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–ADVANCE** **Date: 01-11-15**
Time: 3 Hours **2014-P2-Model** **Max Marks: 180**

PAPER-II

KEY & SOLUTIONS

PHYSICS

1	**C**	2	**B**	3	**C**	4	**B**	5	**B**	6	**B**
7	**B**	8	**B**	9	**B**	10	**A**	11	**A**	12	**C**
13	**A**	14	**A**	15	**A**	16	**B**	17	**A**	18	**C**
19	**B**	20	**D**								

CHEMISTRY

21	**C**	22	**A**	23	**D**	24	**C**	25	**D**	26	**B**
27	**C**	28	**B**	29	**D**	30	**A**	31	**B**	32	**C**
33	**B**	34	**D**	35	**D**	36	**D**	37	**A**	38	**B**
39	**D**	40	**A**								

MATHS

41	**A**	42	**B**	43	**D**	44	**A**	45	**A**	46	**C**
47	**D**	48	**C**	49	**C**	50	**C**	51	**B**	52	**D**
53	**D**	54	**C**	55	**A**	56	**C**	57	**A**	58	**A**
59	**A**	60	**A**								

CHEMISTRY

21. $4HClO_4 + P_4O_{10} \rightarrow 2Cl_2O_7 + 4HPO_3$
22. $4Au + 8CN^- + 2H_2O + O_2 \rightarrow 4\left[Au(CN)_2\right]^{-1} + 4\,OH^-$
23. KI_3
24. HI is oxidized to I_2
25. $(XeO_6)^{4-}$ perxenate ion.
26. Anglesite : $PbSO_4$
27. (i) $C(s) + O_2(g) \rightarrow CO_2(g), \Delta G^0 = \Delta H^0 - T\Delta S^0$
    1 mole 1 mole
    ΔS^0 is $\simeq$ same. Q.
    (ii) $2CO(g) + O_2(g) \rightarrow 2CO_2(g)$
    2 moles 1 mole 2 moles
    $\Delta S^0 = -ve,\ Slope = +ve \rightarrow (R)$
    (iii) $2C + O_2(g) \rightarrow 2CO(g)$
    1 mole 2 moles
    $\Delta S^0 = +ve, Slope = -ve$ P
28. Steel : C: 2 – 0.2 %
29. $CaSiO_3$
30. $FeSiO_3$
31. 'R' $(NH_4)_2 Cr_2O_7 \xrightarrow{\Delta} N_2 + 4H_2O + Cr_2O_3$
32. $A : Cr_2O_3$ Aluminothermic process
33. D - CrO_2Cl_2
34. A: $AgCl$, B: Cl_2, C: I_2
35. $(CN)_2$
36. $(CN)_2, I_2$
37. ClO^- ClO_2^- ClO_3^- ClO_4^-
    ----------→
    Change density decreases
    Delocalization increases
    Basic character decreases
38. $Cl_2, Xe \rightarrow Xe.6H_2O, Cl_2.6H_2O$ gas hydrate. F_2 oxidizes water. Cannot form stable hydrate.
39. P and Q involve separation of Pb & Ag.
40. S gives only $NaClO_2$. P and Q undergo disproportionation