (3)

NCERT-XI, Pg. # 118

124. Ans (4)

NCERT-XI Pg. # 140

125. Ans (4)

NCERT-XI, Pg # 141

126. Ans (3)

NCERT-XI, Pg # 136

127. Ans (2)

NCERT XI Pg # 143, 144

128. Ans (2)

NCERT-XI, Pg. # 157

129. Ans (1)

NCERT-XI Pg. No. # 157

130. Ans (1)

NCERT-XI, Pg. # 159

131. Ans (1)

NCERT-XI Pg. # 159

132. Ans (4)

NCERT-XI Pg. # 176

133. **Ans ( 2 )**  
NCERT-XI Pg. # 170

134. **Ans ( 2 )**  
NCERT-XI, Pg. # 177

135. **Ans ( 3 )**  
NCERT XI Pg. # 176, 177

**SECTION - B**

136. **Ans ( 4 )**  
NCERT-XI, Pg. 94

137. **Ans ( 3 )**  
NCERT-XI, Pg. # 99

138. **Ans ( 1 )**  
XI-NCERT Page No. # 95

139. **Ans ( 4 )**  
NCERT XI Pg. # 98, 99

140. **Ans ( 3 )**  
NCERT-XI, Pg. # 5

141. **Ans ( 2 )**  
NCERT-XI, Pg. # 32

142. **Ans ( 2 )**  
NCERT-XI Pg. # 13, 14

143. **Ans ( 3 )**  
NCERT-XI Page No. 24

144. **Ans ( 3 )**  
NCERT-XI, Pg. # 110

145. **Ans ( 4 )**  
NCERT Pg. # 110

146. **Ans ( 4 )**  
NCERT XI Pg : 111-112

147. **Ans ( 2 )**  
NCERT-XI Pg. # 173

148. **Ans ( 4 )**  
NCERT-XI Pg. No. # 168

149. **Ans ( 4 )**  
NCERT-XI Pg. No. # 169

150. **Ans ( 3 )**  
NCERT-XI Pg. # 158, 159

**SUBJECT : ZOOLOGY**

**SECTION - A**

152. **Ans ( 2 )**  
NCERT-XII, Pg. # 50 & 60

153. **Ans ( 2 )**  
NCERT Page No. # 50

162. **Ans ( 3 )**  
NCERT, Pg # 279

164. **Ans ( 2 )**  
NCERT-XII, Pg. # 188, 189

169. **Ans ( 2 )**  
NCERT Pg. # 211

172. **Ans ( 1 )**  
NCERT Pg. # 317 (21.3.1)

175. **Ans ( 1 )**  
NCERT Pg. # 337

176. **Ans ( 1 )**  
NCERT Pg. No. # 333 to 337

177. **Ans ( 3 )**  
NCERT Pg. # 335

182. **Ans ( 2 )**  
NCERT-XI, Pg. # 225, 226

183. **Ans ( 1 )**  
NCERT Pg. No. # 302(E), 303(H)

**SECTION - B**

187. **Ans ( 2 )**  
NCERT Pg. No. # 303

188. **Ans ( 2 )**  
NCERT, Pg # 46 to 48

190. **Ans ( 2 )**  
NCERT Pg. # 101

193. **Ans ( 1 )**  
Atherosclerosis affects coronary blood supply.

195. **Ans ( 3 )**  
NCERT Pg. # 190

196. **Ans ( 2 )**  
NCERT Pg. # 275

198. **Ans ( 4 )**  
NCERT Pg. No. # 319