RABINDRA MAHAVIDYALAYA

Affiliated to the University of Burdwan
Champadanga, Hooghly, West Bengal, Pin.-712401
Estd.- 1971

Ref. No.....

Date.....

This is to certify that the following ICT enabled tools for effective teaching-learning process was used by the various Departments in the session 2020-2021 at Rabindra Mahavidyalaya, Champadanga, Hooghly, West Bengal

Principal
Rabindra Mahavidyalaya
Champadanga • Hooghly

Dr. Prasanta Bhattacharyya
Principal

Session 2020-21

Teachers use ICT enabled tools for effective teaching-learning process.

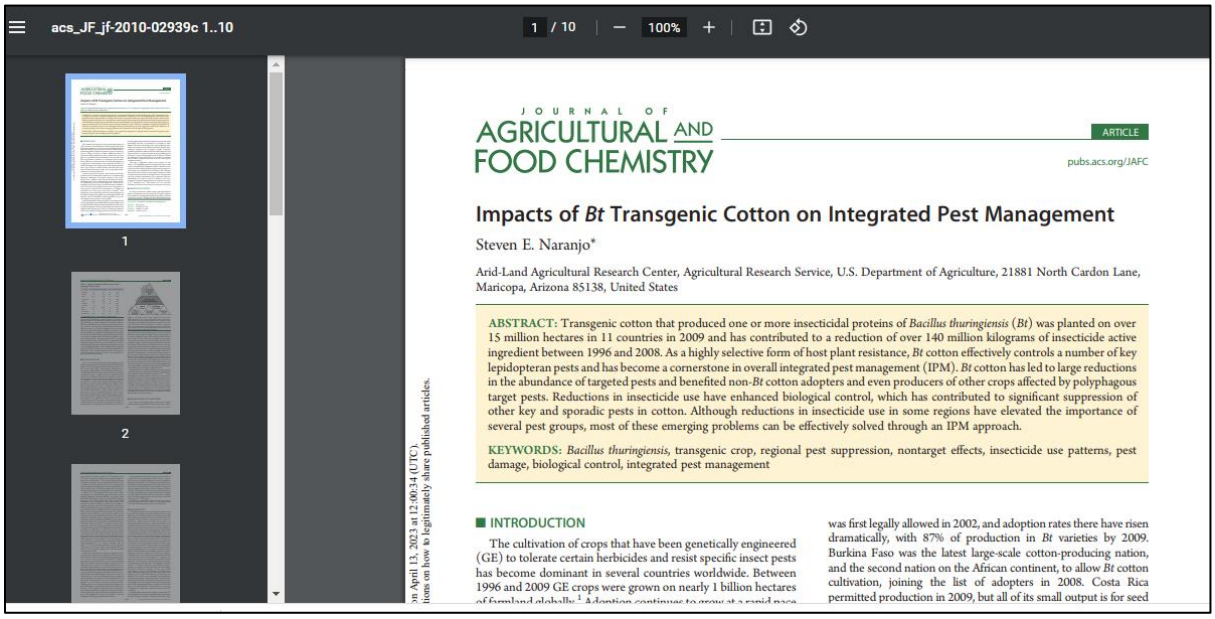
Due to Covid-19 entire teaching learning was switched to online mode. Google Meet, Zoom, etc were used for teaching through. desktop, Laptop. Smart Phone etc. Video, PPT, PDF, excel, etc files were shared for study material. E-Journals and e-books were used for effective teaching and learning.

Some screenshots of the same are attached here.

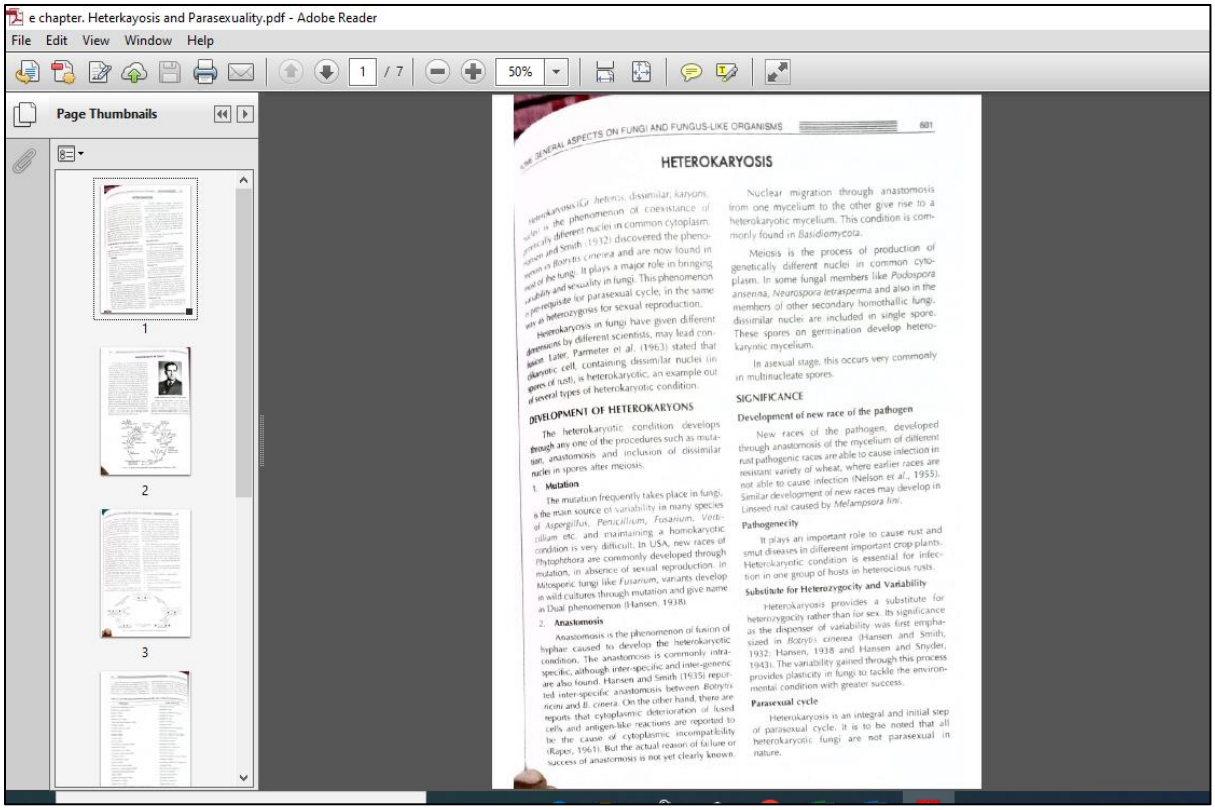
Department of Botany (2020-2021)

Snapshots/ screenshots of E-resources and techniques used

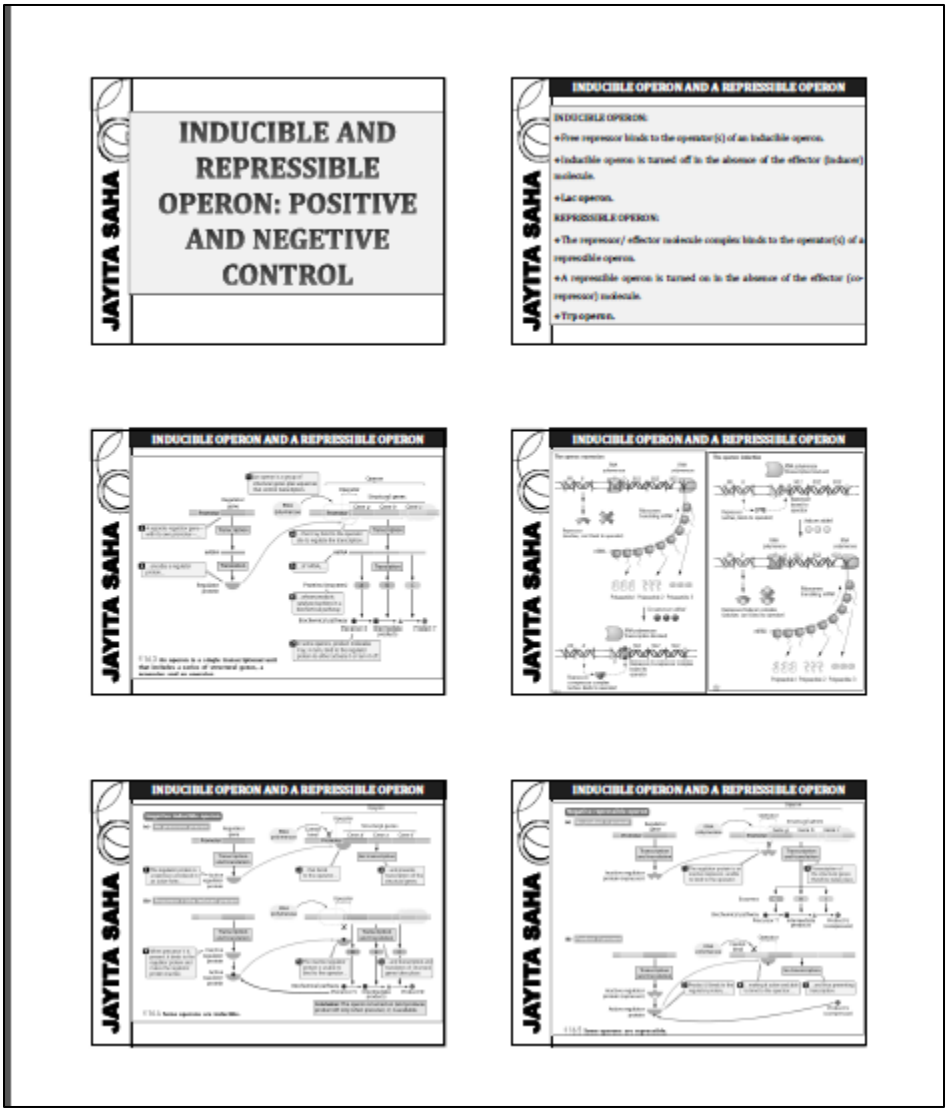
Screenshot (sample) of E- Journal Resource



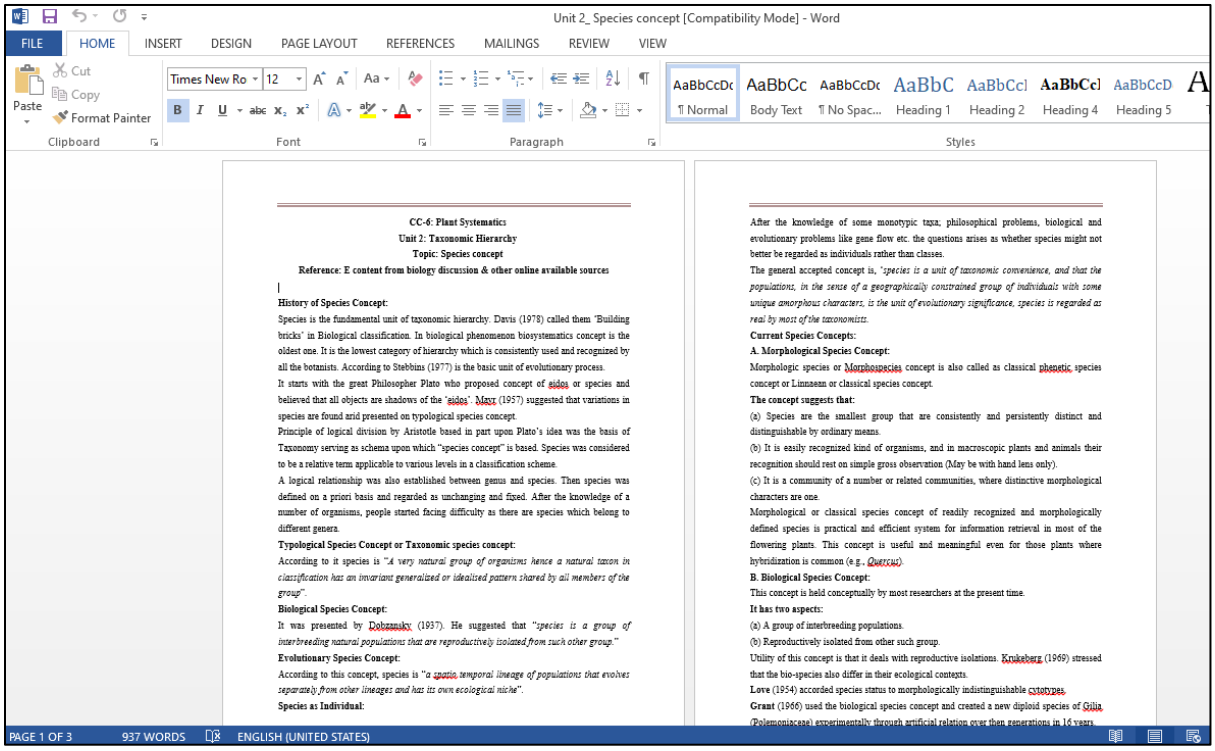
PDF Sample


e chapter. Heterkayosis and Parasexuality.pdf - Adobe Reader
File Edit View Window Help
1 / 7
50%
Page Thumbnails
1
2
3
GENERAL ASPECTS ON FUNGI AND FUNGUS-LIKE ORGANISMS
601
HETEROKARYOSIS
DEVELOPMENT OF HETEROKARYONS
1. Mutation
2. Anastomosis
SIGNIFICANCE
Development of new race of the pathogen
Pathogenecity
Substitute for Heterozygocity and Variability
Parasexual cycle

