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DIVISION: PRE-MEDICAL
Academic session: 2023-24

PERIODIC ASSESSMENT TEST (PAT)

STUDENT SUPPORT BOOKLET (SSB)

Answer Key (AK) | Standard Hints (SH) | Text Solutions (TS) | Weightage Sheet (WS)

CLASS	XII	COURSE NAME	SAMPOORN	COURSE CODE	MD
PHASE CODE(S)	03MD	TOTAL PAGES	12	BATCH CODE(S)	03MD

Target Examination & Year:

NEET 2025

TEST PATTERN	TEST TYPE	TEST CODE & SEQUENCE
NEET	PART TEST (PT)	PT-4

DATE & DAY:
01st October 2023 | Sunday

Duration & Time:
200 Minutes | 11:30 AM to 02:50 PM

Contents:

- Weightage Sheet (WS) ✓
- Answer Key (AK) ✓
- Standard Hints (SH)
- Text Solutions (TS) ✓
- Resonance Student's Critical Analysis of Learning for Excellence (ResoSCALE)
- Student Self Assessment Sheet (SAS)
- Video Solutions (VS)

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ANSWER KEY (AK)

PAPER											
PART-A : CHEMISTRY	Q.No.	1	2	3	4	5	6	7	8	9	10
	Ans.	1	2	2	2	1	2	2	1	2	2
	Q.No.	11	12	13	14	15	16	17	18	19	20
	Ans.	1	3	2	3	1	4	4	4	2	2
	Q.No.	21	22	23	24	25	26	27	28	29	30
	Ans.	3	1	1	2	2	4	1	2	2	3
	Q.No.	31	32	33	34	35	36	37	38	39	40
	Ans.	3	3	2	2	4	4	3	1	4	1
	Q.No.	41	42	43	44	45	46	47	48	49	50
	Ans.	2	2	1	1	1	1	1	1	3	4
PART-B : PHYSICS	Q.No.	51	52	53	54	55	56	57	58	59	60
	Ans.	2	1	3	1	2	4	2	4	3	1
	Q.No.	61	62	63	64	65	66	67	68	69	70
	Ans.	2	3	3	1	3	4	4	1	2	4
	Q.No.	71	72	73	74	75	76	77	78	79	80
	Ans.	3	3	2	4	2	3	2	3	2	4
	Q.No.	81	82	83	84	85	86	87	88	89	90
	Ans.	4	2	1	2	2	1	2	4	4	4
	Q.No.	91	92	93	94	95	96	97	98	99	100
	Ans.	1	3	1	3	4	1	3	1	1	3
PART-C : BIOLOGY	Q.No.	101	102	103	104	105	106	107	108	109	110
	Ans.	1	1	2	2	3	3	4	4	1	4
	Q.No.	111	112	113	114	115	116	117	118	119	120
	Ans.	1	1	1	2	2	1	1	3	4	4
	Q.No.	121	122	123	124	125	126	127	128	129	130
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	Q.No.	131	132	133	134	135	136	137	138	139	140
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	Q.No.	141	142	143	144	145	146	147	148	149	150
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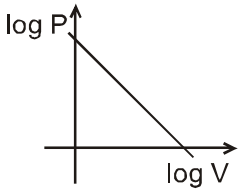
	Q.No.	151	152	153	154	155	156	157	158	159	160
	Ans.	3	4	1	1	1	2	4	1	3	4
	Q.No.	161	162	163	164	165	166	167	168	169	170
	Ans.	1	4	1	4	1	1	1	1	2	4
	Q.No.	171	172	173	174	175	176	177	178	179	180
	Ans.	2	4	2	3	3	1	1	2	4	2
	Q.No.	181	182	183	184	185	186	187	188	189	190
	Ans.	2	1	4	4	3	1	4	2	1	3
	Q.No.	191	192	193	194	195	196	197	198	199	200
	Ans.	3	4	2	1	4	1	3	1	3	3

STUDENT'S SPACE

PAPER

PART-A: CHEMISTRY

1.



