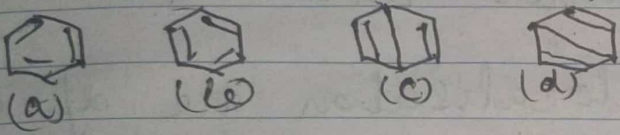


Resonance continued

Monday **11**

(vi) Isovalent resonating structures i.e. having the same no. of covalent bond are more significant than non isovalent-resonating structures.

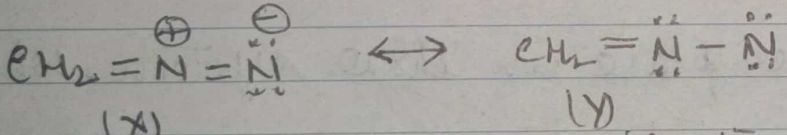


[(a) & (b) are isovalent (c) & (d) are non isovalent]

(vii) Structure with electron deficient atom i.e. less than eight e⁻ in its outermost shell have high energy low stability hence they contribute less than

Tuesday **12**

these structures in which octate rule is not violated



Structure X is more contributes than structure Y.

(viii) Resonating structures are more important in a conjugated system than those in an isolated system.

13

Wednesday

Delocalisation

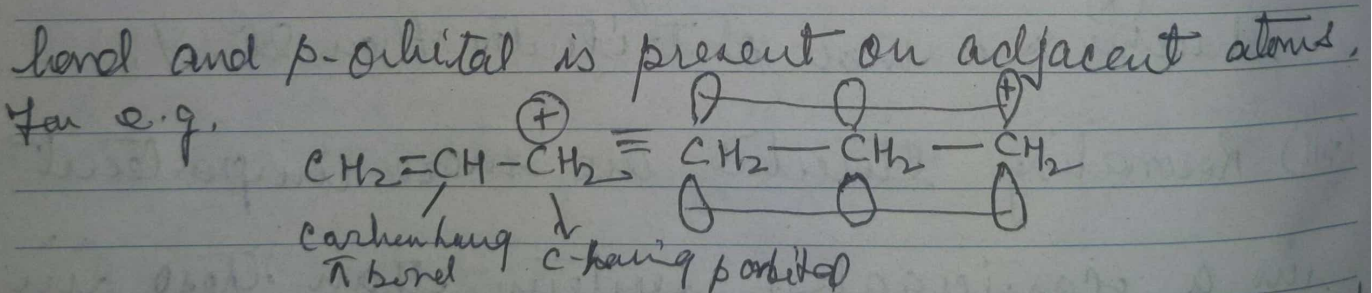
In conjugated system electrons are distributed over whole of the molecule embracing all the carbon atoms and do not remain localised. This phenomenon is called delocalisation of electrons. The ~~delocalisation~~ are of the following types.

(a) Delocalisation by π - π overlap: This type of localisation takes place in those system where single and multiple bonds are alternated.

14

Thursday

(a) Delocalisation by π -p orbital overlap - This type of localisation takes place in those system, where π



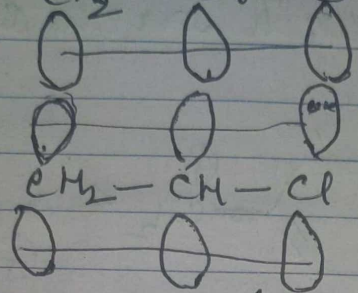
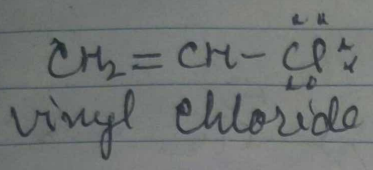
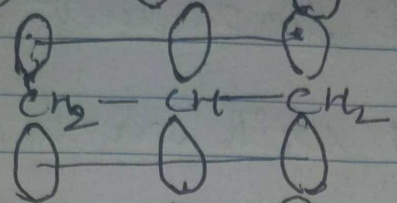
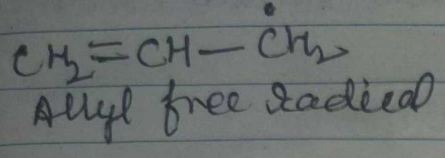
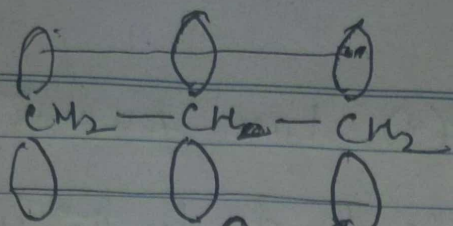
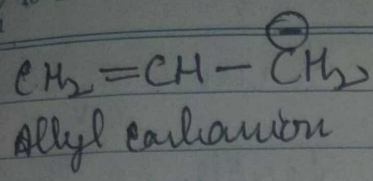
In this case π bond and p-orbital is present on adjacent atoms, e.g. p-orbital present in α -carbon w.r.to multiple bond.

