

Daily Tutorial Sheet [DTS] | Ionic Equilibrium

Level-1		DTS 1-5
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
B	A	A	C	A	B	B	A	D	B	A	C	D	B	C
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
C	A	D	D	C	C	A	A	D	D	D	D	D	B	D
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
B	C	D	D	C	D	B	A	C	B	C	B	A	C	C
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
A	D	B	A	B	C	C	B	D	C	C	D	B	C	B
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
D	C	B	B	D	A	C	B	A	D	D	A	D	B	C

Level-2		DTS 6-11
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76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
C	B	B	A	D	D	D	B	B	B	A	B	D	B	A
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
A	D	B	AC	D	A	D	D	C	D	A	D	B	B	C
106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
D	A	D	D	B	B	ABCD	B	D	B	D	C	B	B	D
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
C	D	A	C	A	6	2.04	3.317	5.74	3.56	0.04	2.03	11	5.1	80
136	137			138	139	140								
4	$1.2 \times 10^{-3} \text{ mol/L}$			8.71	1.89	5.7033								

JEE Main (Archive)		DTS 1-3
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A	A	A	C	A	A	C	A	A	B	D	D	C	B	C
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
D	C	C	C	C	A	A	C	B	B	D	B	C	D	A
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
D	A	B	C	B	A	B	B	A	A	B	B	B	5.23	C
46	47	48	49	50										
A	A	4	B	10.60										

JEE Advanced (Archive)	DTS 1-4
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1	2	3	4	5		6	7	8		9	10			
A	B	D	A	0.015 mole, pH=4.09		Basic salt	B	pH=4.56, 5Ml		False	SO_4^{2-}			
11				12		13				14	15			
(i) 4.15		(ii) $1.43 \times 10^{-10}\text{M}$		9.675×10^{-11}		(i) $\alpha = 1.75 \times 10^{-4}$		(ii) pH = 4.75		C	A			
16.		17	18	19	20	21	22		23			24		
Amphoteric		False	C	A	4.20 p	False	$8.7 \times 10^{-4}\text{g/L}$		(i) pH = 4.56		(ii) pH = 10		Hydration	
25	26	27			28	29					30	31		
A	D	X = 0.177 mmol			A	$[\text{Al}^{3+}] = 1.28 \times 10^{-15}\text{M}$			$[\text{Mg}^{2+}] = 0.68\text{M}$			D	$27.8 \times 10^3\text{L}$	
32		33		34		35	36		37	38	39	40		41
747.4 mg		1.8×10^{-5}		747.4 mg		D	pH = 1		80 mL	6.50	11.5	6.12×10^5		I_2
42	43	44	45	46			47		48	49	50	51		52
More	BC	B	ABC	$[\text{Ag}^+] = 7.5 \times 10^{-18}\text{M}$			pH = 4.86		A	D	C	pH = 9		A
53	54	55	56	57	58	59	60			61	62	63	64	65
B	D	8	3	CD	6	7	$\text{K}_{\text{sp}} = 2.3 \times 10^{-12}$; pH=11.301			B	A	B	4.47	D