

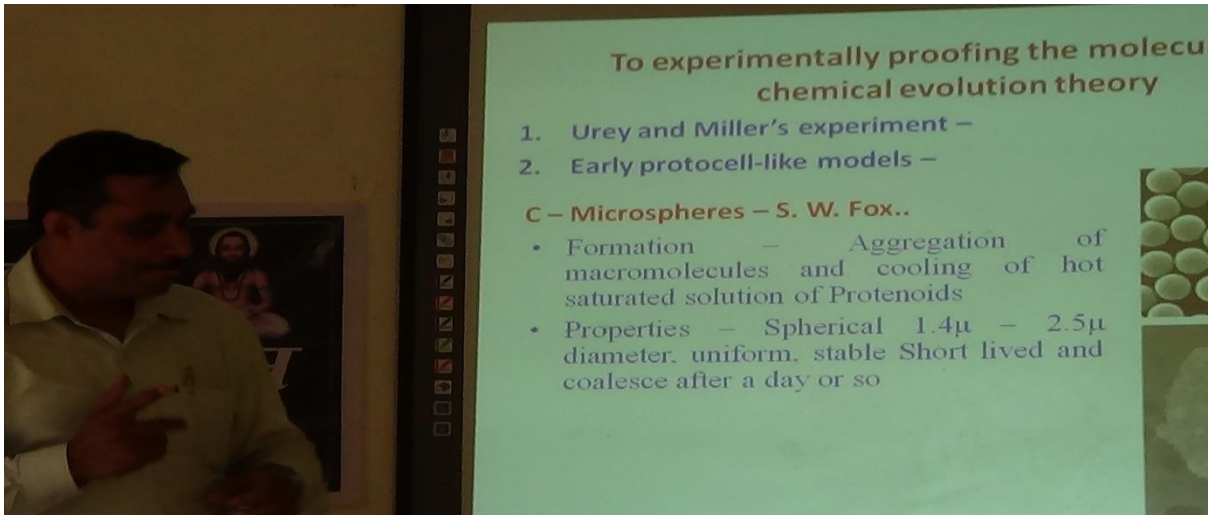


**Government Pataleshwar College Masturi  
District- Bilaspur (C.G) -495551**

**Student Centric Methods (Experiential Learning, Participative Learning  
And Problem Solving Methodologies) Used in the College  
(2016-17 to 2020-21)**

