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 **Date: 14-11-15**

Time: 9:00 AM to 12:00 Noon **RPTM-12** **Max.Marks: 360**

KEY SHEET

PHYSICS		MATHS		CHEMISTRY	
Q.NO	ANSWER	Q.NO	ANSWER	Q.NO	ANSWER
1	2	31	1	61	2
2	3	32	2	62	4
3	1	33	4	63	4
4	1	34	1	64	2
5	2	35	3	65	1
6	1	36	1	66	4
7	3	37	1	67	1
8	2	38	3	68	4
9	1	39	2	69	2
10	4	40	4	70	3
11	1	41	2	71	2
12	3	42	4	72	4
13	2	43	3	73	2
14	1	44	2	74	3
15	3	45	2	75	3
16	3	46	2	76	3
17	2	47	1	77	1
18	3	48	2	78	2
19	2	49	4	79	3
20	1	50	2	80	3
21	3	51	4	81	2
22	4	52	4	82	3
23	1	53	3	83	1
24	4	54	4	84	4
25	1	55	1	85	3
26	2	56	3	86	4
27	3	57	3	87	2
28	1	58	1	88	4
29	1	59	2	89	3
30	1	60	3	90	1

CHEMISTRY

61. Borax bead test must be performed for coloured substances only

64. $LiNO_3 \rightarrow Li_2O + NO_2 + O_2$

$NaNO_3 \rightarrow NaNO_2 + O_2$

$Pb(NO_3)_2 \rightarrow PbO + NO_2 + O_2$

$AgNO_3 \rightarrow Ag + NO_2 + O_2$

67. $PbCl_2$ – soluble in hot water

70. AgCl,AgBr,AgI – soluble in $Na_2S_2O_3(aq)$

74. $Bi^{3+} + I^- \rightarrow BiI_3 \downarrow \xrightarrow{\text{excess } I^-} [BiI_4]^-$

80. $Cu^{2+} + CN^- \rightarrow Cu(CN)_2 \downarrow \rightarrow CuCN \downarrow + (CN)_2$

$CuCN \xrightarrow{\text{excess KCN}} K_3[Cu(CN)_4]$

82. Ferric thiocyante – blood red colouration

83. $HOSO_2NH_2 + HNO_2 \rightarrow N_2 + 2H^+ + SO_4^{2-} + H_2O$

85. $S^{2-} \xrightarrow{H^+} H_2S$

$Cr_2O_7^{2-} / H^+ \xrightarrow{S^{2-}} Cr^{3+}(\text{green})$

87. $Fe^{2+} + MnO_4^- \xrightarrow{H^+} Fe^{3+} + Mn^{2+}$

$C_2O_4^{2-} + MnO_4^- \xrightarrow{H^+} CO_2 + Mn^{2+}$

89. $I^- + [Fe(CN)_6]^{3-} \rightarrow [Fe(CN)_6]^{4-} + I_3^-$

$3Zn^{2+} + 2K^+ + 2[Fe(CN)_6]^{4-} \rightarrow K_2Zn_3[Fe(CN)_6]_2 (\text{white ppt})$

$K_2Zn_3[Fe(CN)_6]_2 + 12(OH)^- \rightarrow 2[Fe(CN)_6]^{4-} + 3[Zn(OH)_4]^{2-} + 2K^+$