

Sri Chaitanya IIT Academy, India

A.P, TELANGANA, KARNATAKA, TAMILNADU, MAHARASHTRA, DELHI, RANCHI A right Choice for the Real Aspirant

ICON CENTRAL OFFICE, MADHAPUR-HYD

 Sec: Sr. IPLCO
 JEE ADVANCED
 DATE: 13-12-15

 TIME: 02:00 PM TO 05: 00 PM
 2012_P2 MODEL
 MAX MARKS: 198

KEY & SOLUTIONS

PHYSICS

1	В	2	C	3	A	4	В	5	D	6	D
7	В	8	A	9	В	10	D	11	В	12	A
13	A	14	C	15	BD	16	AC	17	ABC	18	CD
19	BC	20	ABC								

CHEMISTRY

21	A	22	C	23	A	24	C	25	В	26	В
27	A	28	C	29	A	30	C	31	A	32	В
33	С	34	A	35	BC	36	ABC	37	ABC	38	ABC
39	BCD	40	CD								

MATHEMATICS

41	A	42	С	43	A	44	A	45	C	46	В
47	В	48	В	49	D	50	В	51	В	52	D
53	В	54	D	55	BCD	56	AB	57	AD	58	BCD
59	BC	60	ABCD								

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13-12-15 Sr.IPLCO_Jee-Adv_2012-P2_Key Solutions

CHEMISTRY

- 21. Positive deviation
- 22. Internal pressure = $\frac{n^2a}{v^2}$
- 23. One 'y' occupies tetrahedral void One 'y' occupies octahedral void
- 24. Conceptual
- 25. E_a value high then change in 'k' is high
- 26. E_a value high indicates rate determines step

27.
$$a_x = \frac{a_0}{2^n}$$

28.
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- 29. Above T_c gas cannot convert into liquid
- 30. Conceptual
- 31. Assume $r_{cl} = a$

$$r_{Na^{+}} = 0.5a$$

$$r_{k^+} = \frac{5a}{7}$$

$$\frac{r_{kCl}}{r_{NaCl}} = \frac{5\frac{a}{7} + a}{0.5a + a} = 1.143$$

32.
$$\frac{d_1}{d_2} = \frac{58.5}{(1.5)^3} \times \frac{(1.71)^3}{74.5} = 1.17$$

- 33. $a_n = a_0 e^{-kt}$
- 34 1st order
- 35. Heavion gas having narrow distributes
- 36. At T_c densities of gives and liquid is same
- 37. Conceptual
- 38. In zero order $k = \frac{x}{t}$
- 39. Order with respect to A is 1, with respect to B is 2
- 40. Conceptual