**2016-17**



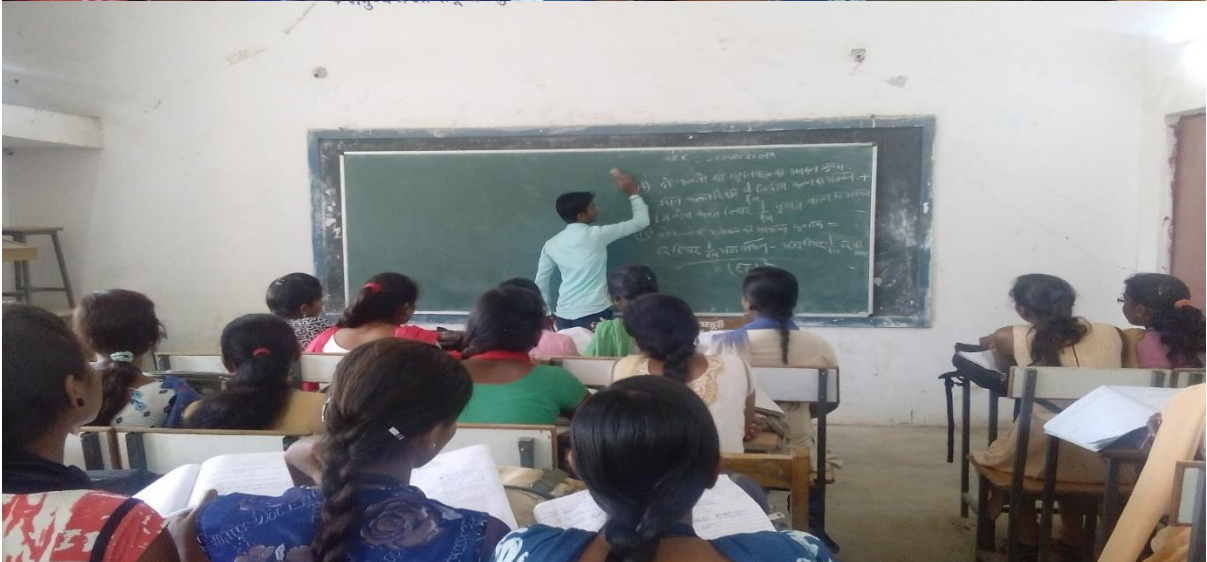








**2017-18**





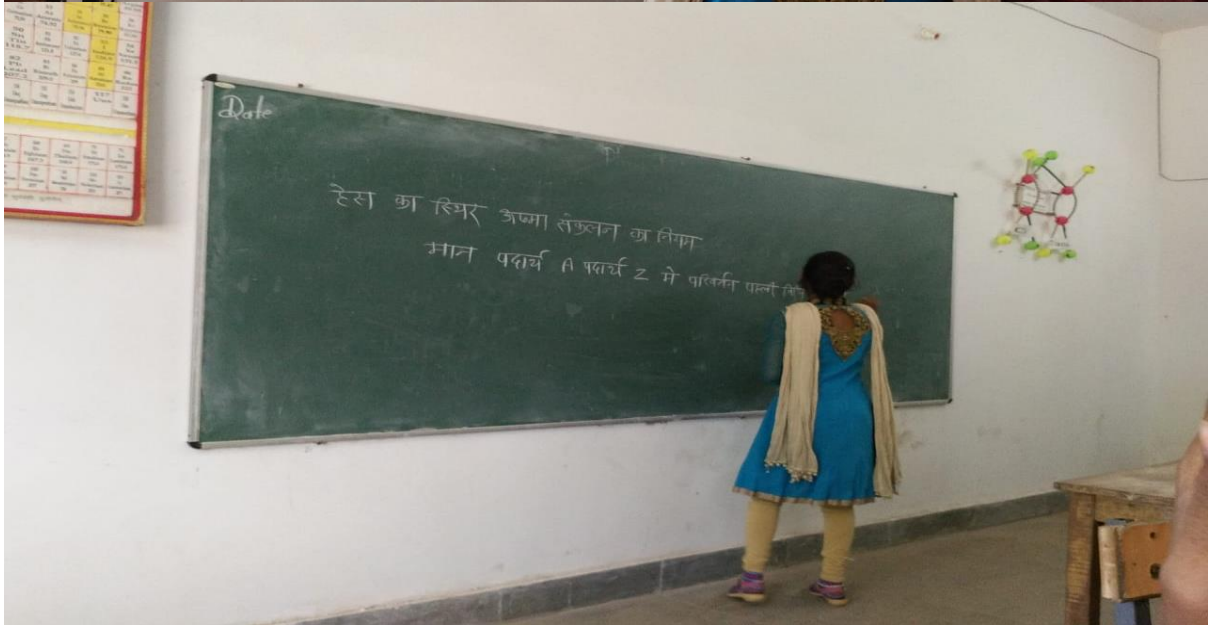


**2018-19**











































































2019-20





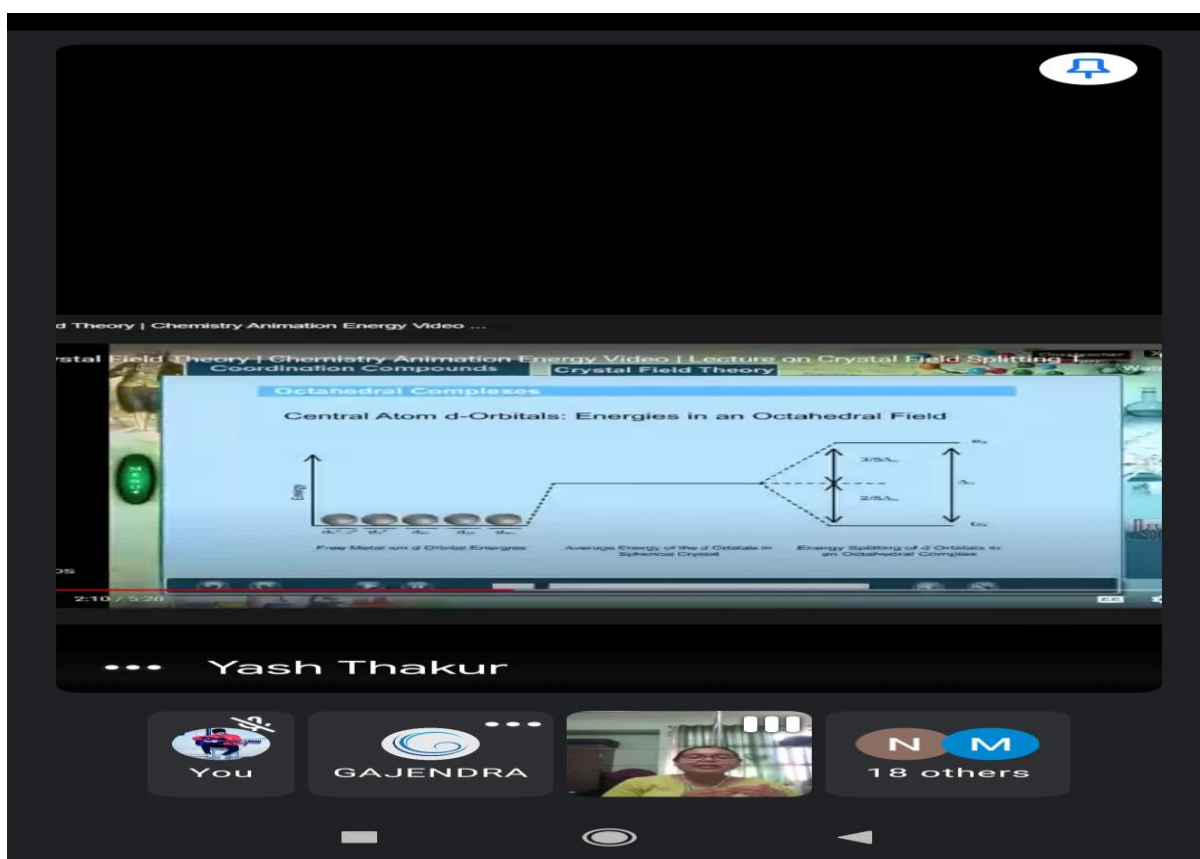








2020-21  
Online Teaching in COVID-19 Pandemic Period



Use of 3 D Animation (Source -You Tube) in Teaching

efp-eqtk-njh

**Step V): Crystal field stabilization energy in the octahedral complexes**  
Crystal field splitting of the  $d^n$  configuration in the octahedral complexes can be given as:

Suppose total number of electrons ( $e^-$ ) in  $t_{2g}$  set =  $p$  (1 to 6)  
Total no of  $e^-$  in  $e_g$  set =  $q$  (1 to 4)  
Then decrease in energy of  $d^n$  configuration by entrance of 1  $e^-$  in  $t_{2g}$  set =  $-0.4 \Delta_o$   
So, decrease in energy of  $d^n$  configuration by entrance of  $p$   $e^-$  in  $t_{2g}$  set =  $(-0.4 \Delta_o) p$   
Increase in energy of  $d^n$  configuration by entrance of 1  $e^-$  in  $e_g$  set =  $0.6 \Delta_o$   
So, increase in energy of  $d^n$  configuration by entrance of  $q$   $e^-$  in  $e_g$  set =  $(0.6 \Delta_o) q$   
Thus, total energy change of  $d^n$  configuration =  $(-0.4 \Delta_o) p + (0.6 \Delta_o) q$   
=  $(-0.4p + 0.6q) \Delta_o$