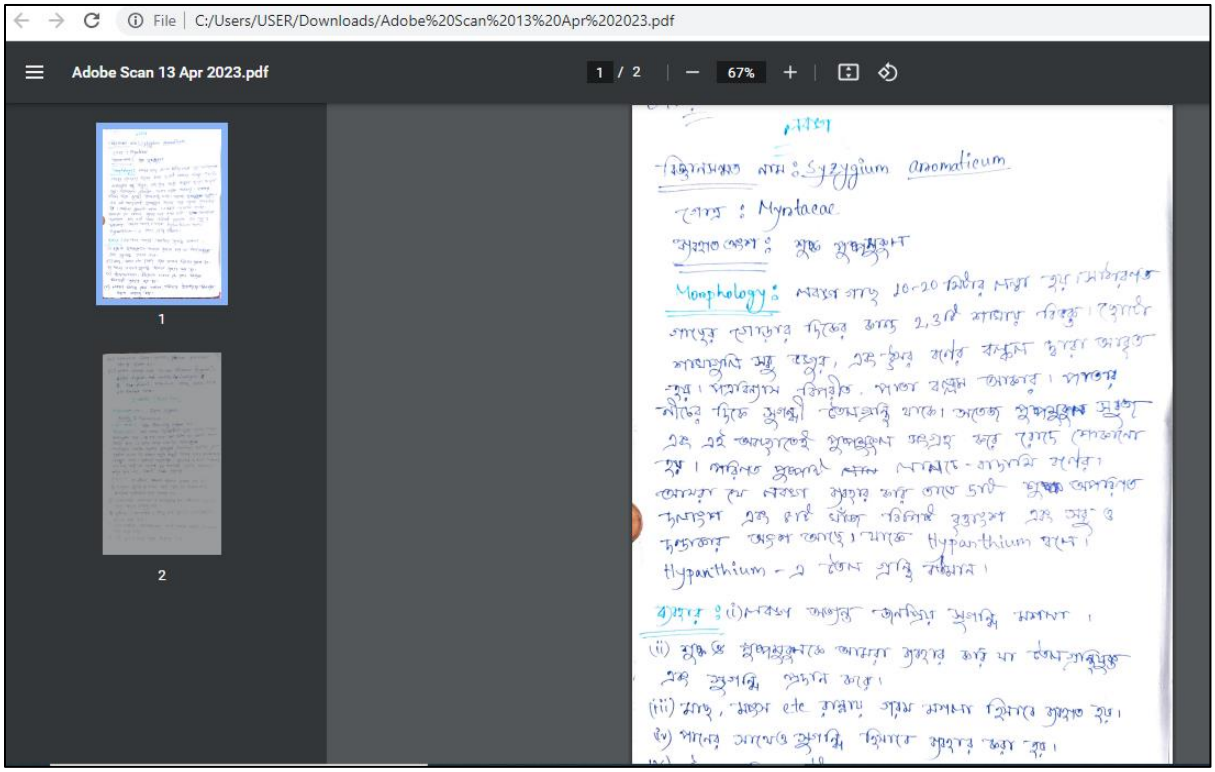
PPT. Sample


JAYITA SAHA
INDUCIBLE AND REPRESSIBLE OPERON: POSITIVE AND NEGETIVE CONTROL
JAYITA SAHA
INDUCIBLE OPERON AND A REPRESSIBLE OPERON
INDUCIBLE OPERON:
•Free repressor binds to the operator(s) of an inducible operon.
•Inducible operon is turned off in the absence of the effector (inducer) molecule.
•Lac operon.
REPRESSIBLE OPERON:
•The repressor/ effector molecule complex binds to the operator(s) of a repressible operon.
•A repressible operon is turned on in the absence of the effector (co-repressor) molecule.
•Trp operon.
JAYITA SAHA
INDUCIBLE OPERON AND A REPRESSIBLE OPERON
JAYITA SAHA
INDUCIBLE OPERON AND A REPRESSIBLE OPERON
JAYITA SAHA
INDUCIBLE OPERON AND A REPRESSIBLE OPERON
JAYITA SAHA
INDUCIBLE OPERON AND A REPRESSIBLE OPERON

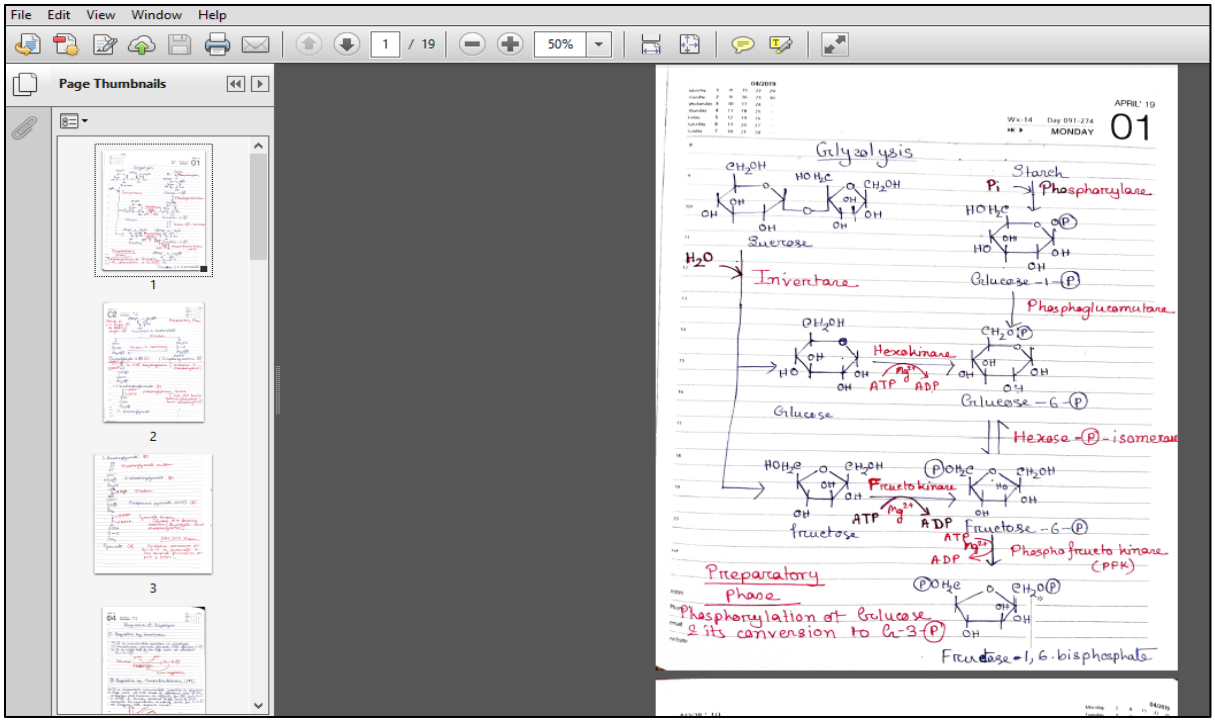
Word Doc. Sample



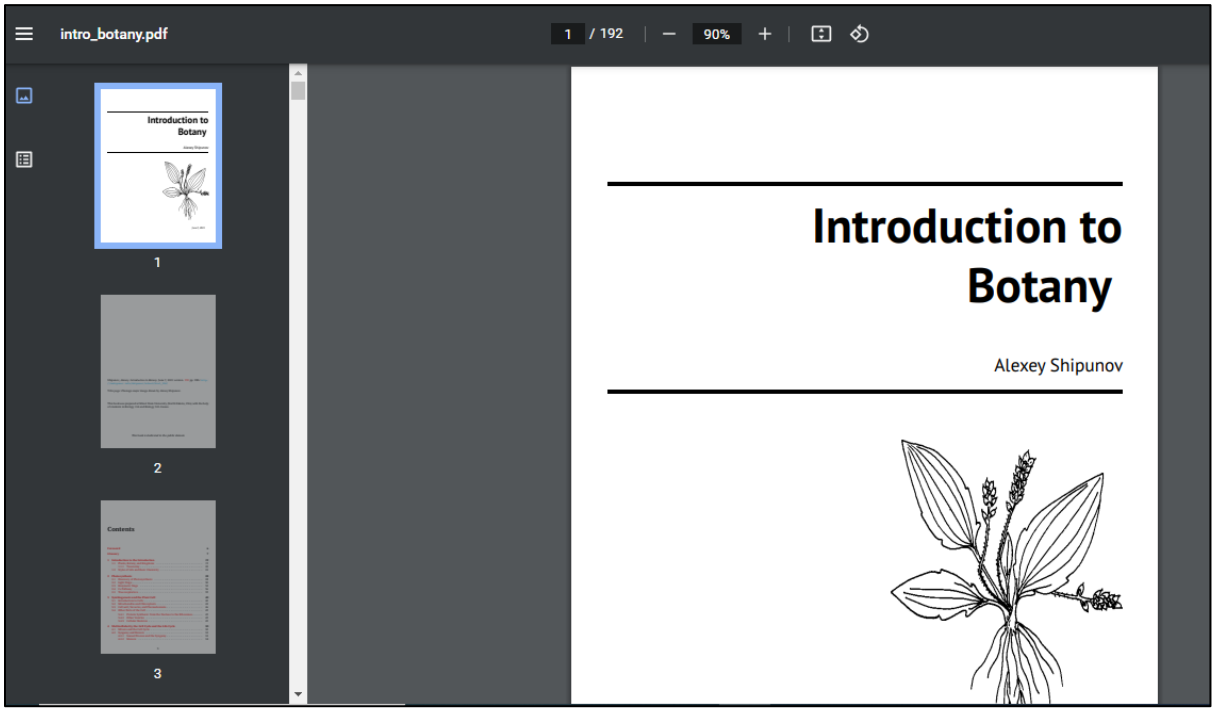
Scanned hand written notes (Sample in Bengali for general stream)