2. $\frac{r_{O_2}}{r_{CH_4}} = \frac{n_{O_2}}{n_{CH_4}}\sqrt{\frac{M_{CH_4}}{M_{O_2}}}$

$\frac{r_{O_2}}{r_{CH_4}} = \frac{3\times16}{32\times2}\times\sqrt{\frac{16}{32}} = \frac{3}{4\sqrt{2}}$

3. $Z = \frac{PV_m}{RT} > 1$

$\frac{PV_m}{RT} = \frac{1\times22.4}{R\times T}$

At same pressure = 1 atm.

$\frac{1\times V_m}{RT} > \frac{1\times22.4}{R\times T}$

$\Rightarrow$ $V_m > 22.4$ L at STP for real gas.

For, $V_m = 22.4$ L of real gas, we have to increase the pressure.

$Z = \frac{PV_m}{RT} > 1$

$\frac{PV_m}{RT} = \frac{1\times22.4}{R\times T}$

समान दाब पर = 1 atm.

$\frac{1\times V_m}{RT} > \frac{1\times22.4}{R\times T}$

$\Rightarrow$ STP पर वास्तविक गैस के लिए $V_m > 22.4$ L

वास्तविक गैस के लिए, $V_m = 22.4$ L हमें दाब बढ़ाना पड़ेगा।

4. same as that of hydrogen molecules

हाइड्रोजन अणुओं के समान

5. Order of Vander waals constant $CO_2 > CH_4 > N_2 > H_2$

ease of liqufication $CO_2 > CH_4 > N_2 > H_2$

वॉण्डर वॉल्स स्थिरांकों का क्रम $CO_2 > CH_4 > N_2 > H_2$

द्रवीकरण की सुगमता $CO_2 > CH_4 > N_2 > H_2$

6. near the HCl bottle

HCl बोतल के निकट

7. $V_{rms,SO_2} = V_{rms,O_2}$ (Given)

$\frac{V_{rms,SO_2}}{V_{O_2}} = \sqrt{\frac{T_{SO_2}}{T_{O_2}}\times\frac{M_{O_2}}{M_{SO_2}}}$

$1 = \sqrt{\frac{T_{SO_2}}{303}\times\frac{32}{64}}$

$T_{SO_2} = 606$ K.

8. Critical temperature is a temperature above which it is not possible to liquefy a gas with the application of pressure.

9. Intermolecular force like attraction force 'a' for which gas behave like a real gas but not idealy.

10. Average KE $= \frac{3}{2}\times\frac{8.314\times300}{6.023\times10^{23}} = 6.21\times10^{-21}$ J/molecule.

औसत गतिज ऊर्जा $= \frac{3}{2}\times\frac{8.314\times300}{6.023\times10^{23}} = 6.21\times10^{-21}$ J/molecule.

11. Initially, partial pressures were equal. As $r\propto\sqrt{1/d}$ or $\sqrt{1/M}$, therefore amounts diffused out in the same time will be $H_2 > CH_4 > SO_2$. Amounts left will be $H_2 < CH_4 < SO_4$ or $SO_2 > CH_4 > H_2$. Hence $p_{SO_2} > p_{CH_4} > p_{CH_4} > p_{H_2}$.

प्रारम्भ में, आंशिक दाब समान थे। चूँकि $r\propto\sqrt{1/d}$ अथवा $\sqrt{1/M}$, इसलिए समान समय में विसरित हुई मात्रा $H_2 > CH_4 > SO_2$ होगी। शेष बची मात्रा $H_2 < CH_4 < SO_4$ अथवा $SO_2 > CH_4 > H_2$ होगी। अतः $p_{SO_2} > p_{CH_4} > p_{CH_4} > p_{H_2}$.