Organic Chemistry Unit -

Hard Reagent: (Gygnard)

of Preparation :- Halide

Dr. Santosh Thakur

You, Pragya, N, S, 20 others

Yash Thakur

You, GAJENDRA, Rajeshwari, S, 15 others

1:11 PM

fjz-mwzy-sjx

**Polymers: Tacticity:**

isotactic polymer, syndiotactic polymer, atactic polymer

Yash Thakur

You, Kiran, L, P, 16 others

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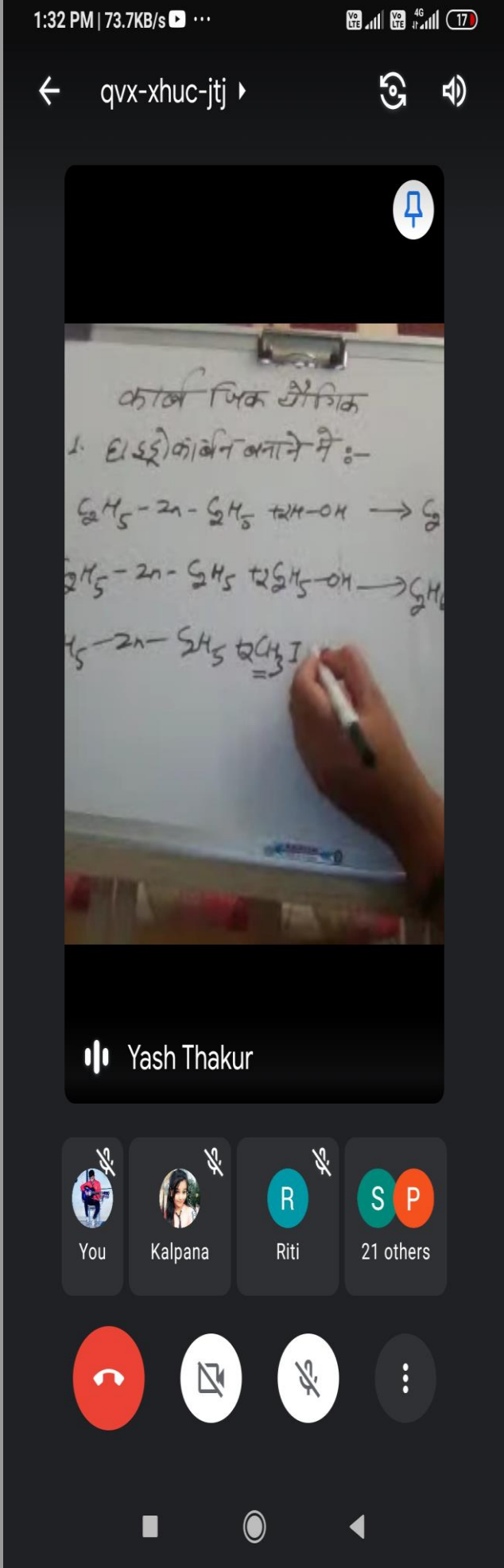
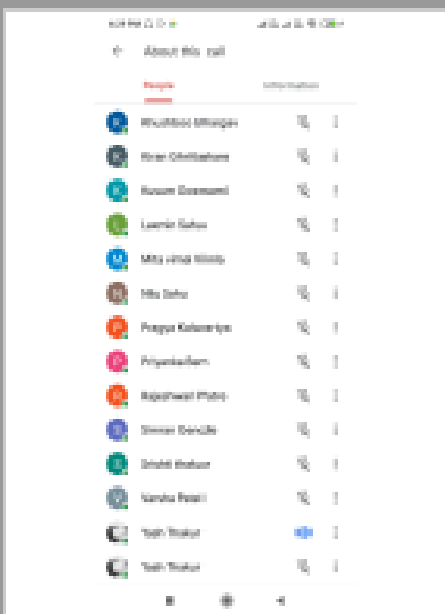
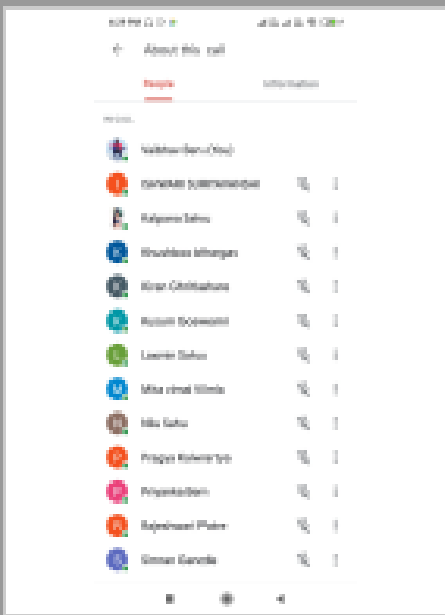
fjz-mwzy-sjx