M	T	W	T	F	S	S	M	T	W	T	F	S	S
1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26	27	28
29	30	31											

December

2023 50th Week

Friday 15



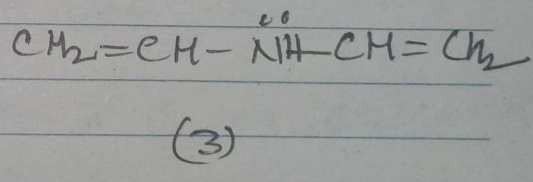
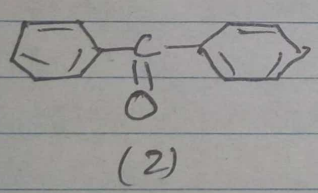
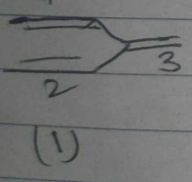
(c) Delocalisation by $\sigma-\pi$ overlap.

(d) Delocalisation by $\sigma-\pi$ overlap

Cross conjugation \rightarrow In cross conjugation

three groups are present, two of which are not conjugated with each other, but each is conjugated with third e.g.

Saturday 16



In e.g (1) 1 & 2 are not conjugated but 3 is conjugated with 1 & 2.

Sunday 17

e.g (2) Carbonyl group is conjugated to both the rings but both rings are not conjugated to each other

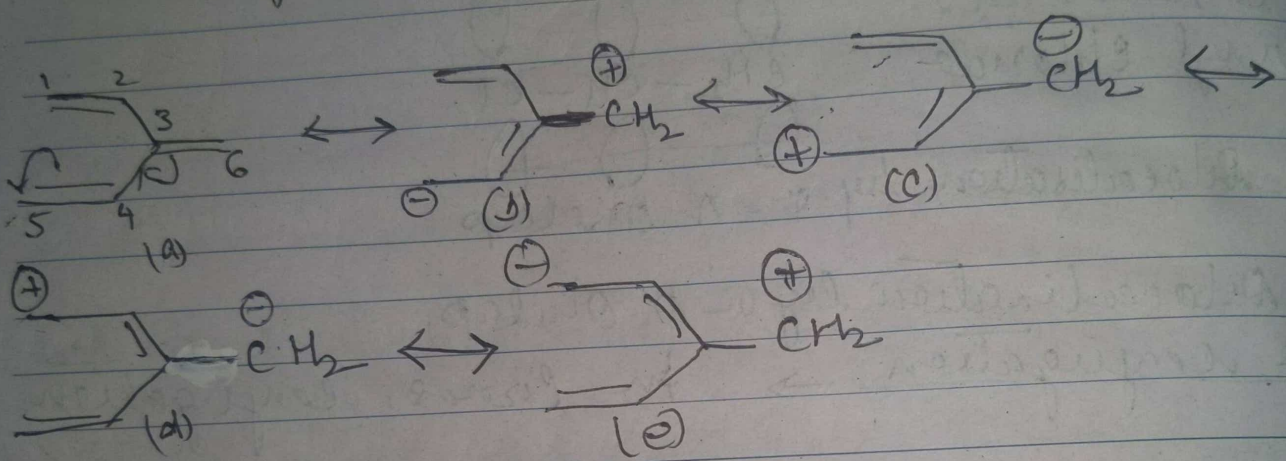
December

51st Week 2023

M	T	W	T	F	S	S	M	T	W	T	F	S	S
				1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31							

18 Monday

In e.g (3) Lone present on it in conjugation
to both double bonds but both double bonds are
not conjugated with each other



19 Tuesday

Resonating Structure of dendralenes.