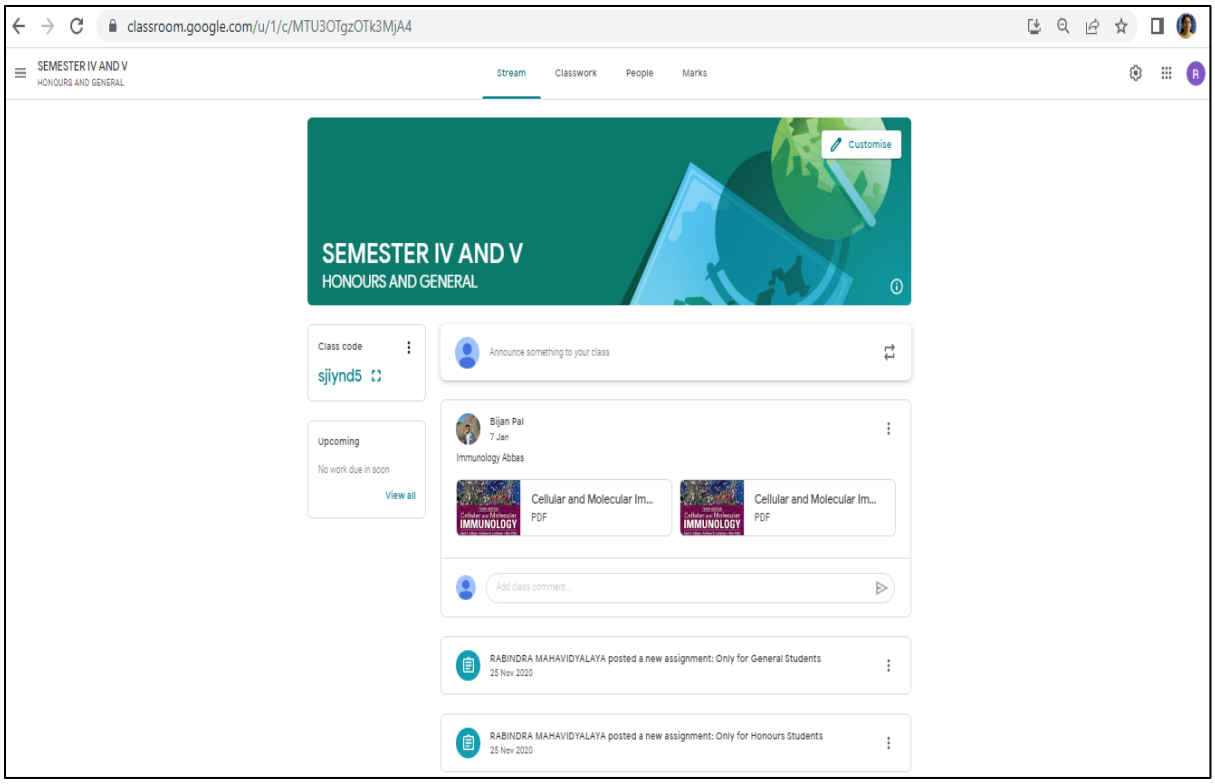
Scanned hand written notes (Sample for Honours stream)

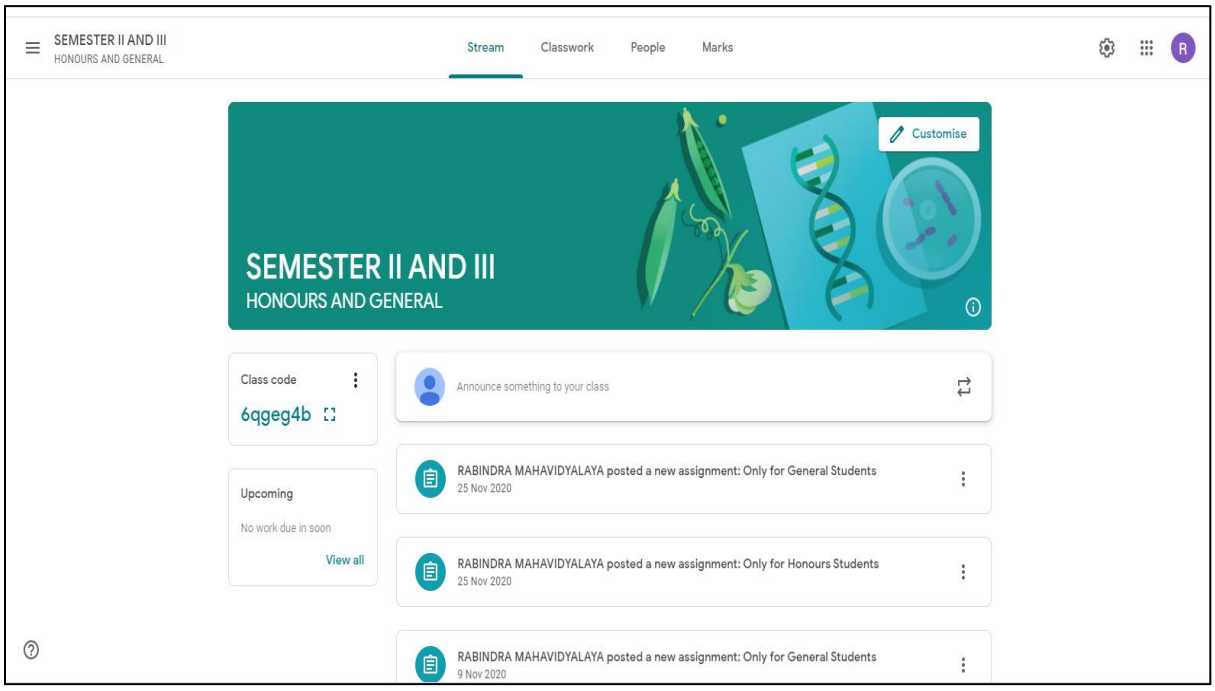


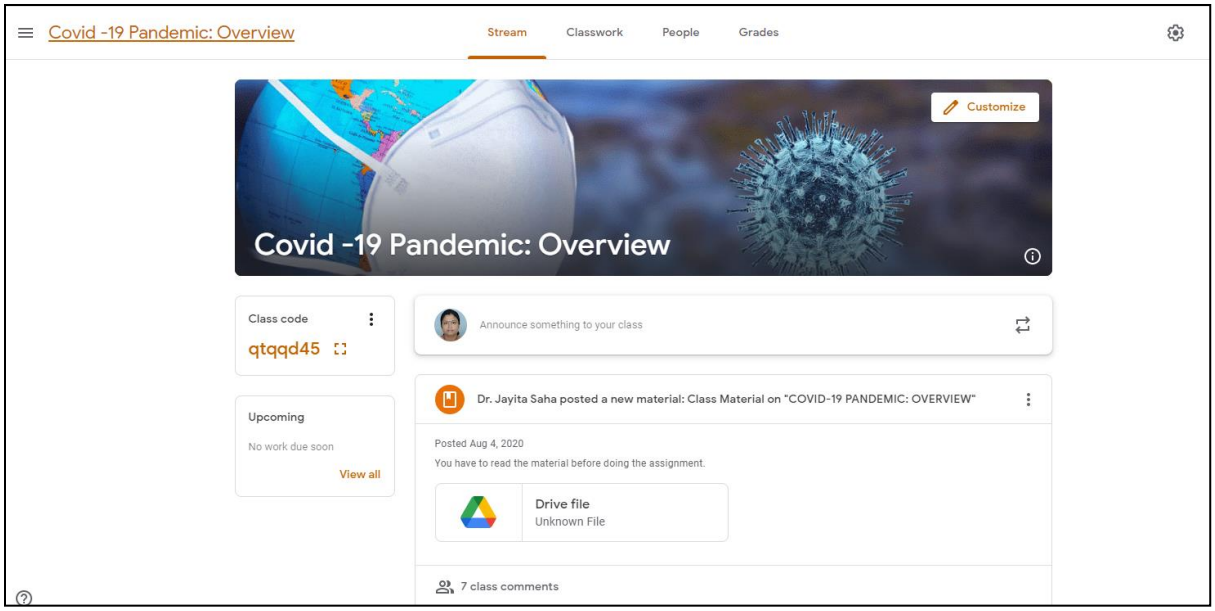
E-Book PDF (Sample)

