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 : 09-08-15
TIME : 02:00 AM TO 05: 00 PM	2013_P2 MODEL	MAX MARKS : 180

KEY & SOLUTIONS

PHYSICS

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

CHEMISTRY

21	ACD	22	ACD	23	ABC	24	A	25	B	26	ACD
27	ABC	28	D	29	A	30	A	31	D	32	D
33	D	34	C	35	C	36	B	37	C	38	D
39	C	40	B								
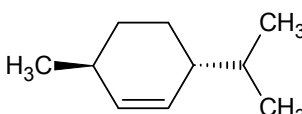
MATHEMATICS
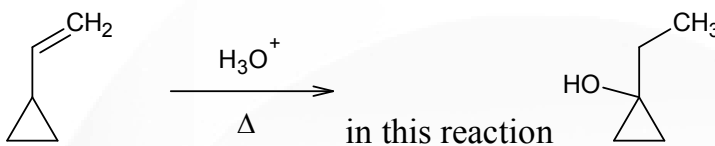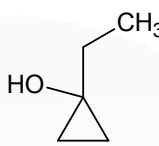
41	ABC	42	BC	43	BD	44	ABC	45	ABCD	46	D
47	ABC	48	AC	49	B	50	C	51	C	52	B
53	B	54	C	55	B	56	A	57	B	58	D
59	A	60	C								

CHEMISTRY

21. H_2 / Pd–$BaSO_4$;H_2 / Ni_2B(P-2 Catalyst)&B_2H_6-THF;CH_3COOH gives syn addition

22.   Wurtz reaction gives good yield for symmetrical alkanes

25.   gives majorly due to anti elimination

26.   in this reaction is not formed

27. Cl_2 at high temperatures; SO_2Cl_2 in presence of light & Me_3COCl in presence of light gives freeradical substitution

31.   This reaction is E^1cb

33 & 34. A & B are positional isomers

35.   1,3-butadiene has more heat of hydrogenation

36.   Cis-2-butene is most reactive towards catalytic hydrogenation

MATHS

41.   The points A and B are $(4t, 2t^2), (-4t, 2t^2)$, P is $(0, 4 + 2t^2)$

       The circle is $x^2 + y^2 + 2(t^2 - 1)y - 4t^2 = 0$

42.   R is (9, 0) and S is (-1, 0)

       The circle passing through P, Q and length of whose tangent from origin has the equation $x^2 + y^2 - 27x + 18 = 0$

43.   Let the points are $(t^2, 2t), (s^2, 2s)$ with $2(t + s) = 3$. Chord joining them is $4x - 3y + 4ts = 0$

       It can pass through origin also, so the minimum distance is zero.

       If it is focal chord, then $ts = -1$ and its length is $\dfrac{25}{4}$