12. Volume of 1 mole of H_2 gas at STP is less then 22.4 litre.

STP पर H_2 गैस के 1 mole का आयतन 22.4 litre से कम होता है।

13. $Z > 1$

14. New gas may have pressure equal to sum of both reacting gases or less or more depending on the reacting gases and product formed.

नयी गैस का दाब दोनों क्रियाशील गैसों के दाब के बराबर या कम या अधिक हो सकता है।

15. $\frac{n_1T_1}{P_1} = \frac{n_2T_2}{P_2}$

$\therefore \quad \frac{1\times 300}{2.46} = \frac{n_2 \times 400}{1}$

$\therefore \quad n_2 = 0.3$

$\therefore$ Mass of oxygen left बची हुई ऑक्सीजन का भार = $0.3 \times 32 = 9.6$ g

$\therefore$ Mass of oxygen escaped ऑक्सीजन का निष्कासित भार = $1 \times 32 - 9.6 = 22.4$ g.

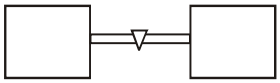
16. Using equation of state $\frac{P_1V_1}{T_1} = \frac{P_2V_2}{T_2}$. So,

$\frac{1\times 2.5}{300} = \frac{1.5\times 2.0}{T}$ $\quad T = 360$ K or 87ºC

अवस्था के समीकरण $\frac{P_1V_1}{T_1} = \frac{P_2V_2}{T_2}$. को प्रयुक्त करने पर, $\frac{1\times 2.5}{300} = \frac{1.5\times 2.0}{T}$ $\quad T = 360$ K या 87ºC

17. $\frac{n_1T_1}{P_1} = \frac{n_2T_2}{P_2}$

$\Rightarrow \quad \frac{3\times 300}{3} = \frac{5\times 400}{P_2} \qquad P_2 = \frac{20}{3}$ atm

18. 

using conservation of moles मोल का संरक्षण रहेगा $\frac{1\times 3}{400} + \frac{3\times 2}{600} = \frac{P\times 5}{500}$

$\Rightarrow \quad P = \frac{20}{3}$ atm

19. $\frac{P_1V_1}{T_1} = \frac{P_2V_2}{T} \quad \therefore \quad \frac{P_1V_1}{P_2V_2} = \frac{T_1}{T_2}$

20. $d = \frac{PM}{RT} \Rightarrow \frac{d_1}{P_1M_1} = \frac{d_2}{P_2M_2}$

$\therefore \frac{2d}{2\times M_1} = \frac{d}{4\times 28}$

$\therefore M_1 = 112$

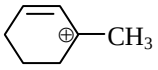
21. Nitroacetic acid
नाइट्रोएसीटीक अम्ल

22. $a > b > c$

23. I > II > III

24. III < II < I

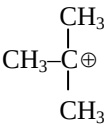
25. III > I > IV > II

26. 

27. $CH_3 - \overset{\overset{O}{\|}}{C} - CH_3$; $CH_3 - \overset{\overset{OH}{|}}{C} = CH_2$

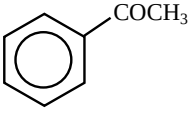
28. I > III > II

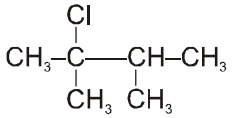
29. III > II > I > IV

30. 

31. III < II < I

32. d > a > c > b

33. 

34. 

36. At same T and P.

$$\frac{V_1}{V_2} = \frac{n_1}{n_2} = \frac{w_1/M_1}{w_2/M_2}$$

$$\therefore \frac{440\ m\ell}{320\ m\ell} = \frac{11}{8} = \frac{0.2g/M_1}{0.1g/44gmol^{-1}} = \frac{88}{M_1}g\ mol^{-1}$$

$\therefore M_1 = (88 \times 8/11)\ g\ mol^{-1} = 66g\ mol^{-1}$

Hence, the gas X coluld be SO_2.