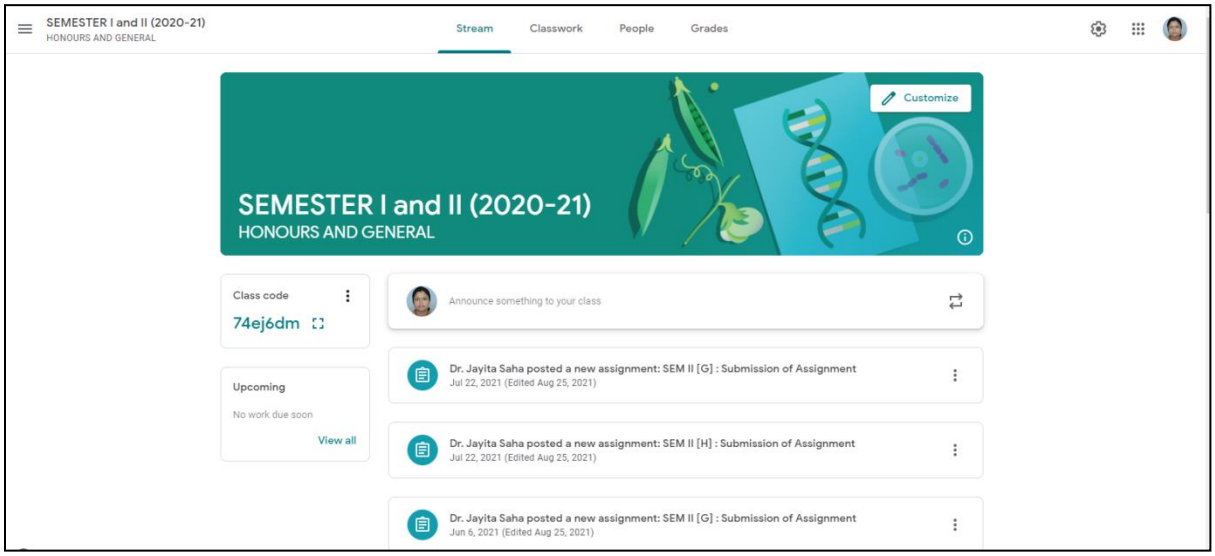


Google Classroom

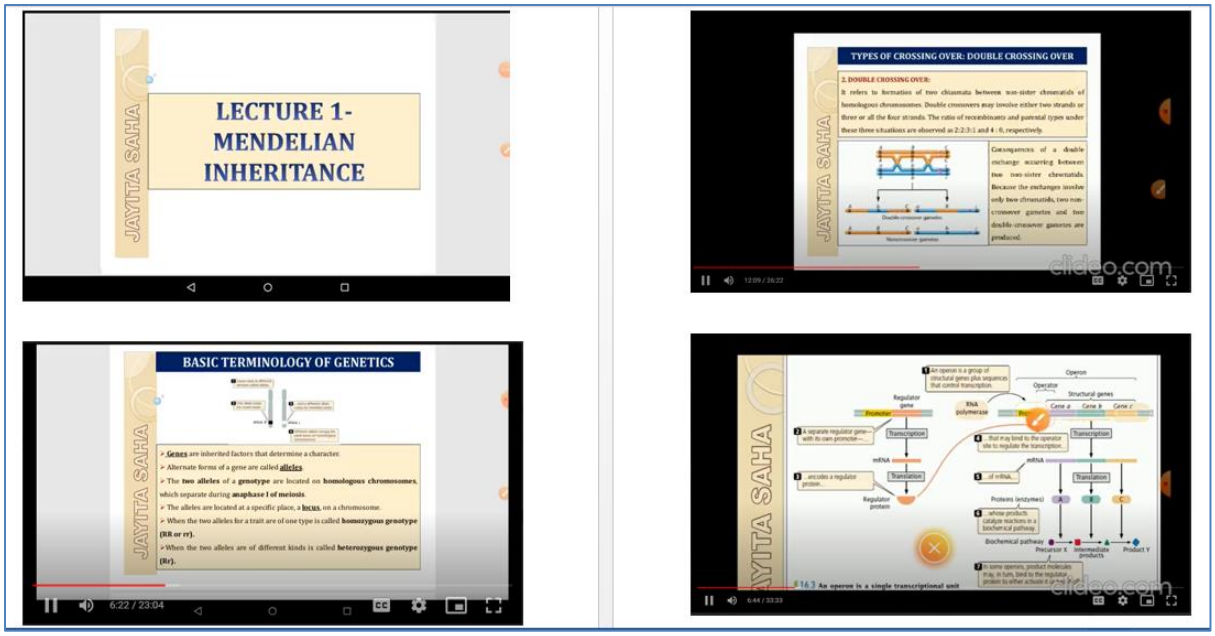




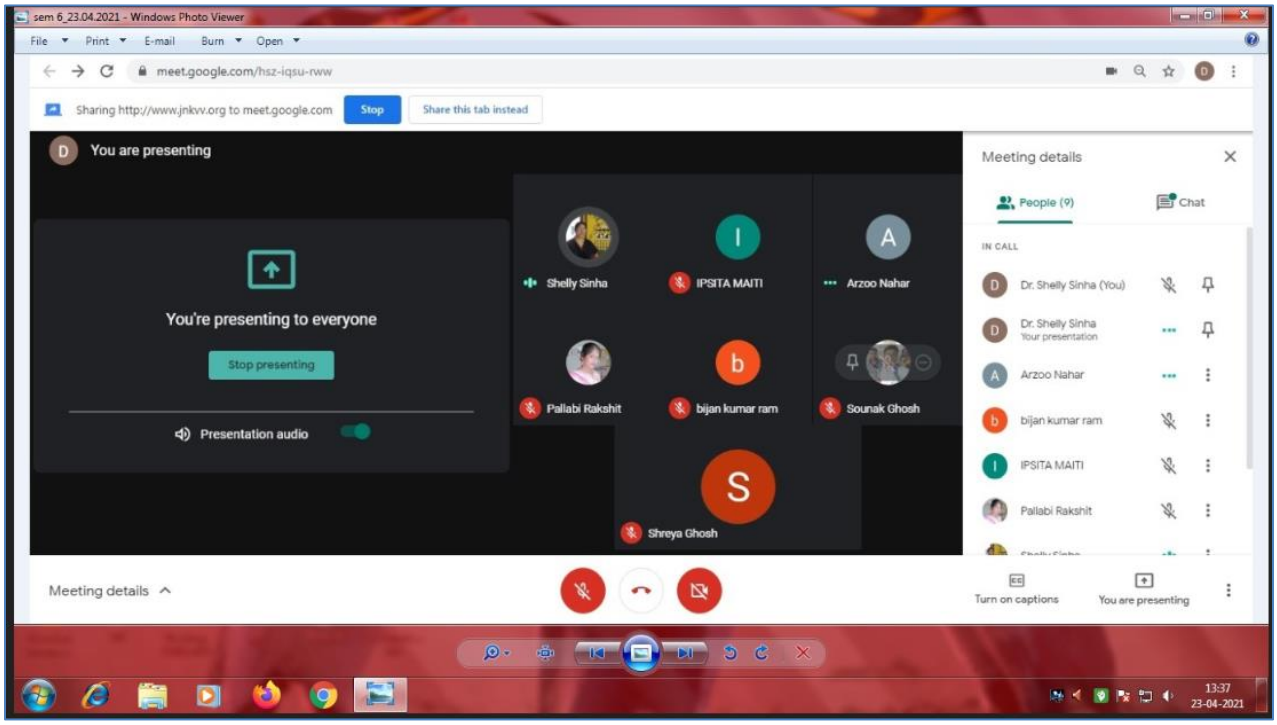

Covid -19 Pandemic: Overview
Stream
Classwork
People
Grades
Customize
Covid -19 Pandemic: Overview
Class code
qtqqd45
Upcoming
No work due soon
View all
Announce something to your class
Dr. Jayita Saha posted a new material: Class Material on "COVID-19 PANDEMIC: OVERVIEW"
Posted Aug 4, 2020
You have to read the material before doing the assignment.
Drive file
Unknown File
7 class comments


SEMESTER I and II (2020-21)
HONOURS AND GENERAL
Stream
Classwork
People
Grades
Customize
SEMESTER I and II (2020-21)
HONOURS AND GENERAL
Class code
74ej6dm
Upcoming
No work due soon
View all
Announce something to your class
Dr. Jayita Saha posted a new assignment: SEM II [G] : Submission of Assignment
Jul 22, 2021 (Edited Aug 25, 2021)
Dr. Jayita Saha posted a new assignment: SEM II [H] : Submission of Assignment
Jul 22, 2021 (Edited Aug 25, 2021)
Dr. Jayita Saha posted a new assignment: SEM II [G] : Submission of Assignment
Jun 6, 2021 (Edited Aug 25, 2021)

Screenshot of Video (Sample)



Google Meet



Department of Chemistry (2020-2021)

Snapshots/ screenshots of E-resources and techniques used

Screenshot (sample) of Resources

PPT Sample

Chemistry Hons. SEM-IV

PHYSICAL CHEMISTRY

Applications of Thermodynamics-II

By

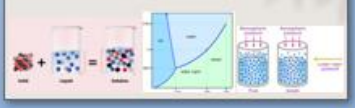
Dr. Debasmita Sardar
Assistant Professor
Department of Chemistry
Rabindra Mahavidyalaya
Champadanga, Hooghly

10

Course Code- CC-8

Course Title- Physical Chemistry-III (Theo)

Applications of Thermodynamics-II



11

Topics

Application of Thermodynamics - II

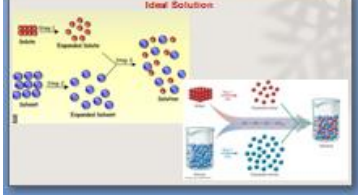
1. Colligative properties: Vapour pressure of solution; Ideal solutions, Ideally diluted solutions and colligative properties; Raoult's law; Thermodynamic derivation using chemical potential to derive relations between the four colligative properties, i.e., (i) relative lowering of vapour pressure, (ii) elevation of boiling point, (iii) Depression of freezing point, (iv) Osmotic pressure. Application in calculating molar masses of solute; Abnormal colligative properties for dissociated and associated solutes in solution.

2. Phase rule: Definitions of phase, component and degrees of freedom; Phase rule and its derivations; Phase diagram for water, CO_2, Sulphur

3. First order phase transition and Clapeyron equation; Clausius-Clapeyron equation - derivation and use; Liquid vapour equilibrium for two component systems.

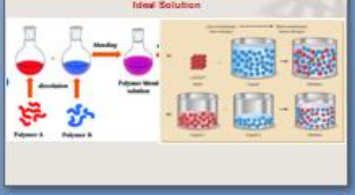
12

Ideal Solution



15

Ideal Solution



16

Ideal & Non-Ideal Solution

Ideal solutions and Non- ideal solutions

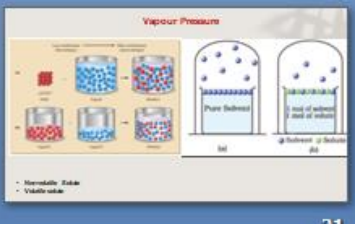
Ideal solutions	Non- ideal solutions
The solutions that obey Raoult's Law over the entire range of concentrations are known as ideal solutions.	When a solution does not obey Raoult's Law over the entire range of concentration, then it is called non-ideal solution.
$\Delta_{mix}H=0$ and $\Delta_{mix}V=0$	$\Delta_{mix}H \neq 0$ and $\Delta_{mix}V \neq 0$
The intermolecular attractive forces between solute molecules and solvent molecules are nearly equal to those present between solute and solvent molecules i.e. A-A and B-B interactions are nearly equal to those between A-B	The intermolecular attractive forces between solute molecules and solvent molecules are not equal to those present between solute and solvent molecules i.e. A-A and B-B interactions are not equal to those between A-B

17

Vapor Pressure

20

Vapour Pressure



21

Colligative Properties

Colligative properties are characteristics of a solution that depend on the ratio of the number of solute particle to solvent particles.

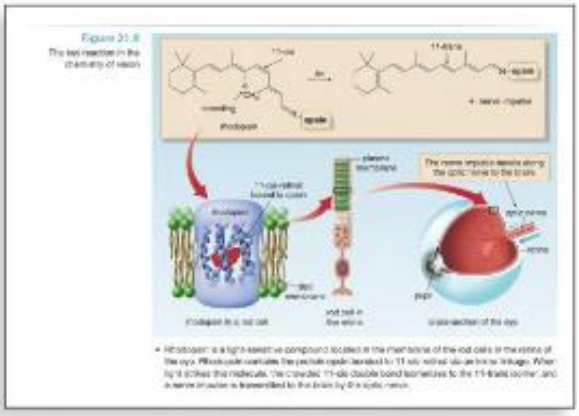
22

PDF Sample

Illustrations

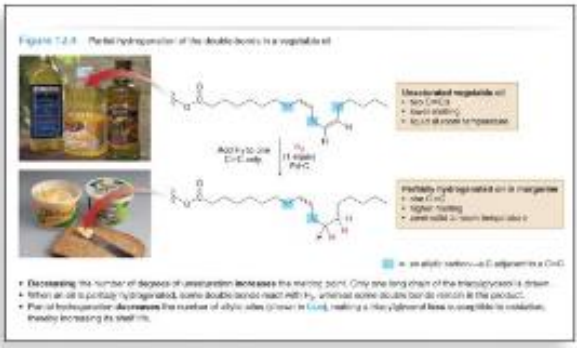
Organic Chemistry is supported by a well-developed illustration program. Besides traditional skeletal (line) structures and condensed formulas, there are numerous ball-and-stick molecular models and electrostatic potential maps to help students grasp the three-dimensional structure of molecules (including stereochemistry) and to better understand the distribution of electronic charge.

"I believe that dissecting the text gives students time to understand and to digest, step-by-step, each concept presented, rather than memorize them. This helps students in achieving better results faster. . . . The quality of the illustrations is very good, without unnecessary explanations that could make them confusing. The language is easy to follow, the concept easy to understand."
—Camelia Gogonea, Cleveland State University

