



**Welcome to IIT Bombay
and
CH 105**

CH 105 – Organic Chemistry

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Prof. S. J. Gharpure

and...several current and past colleagues at IIT B

Syllabus

- **Chemistry in 3D:** Visualization of tetrahedral carbon, representation of molecules using projection formulae and their interconversion. Factors affecting rotational barrier, stability and reactivity of alkanes, cyclohexane and decalin systems.
- **MO and photochemistry:** Importance of molecular orbitals in understanding pericyclic and organic photochemical reactions involving alkenes and polyenes.

Course Resources

Course Website: moodle.iitb.ac.in

Notes, questions, slides, available here, forum for doubts etc.

Books

- P. Volhardt and N. Schore, Organic Chemistry: Structure and Function, 8th Edition, W. H Freeman & Co, 2018.
- P. Y. Bruice, Organic Chemistry, 8th Edition, Pearson, 2017
- W. H. Brown, C. S. Foote, B. L. Iverson, E. V. Anslyn, Organic Chemistry, 6th Edition, Brooks/Cole Cengage Learning, 2012
- L. G. Wade Jr. "Organic Chemistry", 8th Edition, Pearson, 2016

Advanced Reading:

- Organic Chemistry, Clayden, Green, Warren and Wothers, Oxford University Press

Animations:

- <http://www.chemtube3d.com/>

Class Info

- **Organic Chemistry until November 21**

Classes in Slot 2

Mon (9:30 am) , Tues (10:30 am), Thurs (11:30 am)

- **Tutorials: On Wednesdays**

Tutorials are useful for Self Evaluation, Clarification of Concepts, Practice and..... **quizzes** 😊

Feel Free to Raise Hand for Asking Questions

“ No question is a silly question”

Also Your Tut TA will have a whatsapp group for your Tut batch

Evaluation

Evaluation: Organic + Inorganic (one grade, equal weightage)

For Organic:

- **One final exam - 80% weightage**
- **Tutorial quizzes - 20% weightage**

Mark your calendars for Final Organic Exam

November 26, 2022

9:30 – 11:30 am (tentative)