समान T तथा P पर,

$$\frac{V_1}{V_2} = \frac{n_1}{n_2} = \frac{w_1/M_1}{w_2/M_2}$$

$$\therefore \frac{440\ m\ell}{320\ m\ell} = \frac{11}{8} = \frac{0.2g/M_1}{0.1g/44gmol^{-1}} = \frac{88}{M_1}g\ mol^{-1}$$

$\therefore M_1 = (88 \times 8/11)\ g\ mol^{-1} = 66g\ mol^{-1}$

इस प्रकार, गैस X, SO_2 हो सकती हैं।

37. $V \propto T$ (at constant n and P).

$V \propto T$ (नियत n व P पर)।

38. At constant T, (नियत ताप T पर) $P_1V_1 = P_2V_2$

$1 \times 20 = P_2 \times 50$; $P_2 = \frac{20}{50} \times 1$

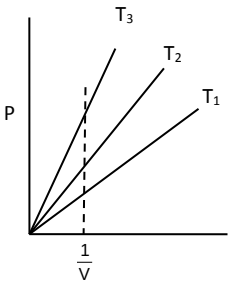
39. $P \propto \frac{1}{V}$

$P \times 250 = 1000 \times P'$

$P' = \frac{1}{4}P$

40. Boyles' Law

$P\alpha\frac{1}{V}$ [at constant Temperature and constant amount of gas.]



PV = nRT

for same value of $\frac{1}{V}$ higher the value of P, higher is temperature. So order of temperature.

$\Rightarrow T_3 > T_2 > T_1$

41. Covalent band is not intermolecular force of attraction it is band between two atom.
Apart from covalent bonding all the other given inter molecular forces will be included for interacting particles.

42. $PV = \left(P + \frac{1}{100}P\right)V_2$

$V_2 = \frac{PV}{\frac{101}{100}P}$ $\Rightarrow$ $V_2 = \frac{100}{101}V$

% decrease (% कमी) $= \frac{\frac{100}{101}V}{V} = \frac{100}{101}\%$

43. $P = P_A + P_B + P_C$

44. $P.P_{H2} = \frac{\frac{w}{2}}{\frac{w}{2}+\frac{w}{16}} \times P$ $\Rightarrow$

$P.P_{H2} = \frac{8}{9}P$

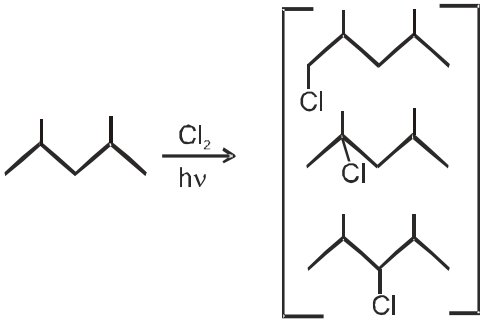
45. Rate of diffusion $\propto \frac{1}{\sqrt{\text{Molecular Mass}}}$

that is why H_2 gas diffuse first

विसर्जन की दर $\propto \frac{1}{\sqrt{\text{अणुभार}}}$

अतः H_2 पहले विसर्जित होगी।

46.



Total = 3

47. Refer to notes

48. It is Kolbe's electrolysis method.

$$CH_3-\underset{\|}{C}-COONa \xrightarrow{\text{Electrolysis}} CH_3-C\equiv C-CH_3$$
$$CH_3-\underset{\|}{C}-COONa$$

49. acidity order

50. On the basis of electronic effect. (इलेक्ट्रॉनीक प्रभाव के आधार पर)

PART-B: PHYSICS

51. Apparent weight
$= m(g-a) = 50(9.8-9.8) = 0$

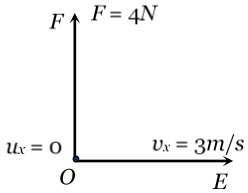
52. Kinetic energy $E = \frac{1}{2}mv^2 \Rightarrow E \propto v^2$
graph will be parabola symmetric to E-axis.