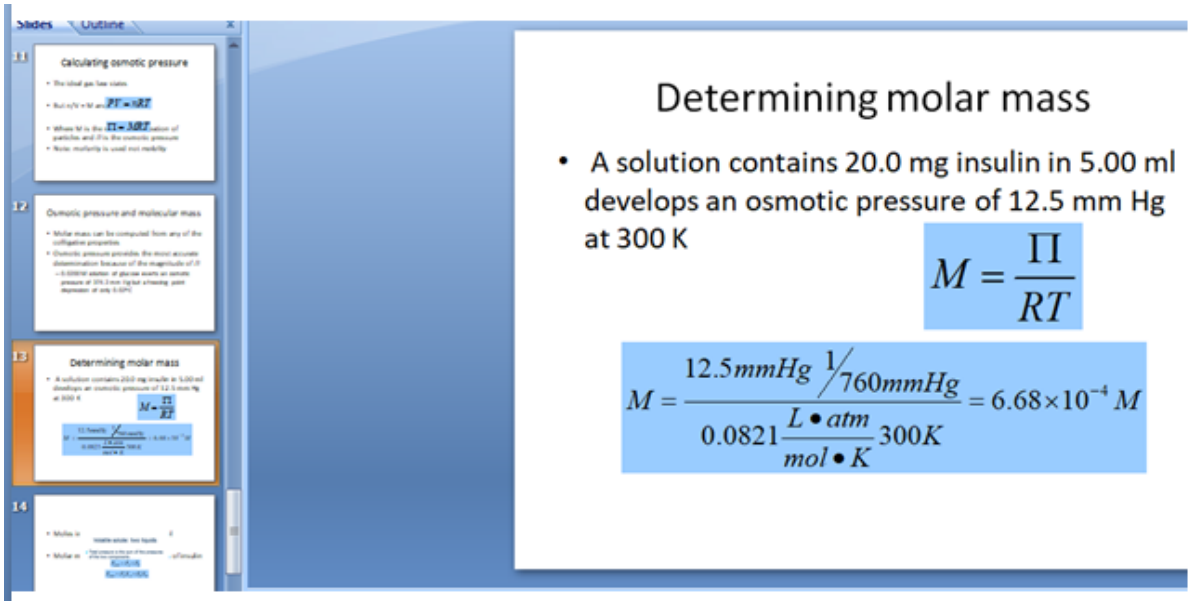


Micro-to-Macro Illustrations

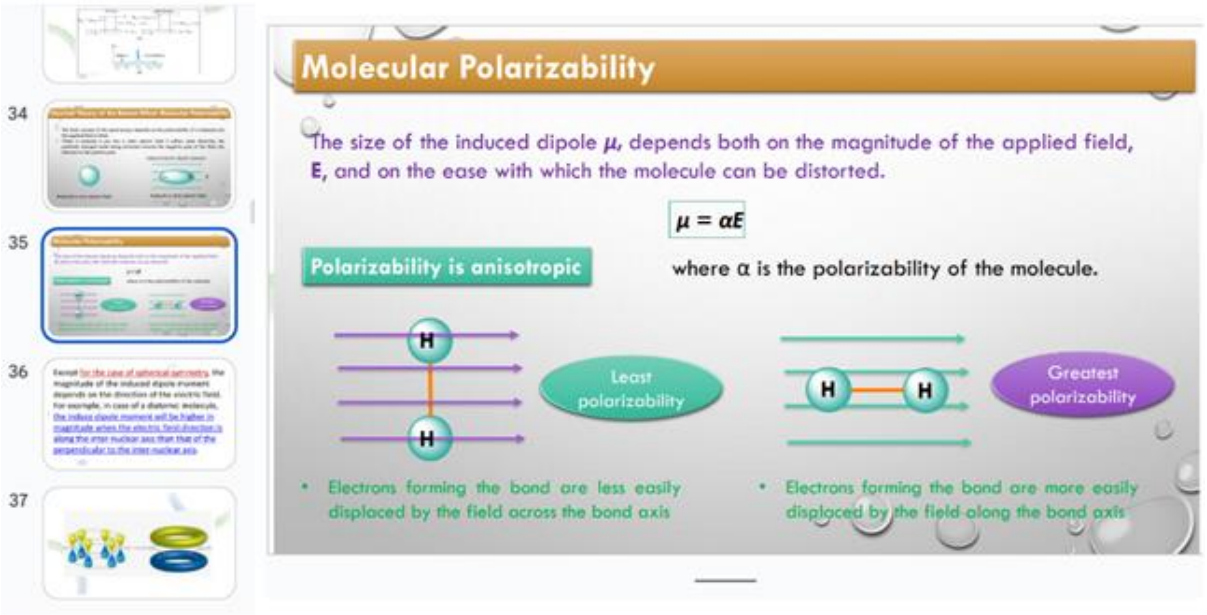
Unique to *Organic Chemistry* are micro-to-macro illustrations, where line art and photos combine with chemical structures to reveal the underlying molecular structures giving rise to macroscopic properties of common phenomena. Examples include starch and cellulose (Chapter 5), adrenaline (Chapter 7), partial hydrogenation of vegetable oil (Chapter 12), and dopamine (Chapter 25).



Class Materials



Class taken by Dr. Sucheta Joy, Assistant Professor, department of Chemistry on colligative properties



Class taken by Dr. Debasmita Sardar, Assistant Professor, department of Chemistry on Raman Spectroscopy

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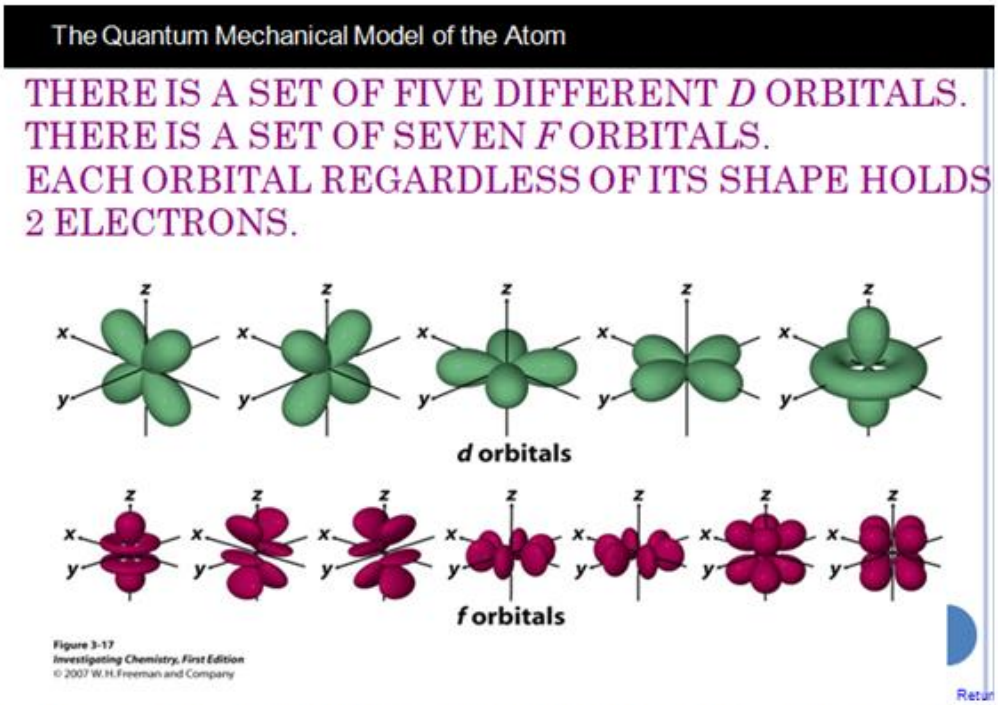

Class taken by Dr. Dr. Sucheta Joy, Assistant Professor, department of Chemistry on atomic structure

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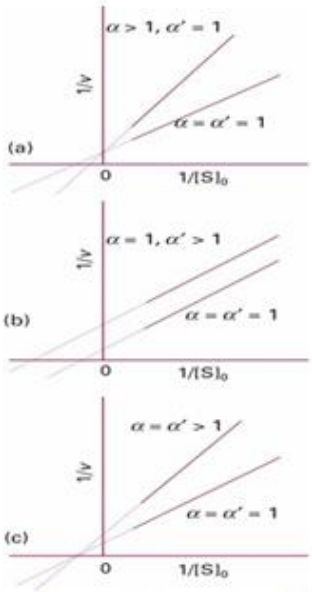

- Lineweaver–Burk plots characteristic of the three major modes of enzyme inhibition:
- (a) competitive inhibition,
- (b) uncompetitive inhibition, and
- (c) non-competitive inhibition, showing the special case $\alpha = \alpha' > 1$.

$$[E]_0 = \frac{K_M[ES]}{[S]_0}\alpha + [ES]\alpha' = [ES]\left(\frac{\alpha K_M}{[S]_0} + \alpha'\right)$$

Class taken by Dr. Sucheta Joy, Assistant Professor, department of Chemistry on photochemistry

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1. Prevention of Waste/By-Products

It is better to prevent waste/By Products than to treat or clean up waste after it is formed.

✓ Carry out a synthesis in such a way so that formation of waste (by-products') is minimum or absent.

✓ Cost involved in the treatment and disposal of waste adds to the overall production cost.

✓ The unreacted starting materials also form part of the waste.

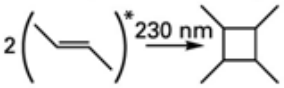
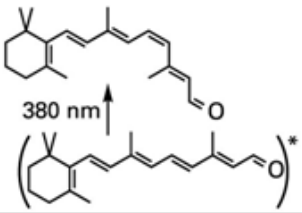
✓ If discharged causes pollution and requires expenditure for cleaning-up.

❖ An Ounce of Prevention is Worth a Pound Of Cure.

❖ A Chemist in a Green Chemistry lab is Performing Pollution Prevention on a Molecular level .

Class taken by Mrs. Subhra Dholey, SACT, department of Chemistry on green chemistry

Table 23.1 Examples of photochemical processes

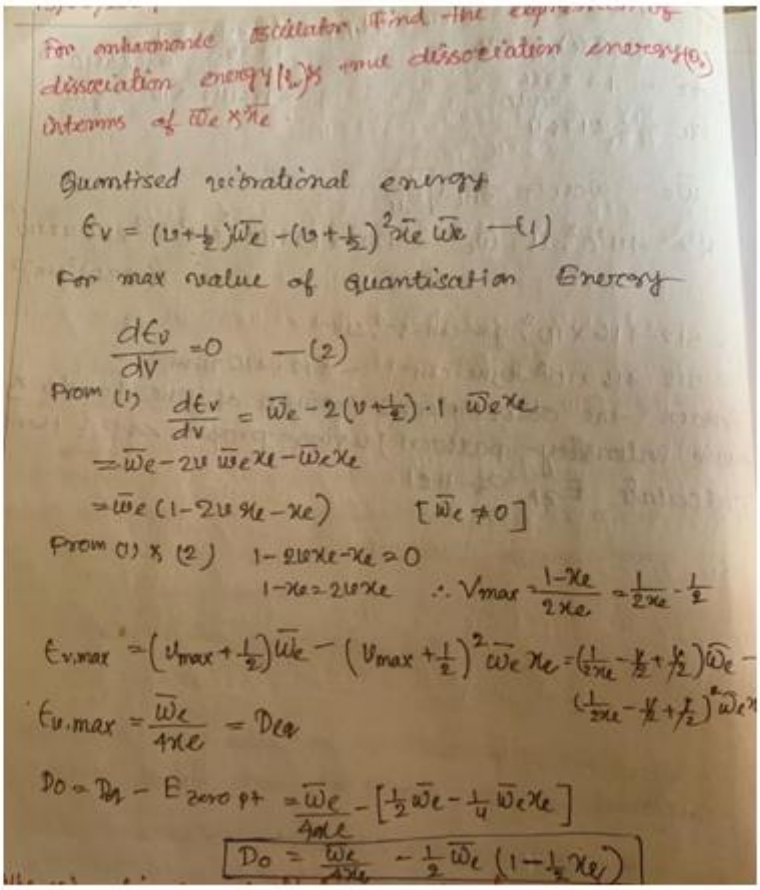
Process	General form	Example
Ionization	$A^* \rightarrow A^+ + e^-$	$NO^* \xrightarrow{134\ nm} NO^+ + e^-$
Electron transfer	$A^* + B \rightarrow A^+ + B^-$ or $A^- + B^+$	$[Ru(bpy)_3^{2+}]^* + Fe^{3+} \xrightarrow{452\ nm} Ru(bpy)_3^{3+} + Fe^{2+}$
Dissociation	$A^* \rightarrow B + C$	$O_3^* \xrightarrow{1180\ nm} O_2 + O$
	$A^* + B\text{-}C \rightarrow A + B + C$	$Hg^* + CH_4 \xrightarrow{254\ nm} Hg + CH_3 + H$
Addition	$2\,A^* \rightarrow B$	
	$A^* + B \rightarrow AB$	
Abstraction	$A^* + B—C \rightarrow A—B + C$	$Hg^* + H_2 \xrightarrow{254\ nm} HgH + H$
Isomerization or rearrangement	$A^* \rightarrow A'$	

* Excited state.