**Polymers: Tacticity:**

isotactic polymer, syndiotactic polymer, atactic polymer

Yash Thakur

You, Kiran, L, P, 16 others



12:56 PM | 69.4KB/s | dhs-usjt-swj

1:22 PM | 33.7KB/s | cuk-djct-kzj

**Yash Thakur**

**Yash Thakur**

Participants: You, Riti, GAJENDRA, 21 others | You, Durgeshw..., Sandeep, 23 others

Handwritten notes on whiteboard (Left):

$$M = Mg$$

$$= \frac{2n}{5}$$

Handwritten notes on whiteboard (Right):

Sulphuric Acid ( $-SO_3H$ )

Sulphonic Acids ( $-SO_3H$ )

Synthesis:

$$SO_3 + R-X \rightarrow RSO_3Na$$

3:37 PM | fih-qopb-fay

**Dr. Santosh Thakur**

**Yash Thakur**

Participants: You, Pragya, 17 others | You, GAJENDRA, Dhanraj Si..., 21 others

Field splitting energy difference ( $\Delta_o$ ) (Figure 2.2)

Figure 2.2: Crystal field splitting of d orbitals in octahedral complex

Step IV-Distribution of  $d^4$  configuration of the CMI in the splitted set of d-orbitals

To define the distribution of  $d^4$  configuration of CMI in the splitted set of d-orbitals,

Handwritten notes on whiteboard:

$d_{xy}$ ,  $d_{xz}$ ,  $d_{yz}$ ,  $d_{z^2}$ ,  $d_{x^2-y^2}$

$\Delta_o$

2:32 PM 129KB/s

ihg-gikt-yik

Handwritten notes on the whiteboard:

1.  $\sigma$ - $\sigma^*$  Alkanes
2.  $\pi$ - $\sigma^*$  Alkenes, Alkynes
3.  $\pi$ - $\pi^*$
4.  $\pi$ - $\pi^*$
5.  $\sigma$ - $\sigma^*$

A 3x3 grid diagram is drawn on the whiteboard with numbers 1 through 9 in the cells.

Dr. Santosh Tha

Participants: You, Riti, Prabha, 34 others

2:32 PM 76.8KB/s

ohe-vwns-fhk

Toluene Sulphonic Acid

Reaction scheme showing the sulfonation of toluene:

Cc1ccccc1.O=S(=O)(O)O>>Cc1ccc(S(=O)(=O)O)cc1.Cc1ccccc1S(=O)(=O)O

Reagents:  $\text{H}_2\text{SO}_4$ ,  $100^\circ\text{C}$

Products: p-Toluenesulfonic acid, o-Toluenesulfonic acid

Yash Thakur

Participants: You, ISHWARI, maya, K, 21 others

12:31 PM 73.2KB/s

tfe-preq-eyi

Synthetic Polymer

Handwritten notes on the whiteboard:

- ① Natural Polymer
- ② Synthetic Polymer

Synthetic Polymer

Dr. Santosh Tha

Participants: You, Pooja, Riti, I, K, 31 others