53. $\vec{F} = \frac{d\vec{p}}{dt} = \frac{d}{dt}(a+bt^2) = 2bt$ i.e. $F \propto t$

54. $W = \mu mgS = 0.2\times 50\times 9.8\times 1 = 98\ J$

55. $v = \sqrt{2gh} = \sqrt{2\times 9.8\times 0.1} = \sqrt{1.96} = 1.4\ m/s$

57. Displacement of body in 4 sec along OE
$s_x = v_x t = 3\times 4 = 12\ m$



Force along OF
(perpendicular to OE) = 4 N
$\therefore\ a_y = \frac{F}{m} = \frac{4}{2} = 2\ m/s^2$
Displacement of body in 4 sec along OF
$\Rightarrow s_y = u_y t + \frac{1}{2}a_y t^2 = \frac{1}{2}\times 2\times (4)^2 = 16\ m$
[As $u_y = 0$]
$\therefore$ Net displacement
$s = \sqrt{s_x^2 + s_y^2} = \sqrt{(12)^2 + (16)^2} = 20\ m$

58. $U \propto x^2$
$\Rightarrow \frac{U_2}{U_1} = \left(\frac{x_2}{x_1}\right)^2 = \left(\frac{0.1}{0.02}\right)^2 = 25\ \therefore U_2 = 25U$

59. $v = r\omega \Rightarrow \omega = \frac{v}{r}$ = constant
[As v and r are constant]

60. If x is the extension produced in spring.
$F = kx \Rightarrow x = \frac{F}{k} = \frac{mg}{k} = \frac{20\times 9.8}{4000} = 4.9\ cm$

61. $F = \frac{mv^2}{r}$,

62. $W = \frac{F^2}{2k}$
If both springs are stretched by same force then $W \propto \frac{1}{k}$
As $k_1 > k_2$ therefore $W_1 < W_2$
i.e. more work is done in case of second spring.

63. $u_y = 40\ m/s$, $F_y = -5N$, $m = 5\ kg$.
So $a_y = \frac{F_y}{m} = -1\ m/s^2$ (As $v = u + at$)
$\therefore\ v_y = 40 - 1\times t = 0 \Rightarrow t = 40\ sec$.

64. Refer to answer key

65. Resultant downward force along the incline
$= mg(\sin\theta - \mu\cos\theta)$
Normal reaction $= mg\cos\theta$
Given : $mg\cos\theta = 2mg(\sin\theta - \mu\cos\theta)$
By solving $\theta = 45^o$.

66. Kinetic energy for first condition
$= \frac{1}{2}m\left(v_2^2 - v_1^2\right) = \frac{1}{2}m\left(20^2 - 10^2\right) = 150\ mJ$

67. $120\ rev/min = 120\times\frac{2\pi}{60}\ rad/sec = 4\pi\ rad/sec$

68. When the distance between atoms is large then interatomic force is very weak. When they come closer, force of attraction increases and at a particular distance force becomes zero. When they are further brought closer force becomes repulsive in nature. This can be explained by slope of $U - x$ curve shown in graph (1).

69. $a = \frac{\text{Applied force} - \text{Kinetic friction}}{\text{mass}}$

$$= \frac{100 - 0.5 \times 10 \times 10}{10} = 5 m/s^2$$

70. Work done in the motion of a body over a closed loop is zero only when the body is moving under the action of conservative forces (like gravitational or electrostatic forces). i.e. work done depends upon the nature of force.

71. Maximum force of friction
= centripetal force

$$\frac{mv^2}{r} = \frac{100 \times (9)^2}{30} = 270 N$$

72. In uniform circular motion, acceleration causes due to change in direction and is directed radially towards centre.

73. We know $s = \frac{u^2}{2\mu g}$

$$\therefore \quad \mu = \frac{u^2}{2gs} = \frac{(6)^2}{2 \times 10 \times 9} = 0.2$$

74. In a round trip work done is zero only when the force is conservative in nature.
Force is always required to move a body in a conservative or non-conservative field

75. $U = A - Bx^2 \Rightarrow F = -\frac{dU}{dx} = 2Bx \Rightarrow F \propto x$

76. In uniform circular motion tangential acceleration remains zero but magnitude of radial acceleration remains constant.