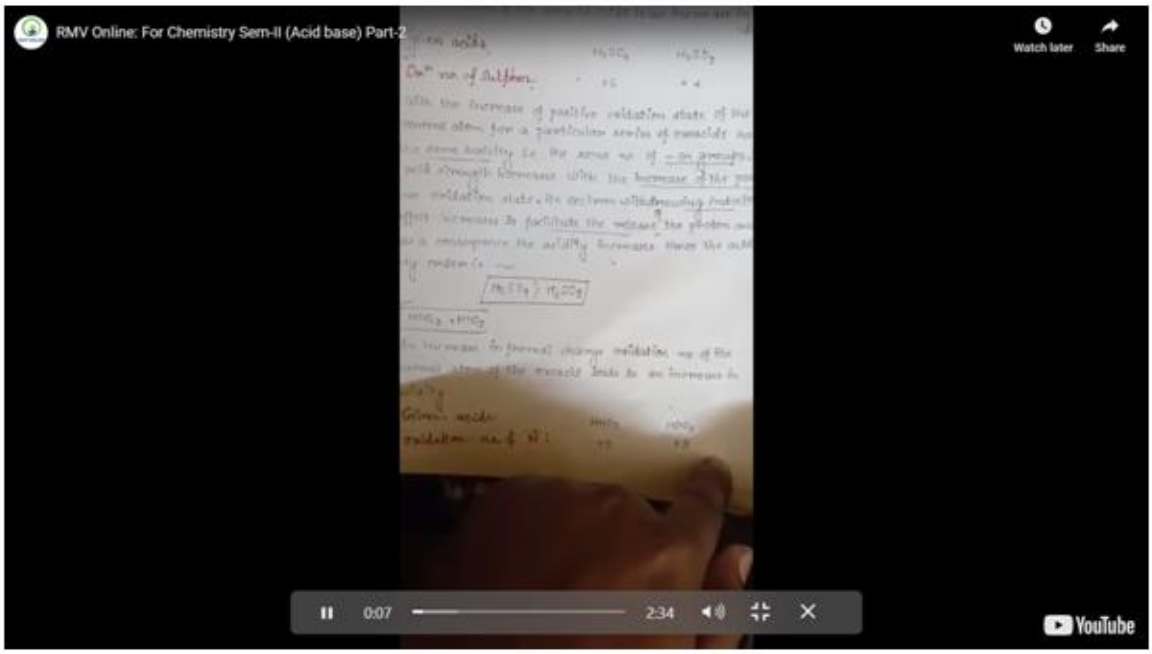
Table 23-1
Atkins Physical Chemistry, Eighth Edition

Class taken by Dr. Sucheta Joy, Assistant Professor, department of Chemistry on photochemical process

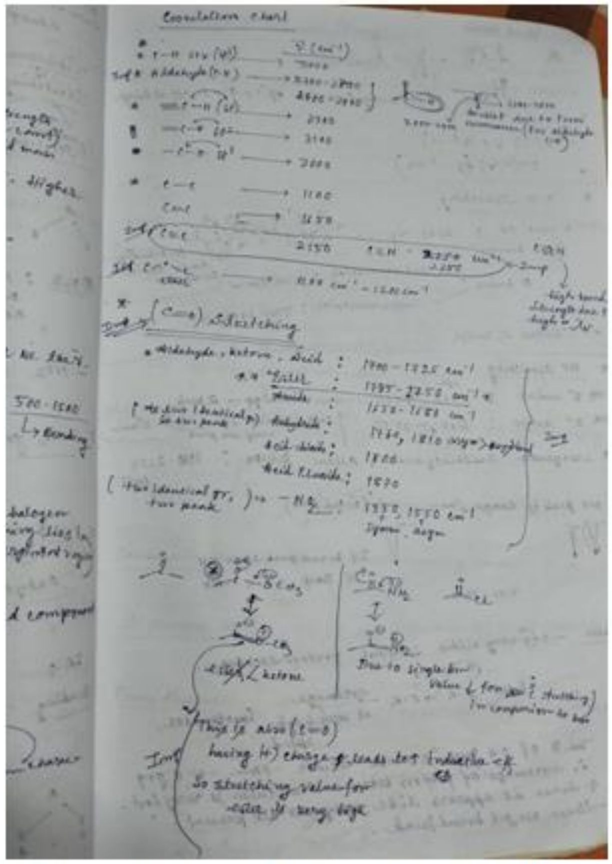
Scanned hand written notes



Class taken by Dr. Debasmita Sardar, Assistant Professor, department of Chemistry on IR Spectroscopy

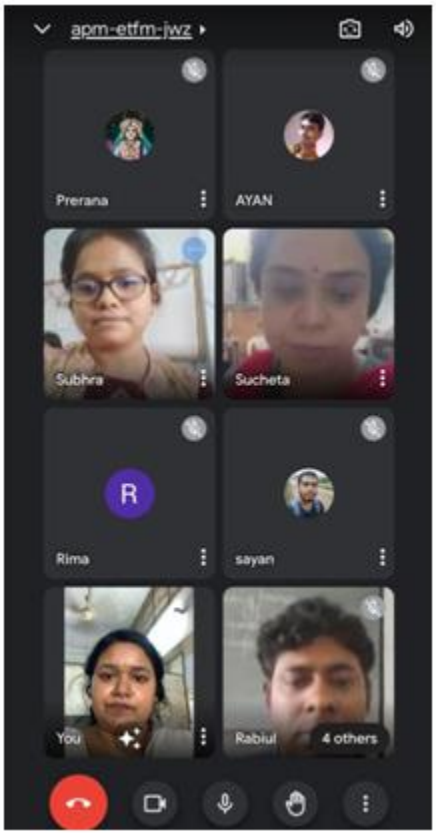


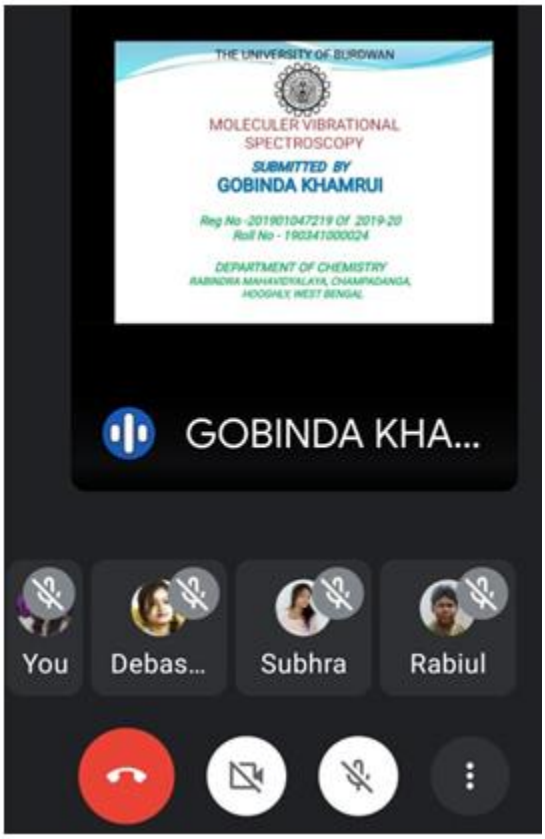
Class taken by Dr. Rabiul Alam, Assistant Professor, department of Chemistry on acid-base

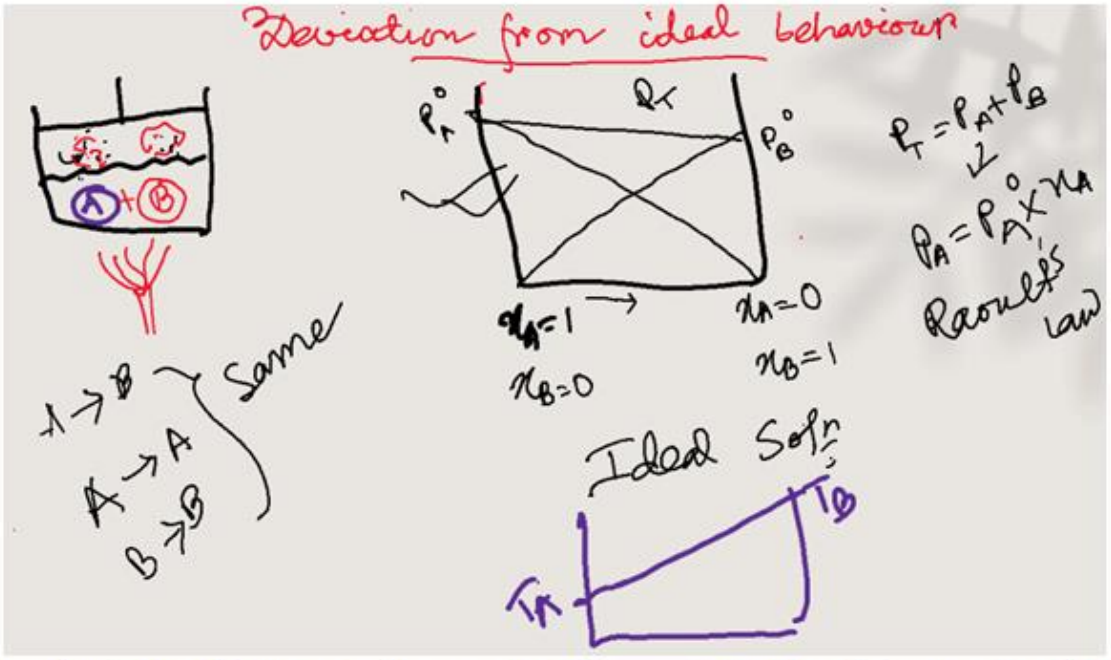


Class taken by Mrs. Subhra dholey, SACT, department of Chemistry on stretching frequency

