

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: 31-10-15

 Time: 9:00 AM to 12:00 Noon
 RPTM-10
 Max.Marks: 360

KEY SHEET

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

CHEMISTRY

- 61. $\left[XeF^{+}\right] \& \left[SbF_{6}\right]^{-}$
- 62. AIEEE-2009-The reaction (a) is not feasible because XeF_6 formed at once reacts with water producing again the reactant.
- 63. $SiO_2 + 2XeF_6 \rightarrow 2XeOF_4 + SiF_4$

Depending on conditions the reaction can further go forward and finally forms XeO_3

$$XeOF_4 + SiO_2 \rightarrow XeO_2F_2 + SiF_4$$

 $SiO_2 + XeO_2F_2 \rightarrow XeO_3 + SiF_4$

- 64. He bp is 4.2 k due to weak dispersion forces. NCERT book and std. data
- 65. Extraction of Zinc Text book
- 66. Haematite is Fe_2O_3 is magnetic; cassetarite (SnO_2) ore is non magnetic and impurities $FeWO_4 / MnWO_4$ are magnetic.
- 67. Factual information (NCERT, Page No.156)
- 68. Factual information (NCERT, Page No.156)

69.
$$Ag_2S + 2NaCN \xrightarrow{O_2 / Strring} 2AgCN + Na_2S$$

$$Na_2S \xrightarrow{O_2 / Strring} Na_2SO_4$$

$$AgCN + NaCN \longrightarrow Na\left[Ag(CN)_2\right] \xrightarrow{Zn / dust} Na_2\left[Zn(CN)_4\right] + 2Ag$$

- 70. Factual information (NCERT)
- 71. $I_2O_5 + CO \rightarrow I_2 + CO_2$ $2Na_2S_2O_3 + I_2 \rightarrow Na_2S_4O_6 + 2NaI$
- 72. 1) $2KMnO_4 + 16HCl \rightarrow 2KCl + 2MnCl_2 + 8H_2O + 5Cl_2$
 - 2) $NaCl + H_2SO_4 \rightarrow NaHSO_4 + HCl$ $MnO_2 + 4HCl \rightarrow MnCl_2 + 2H_2O + Cl_2$
 - 3) $MnO_2 + 4HCl \rightarrow MnCl_2 + 2H_2O + Cl_2$
- 73. Factual information (NCERT, Page No.202)

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- 74. $6NaOH + 3Cl_2 \rightarrow 5NaCl + NaClO_3 + 3H_2O$
- 75. (Excess) $2NH_3 + 3Cl_2 \rightarrow N_2 + 6HCl$ $NH_3 + HCl \rightarrow NH_4Cl$
- 76. $HF > \underbrace{HI > HBr > HCl}$ dipole –dipole attraction (vanderwaal's forces)

(Hydrogen) bonding)

77. $H_2O + Cl_2 \rightarrow HCl + HOCl$ $HOCl \rightarrow HCl + (O)$

Coloured + (O) \rightarrow Color less

- 78. Antichlor is a compound which removes Cl₂ from a material
- 79. $4AgClO_3 + 3Cl_2 \rightarrow 4AgCl + ClO_2$ One of the methods of preparation of ClO_2
- 80. Factual information (NCERT, Page No.160)
- 81. Factual information (NCERT, Page No.162)
- 82. IBr_2^- is linear like XeF_2 and BrO_3^- is pyramidal like XeO_3 .
- 83. Malachite is $Cu(OH)_2$. $CuCO_3$ magnetite is Fe_3O_4 , Horn silver is AgCl, zinc blende is ZnS.
- 84. Factual information (NCERT, Page No.156)
- 85. Weak $X X^1$ bond NCERT Page No. 201
- 86. Prop of bleaching powder text book inf. $CaOCl_2 + CO_2 \rightarrow CaCO_3 + Cl_2$
- 87. 2004 AIEEE Question
- 88. Factual information (NCERT, Page No.205)
- 89. Text book information Metallurgy of tin and lead.
- 90. 2005 AIEEE Question