77. $W = Fs = F \times \frac{1}{2} a t^2 \quad \left[from s = ut + \frac{1}{2} a t^2 \right]$

$$\Rightarrow W = F\left[\frac{1}{2}\left(\frac{F}{m}\right)t^2\right] = \frac{F^2 t^2}{2m} = \frac{25 \times (1)^2}{2 \times 15} = \frac{25}{30} = \frac{5}{6} J$$

78. $T = m(g + a) = 1000(9.8 + 1) = 10800 N$

79. Work done on the body = K.E. gained by the body $FS\cos\theta = 1 Joule$

$$\Rightarrow F\cos\theta = \frac{1}{s} = \frac{1}{0.4} = 2.5N$$

80. $W = \vec{F}.\vec{s} = (6\hat{i} + 2\hat{j} - 3\hat{k}).(2\hat{i} - 3\hat{j} + x\hat{k}) = 0$

$12 - 6 - 3x = 0 \Rightarrow x = 2$

81. The stopping distance, $S \propto u^2$

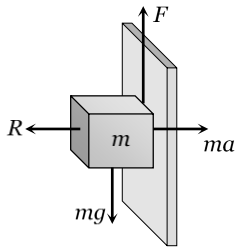
$(\because v^2 = u^2 - 2as)$

$$\Rightarrow \frac{S_2}{S_1} = \left(\frac{u_2}{u_1}\right)^2 = \left(\frac{120}{60}\right)^2 = 4$$

$$\Rightarrow S_2 = 4 \times S_1 = 4 \times 20 = 80 m$$

82. Work done = Area enclosed by F – x graph

83. For the limiting condition upward friction force between board and block will balance the weight of the block.]



i.e. $F > mg$

$\Rightarrow \mu(R) > mg$

$\Rightarrow \mu(ma) > mg$

$\Rightarrow \mu > \frac{g}{a}$

84. $F = ma = \frac{m(u - v)}{t} = \frac{2 \times (8 - 0)}{4} = 4N$

85. Since downward force along the inclined plane= $mg\sin\theta = 5 \times 10 \times \sin 30° =$ 25N

86. $m = \frac{F}{a} = \frac{\sqrt{6^2 + 8^2 + 10^2}}{1} = \sqrt{200} = 10\sqrt{2} kg$

87. Increment in angular velocity

$\omega = 2\pi(n_2 - n_1)$

$$\omega = 2\pi(1200 - 600)\frac{rad}{min} = \frac{2\pi \times 600}{60}\frac{rad}{s} = 20\pi\frac{rad}{s}$$

88. $\vec{a} = \frac{\vec{F}}{m}$. If $\vec{F} = 0$ then $\vec{a} = 0$.