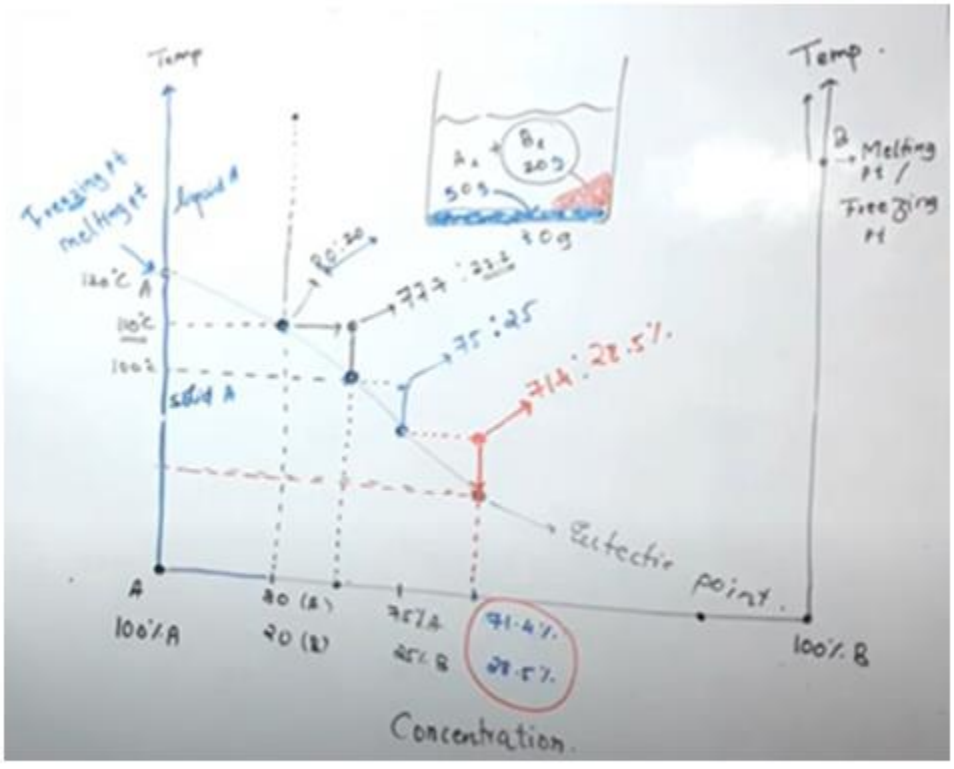
Google Classroom





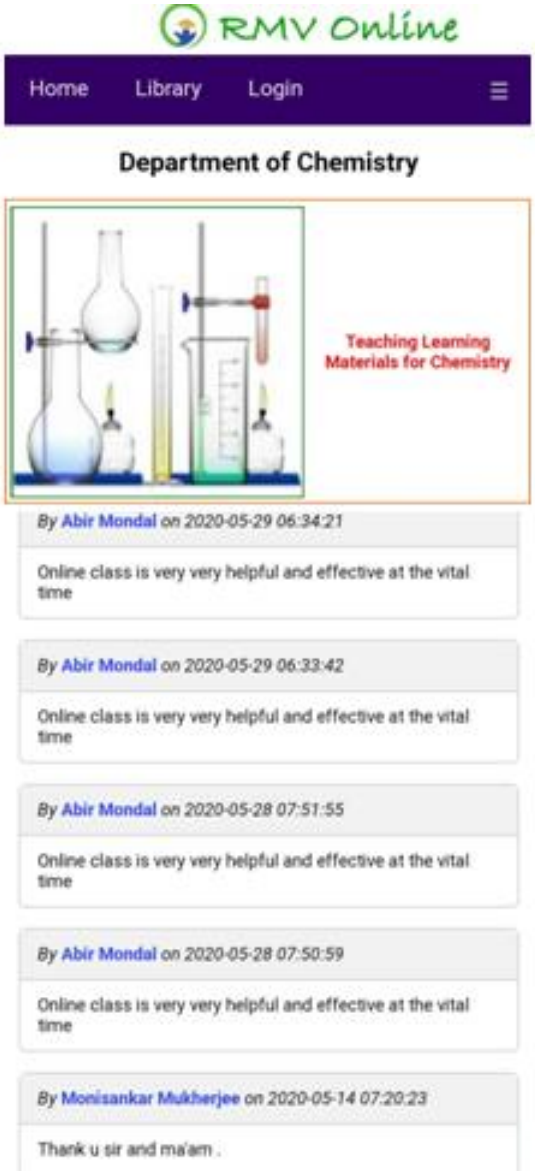


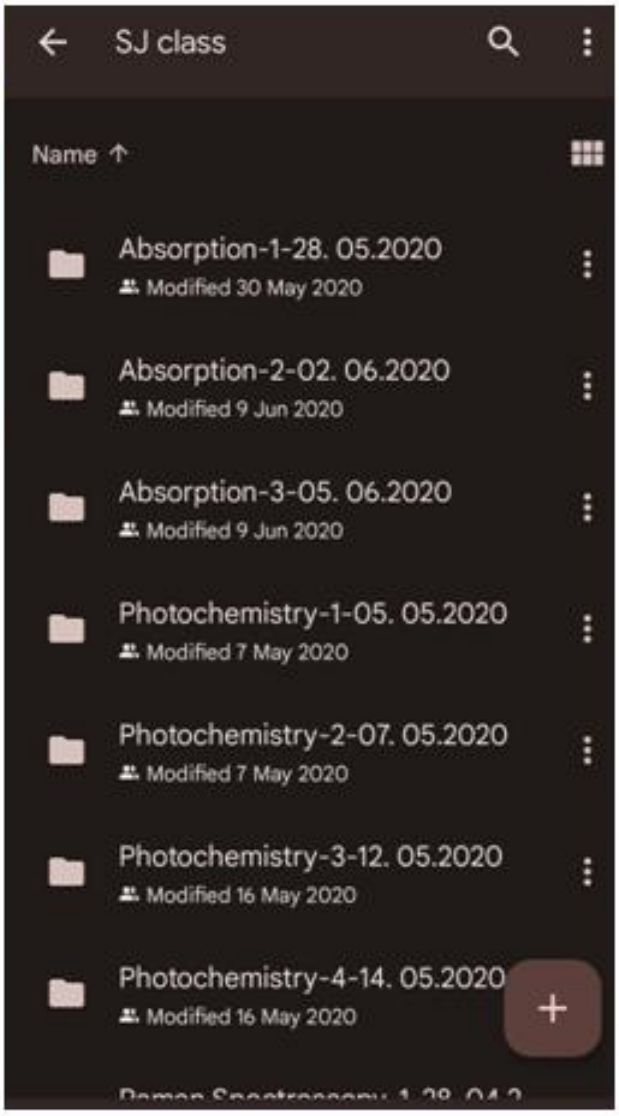
Class taken by Dr. Debasmita Sardar, Assistant Professor, department of Chemistry on solutions



Class taken by Dr. Debasmita Sardar, Assistant Professor, department of Chemistry on phase equilibrium

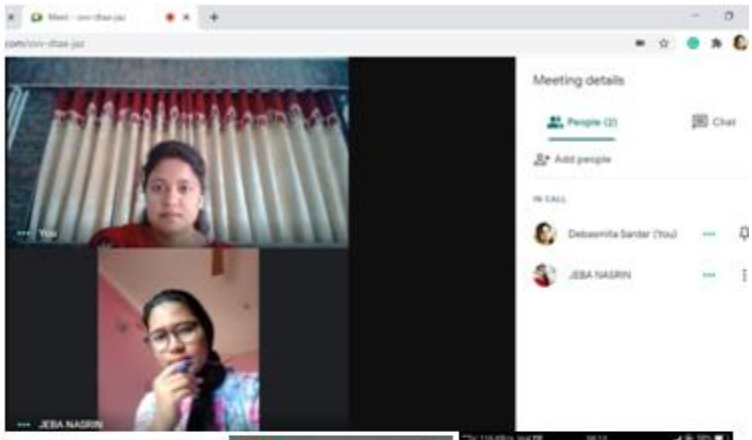
Students Review for online classes & uploaded class notes

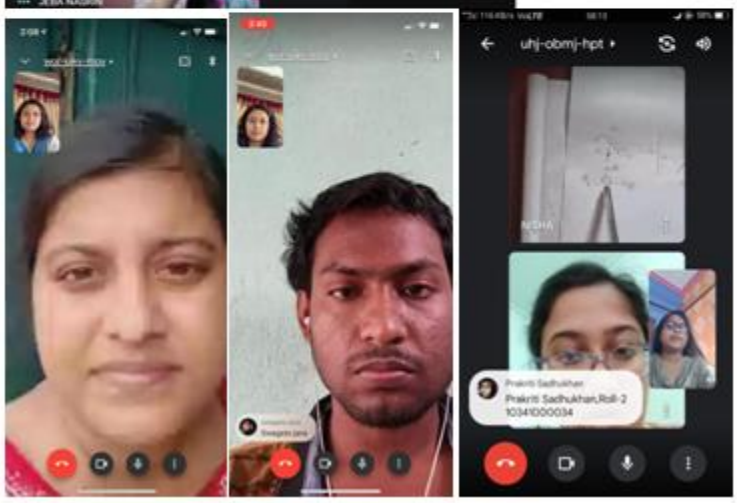




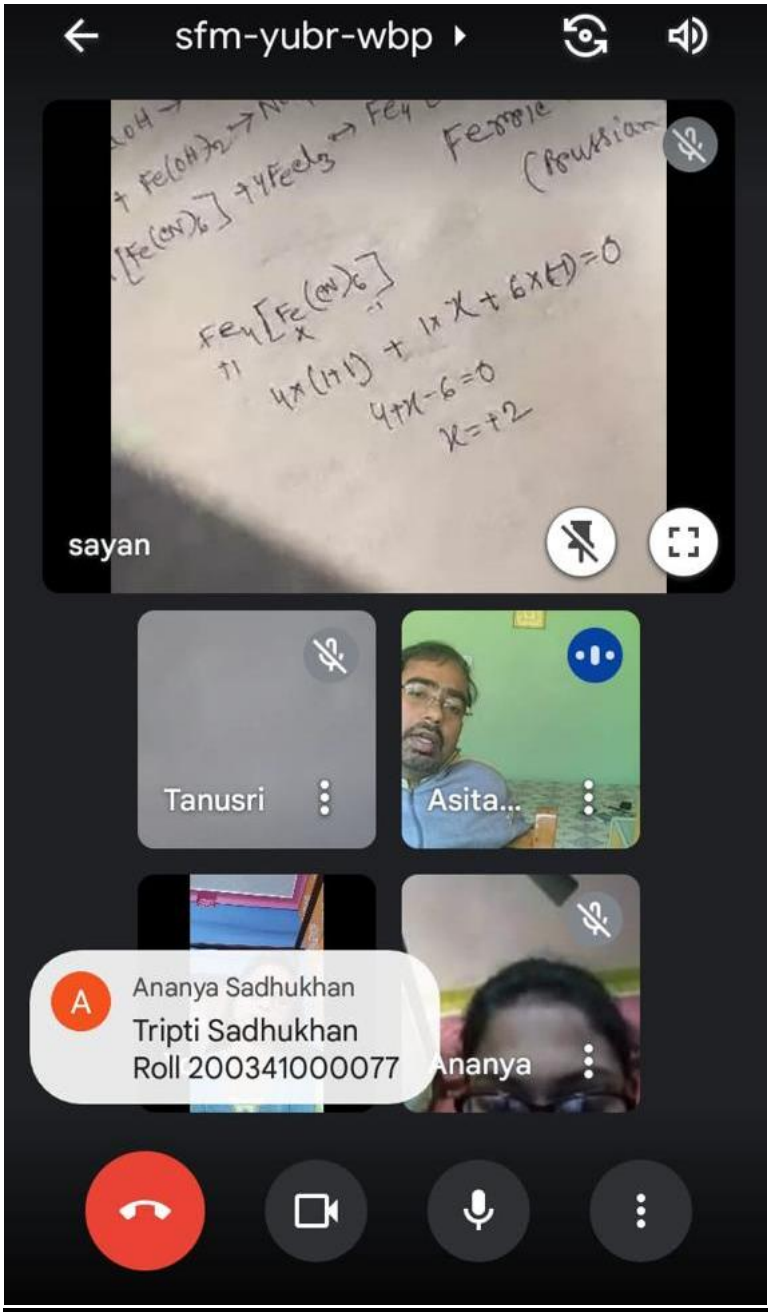
Exam Viva


qgi-xrfb-ytw
RUMA CHOYAN
qgi-xrfb-ytw
Rumela Saha chowdhury
ong-oryo-uea

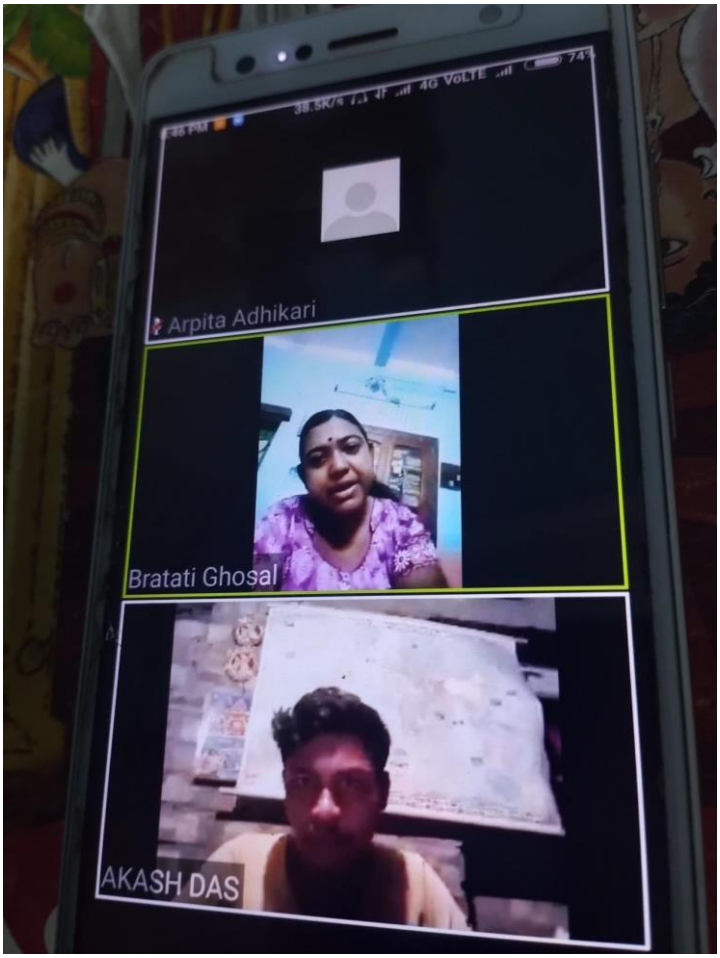

Meeting details
People (2)
Chat
Add people
JEBA NASRIN


uhj-obmj-hpt
Prakriti Sadhukhan,Roll-2
10341000034

Practical Exam Viva (in presence of External)