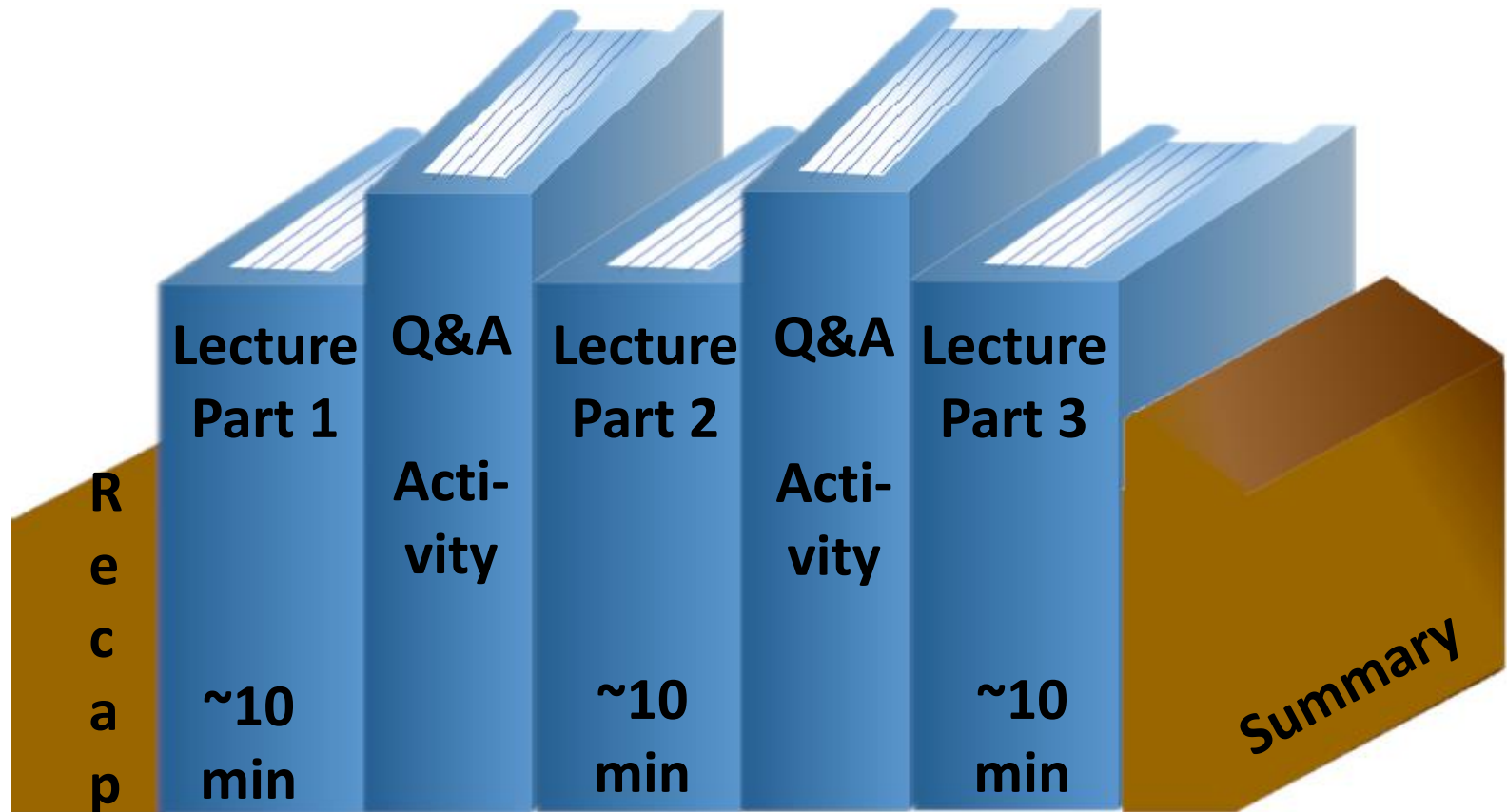
SAFE App For Tutorial Quiz

We will be using SAFE app for conducting the quiz during tutorial hour.

Step 1. Download SAFE app developed by CSE IITB on your **mobile phone** (<http://safe.cse.iitb.ac.in>);

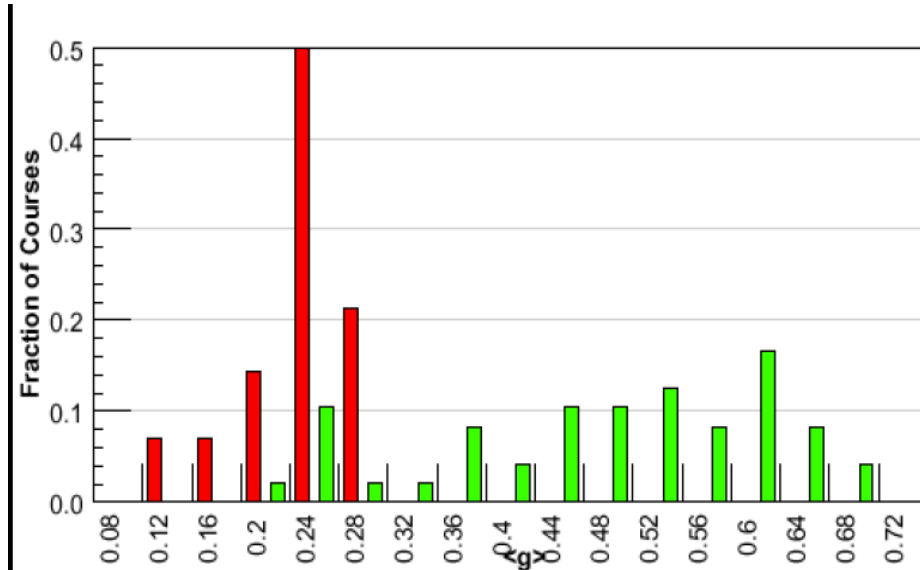
Step 2. Use the registration code 4F07RMKI to register for CH105.

What to expect in class



Why Breaks and Activities?

What does research say?



Learning gain

In Red – Lecture mode

In Green – Activity based approaches

You might feel uncomfortable asking doubts or not getting the answer right!

“what if I get this wrong ?”

“I am not able to solve this – panic mode!!”,

“I am not able to sleep in class”

“why am I made to do stuff in class”

Remember -

Its ok to feel uncomfortable and to be wrong!

Better to help each other in class than one day before exam!

You will discover that you are not alone