89. The centripetal force, $F = \frac{mv^2}{r} \Rightarrow r = \frac{mv^2}{F}$

$\therefore \; r \propto v^2$ or $v \propto \sqrt{r}$

(If m and F are constant),

$$\Rightarrow \frac{v_1}{v_2} = \sqrt{\frac{r_1}{r_2}} = \sqrt{\frac{1}{2}}$$

90. Relative velocity of parrot with respect to train $= 5 - (-10) = 5 + 10 = 15\,m/sec$

Time taken by the parrot

$$= \frac{d}{v_{rel.}} = \frac{150}{15} = 10\,sec.$$

91. $W = \vec{F}.\vec{s} = 40 \times 8 \times \cos 60° = 160\,J$

92. Because horizontal velocity is same for coin and the observer. So relative horizontal displacement will be zero.

93. $U = -\int F dx = -\int kx\,dx = -k\frac{x^2}{2}$

This is the equation of parabola symmetric to U axis in negative direction

94. $\omega = \frac{d\theta}{dt} = \frac{d}{dt}(2t^3 + 0.5) = 6t^2$

at t =2 s, $\omega = 6 \times (2)^2 = 24\,rad/s$

95. $t = \sqrt{\frac{2h}{g}} = \sqrt{\frac{2 \times 396.9}{9.8}} \simeq 9\,sec$

and $u = 720\,km/hr = 200\,m/s$

$\therefore R = u \times t = 200 \times 9 = 1800\,m$

96. Limiting friction between block and slab $= \mu_s m_A g = 0.6 \times 10 \times 9.8 = 58.8\,N$

But applied force on block A is 100 N. So the block will slip over a slab.

Now kinetic friction works between block and slab $F_k = \mu_k m_A g = 0.4 \times 10 \times 9.8 = 39.2\,N$

This kinetic friction helps to move the slab

$\therefore$ Acceleration of slab

$$= \frac{39.2}{m_B} = \frac{39.2}{40} = 0.98\,m/s^2$$

97. Point J $\longrightarrow$ No equilibrium

K $\longrightarrow$ Unstable equilibrium

L $\longrightarrow$ Stable equilibrium

M $\longrightarrow$ Neutral equilibrium

98. Work done = Area covered in between force displacement curve and displacement axis

= Mass $\times$ Area covered in between acceleration-displacement curve and displacement axis.

$$= 10 \times \frac{1}{2}(8 \times 10^{-2} \times 20 \times 10^{-2}) = 8 \times 10^{-2}\,J$$

99. Work done $= \vec{F}.\vec{s}$

$$= (6\hat{i} + 2\hat{j}) \cdot (3\hat{i} - \hat{j}) = 6 \times 3 - 2 \times 1 = 18 - 2 = 16\,J$$

100. The vertical component of velocity of projection $= -50\sin 30° = -25\,m/s$

If t be the time taken to reach the ground,

$$h = ut + \frac{1}{2}gt^2 \Rightarrow 70 = -25t + \frac{1}{2} \times 10t^2$$

$$\Rightarrow 70 = -25t + 5t^2 \Rightarrow t^2 - 5t - 14 = 0 \Rightarrow t = -2s \text{ and } 7s$$

Since, t = – 2 s is not valid $\therefore$ t = 7 s

---- TEXT SOLUTIONS (TS) END ----

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Educating for better tomorrow