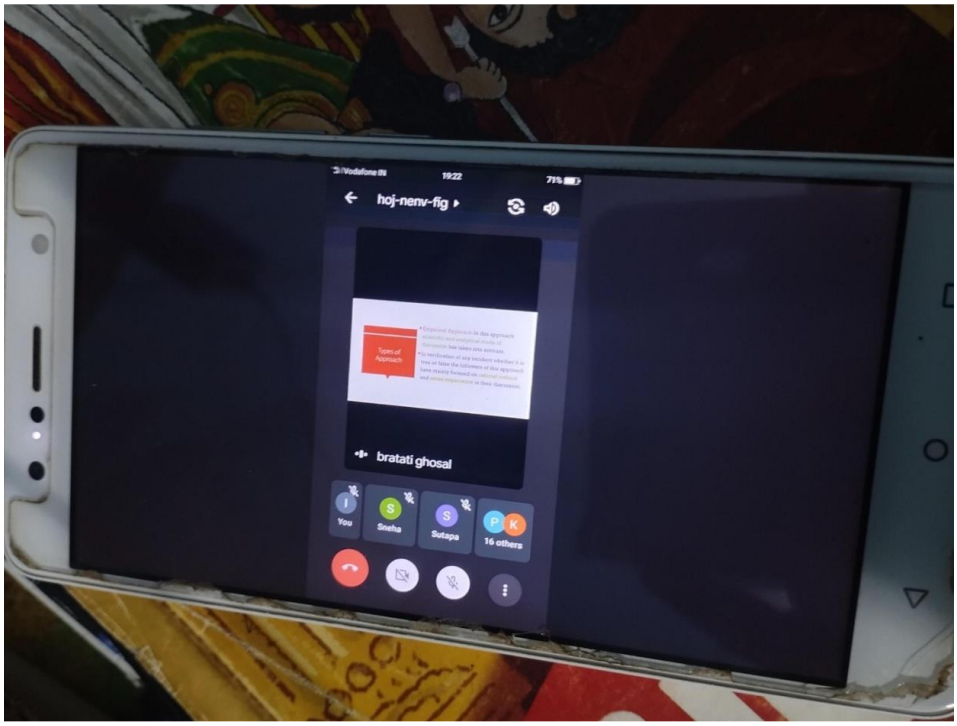


Department of Political Science

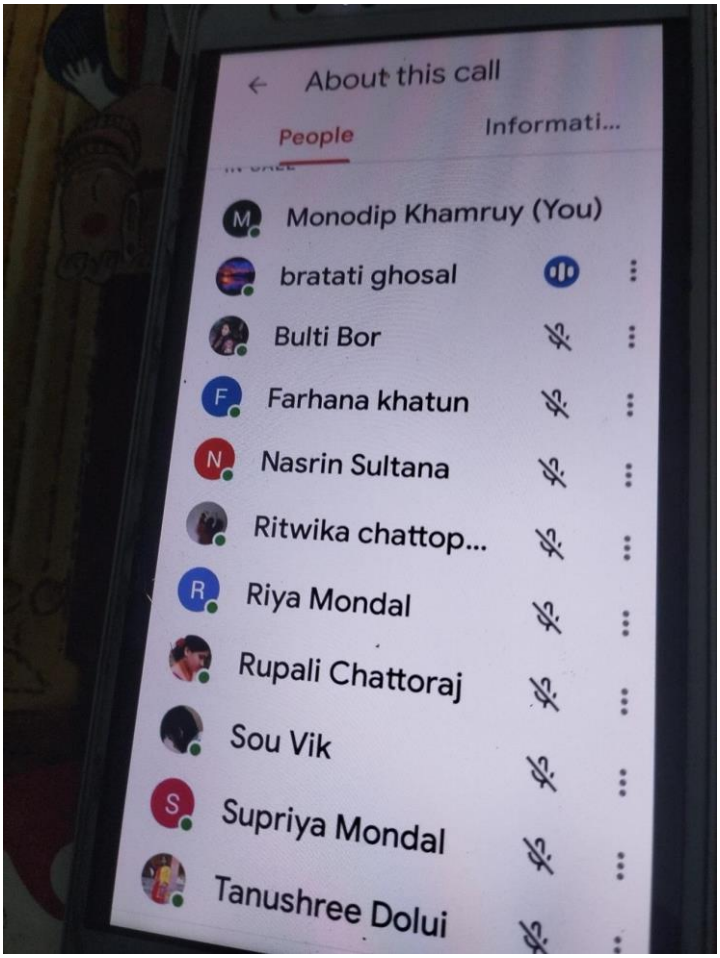


Online class taken by Bratati Ghosal, Assistant professor in Political Science for 6 th sem honours students (2020-21 session)

Online class for Semester-1 Hons students, taken by Bratati Ghosal, Assistant Prof.in Political Sc. (2020-21)



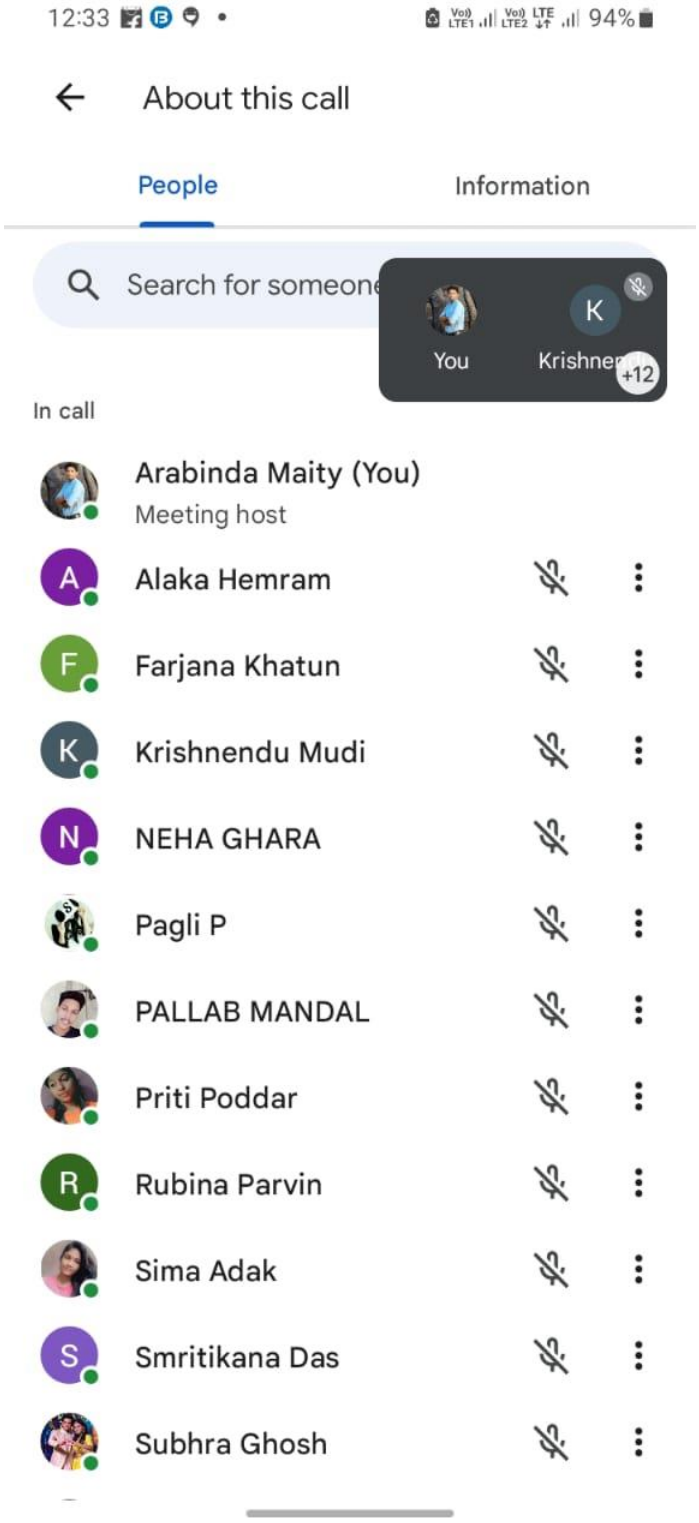
Online class for Political Science Sem-5 Hons students taken by Bratati Ghosal, Asst.professor for 2020-21

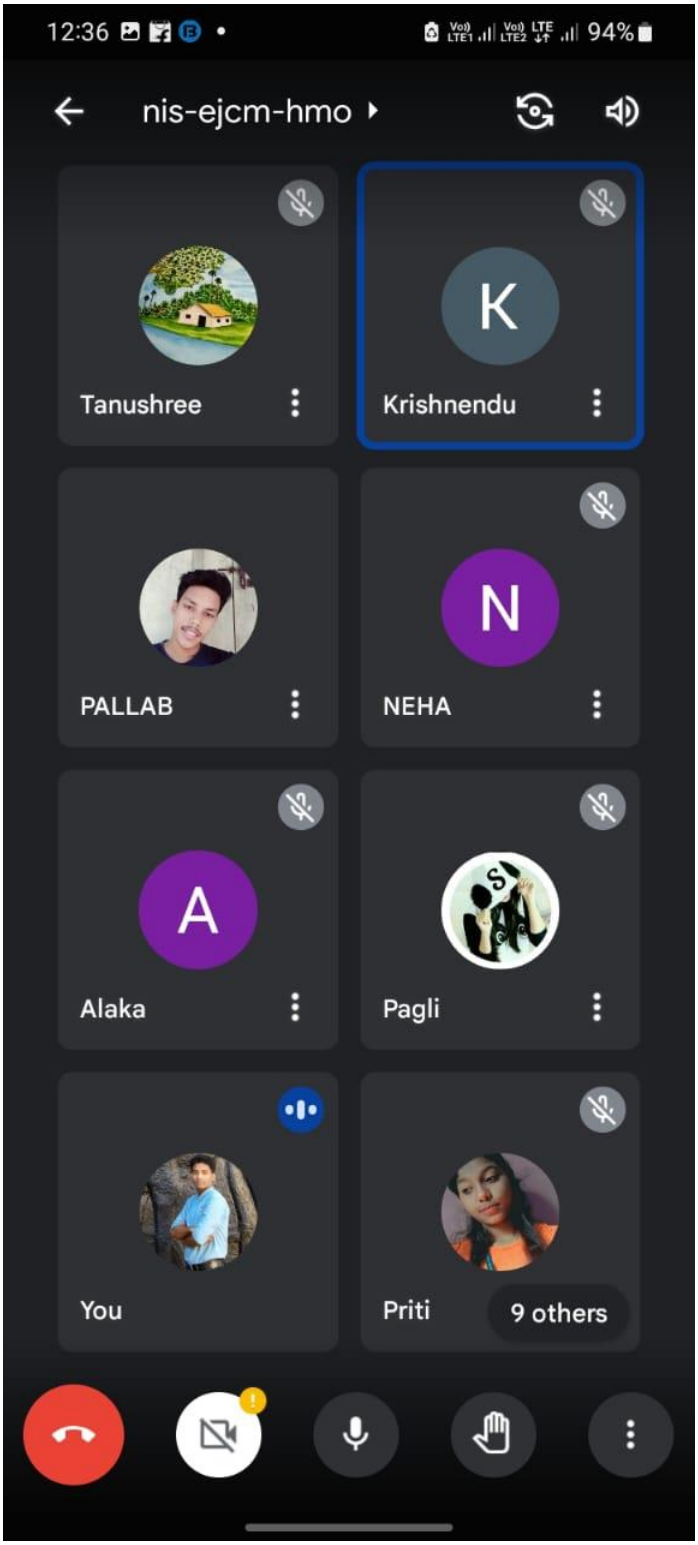


DEPARTMENT OF PHYSICAL EDUCATION (SESSION 2020-2021)

ONLINE CLASS - SEMESTER-1

CLASS TAKEN BY MR. ARABINDA MAITY , SACT, PHYSICAL EDUCATION

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nis-ejcm-hmo
Tanushree
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PALLAB
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A
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Priti
9 others

Topic: Renaissance in Italy.
Semester- III Honours
Paper- CC- VI
Lecture delivered by Prof. *Sujata Bandyopadhyay*, Department of History, Rabindra Mahavidyalaya, Champadanga in 2020.
https://www.youtube.com/watch?v=EJZaz7YRsiw

Rests of the departments also have followed the similar techniques to conduct classes and evaluate student performance. (Screenshots are not attached.)