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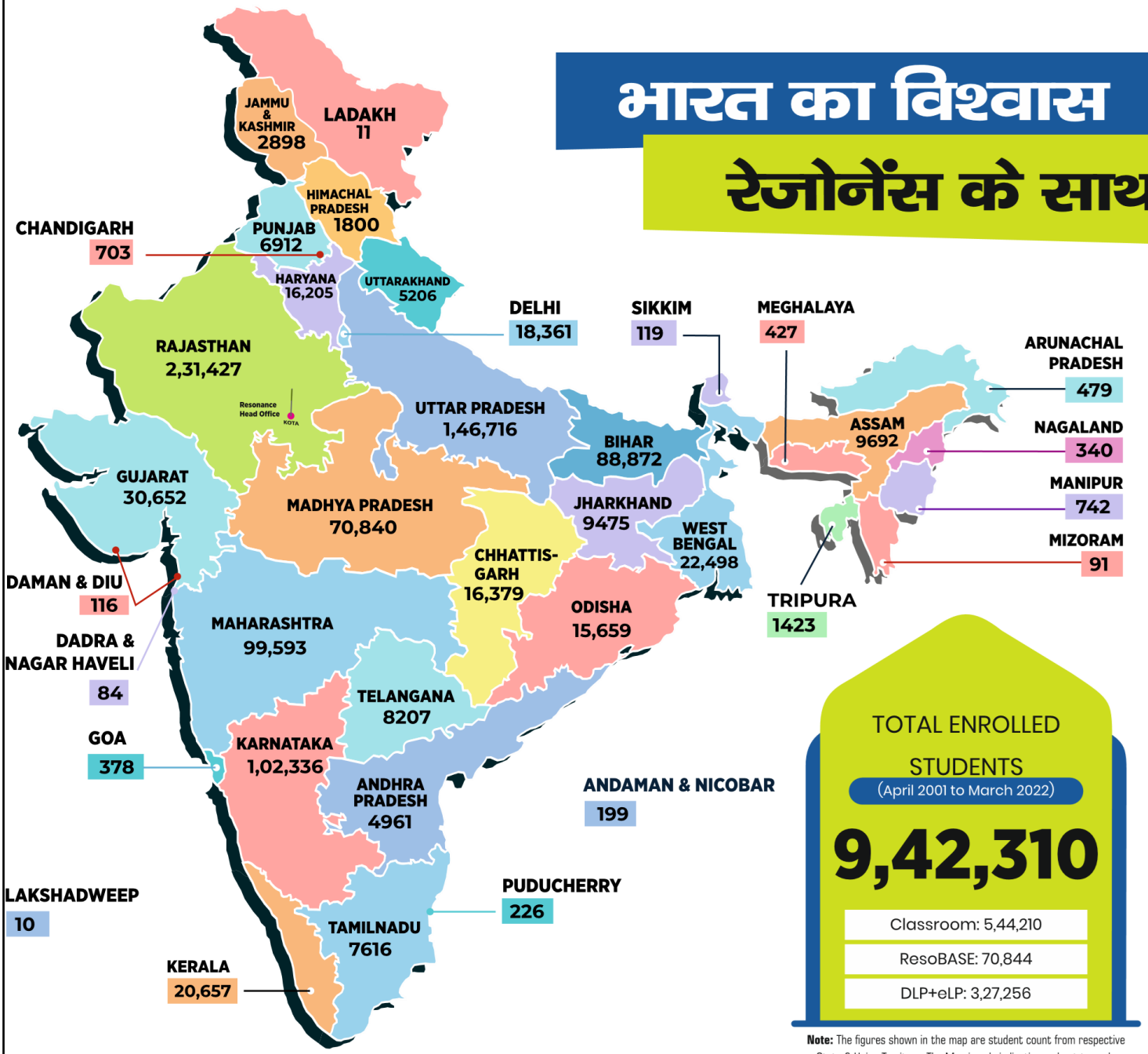

TOTAL ENROLLED STUDENTS
(April 2001 to March 2022)

9,42,310

- Classroom: 5,44,210
- ResoBASE: 70,844
- DLP+eLP: 3,27,256

Note: The figures shown in the map are student count from respective State & Union Territory. The Map is only indicative and not to scale

Resonance : The Legacy of 21 Years (2001-2022) of Academic Excellence

- **JEE (Adv.) / IIT-JEE** ▸ **50 हजार +** SELECTIONS SINCE 2002
  229 AIRs in TOP-100 (Classroom + DLP)
- **JEE (Main) / AIEEE** ▸ **2.40 लाख+** SELECTIONS SINCE 2009
  136 AIRs in TOP-100 (Classroom + DLP)
- **NEET (UG) / AIPMT** ▸ **19 हजार+** SELECTIONS SINCE 2012
  19 AIRs in TOP-100 (Classroom + DLP)

- **NTSE** SINCE 2006 ▸ **2440** Scholars
- **KVPY** SINCE 2006 ▸ **2859** Fellowship Winners
- **OLYMPIADS** SINCE 2006 ▸ **52** Medalists (Gold/Silver/ Bronze) in International Olympiads
- **CA & CS** SINCE 2013 ▸ **4179** Selections — 5 Times AIR-1 in CA & CS Exams
- **CLAT, SET & GPTU** SINCE 2014 ▸ **77** Selections — AIR-1 in GPTU