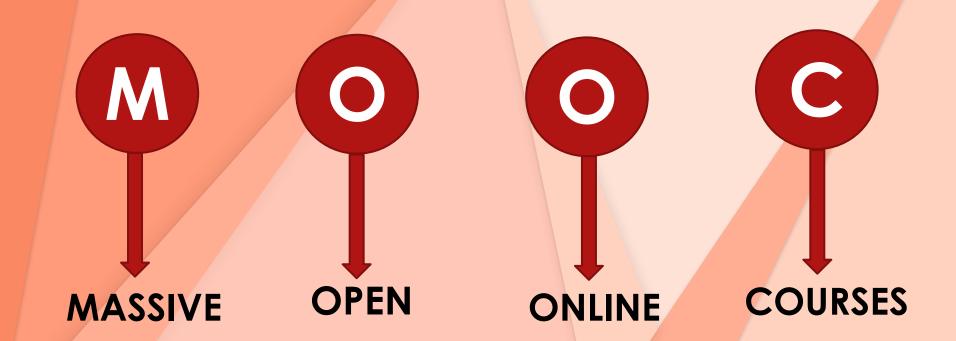
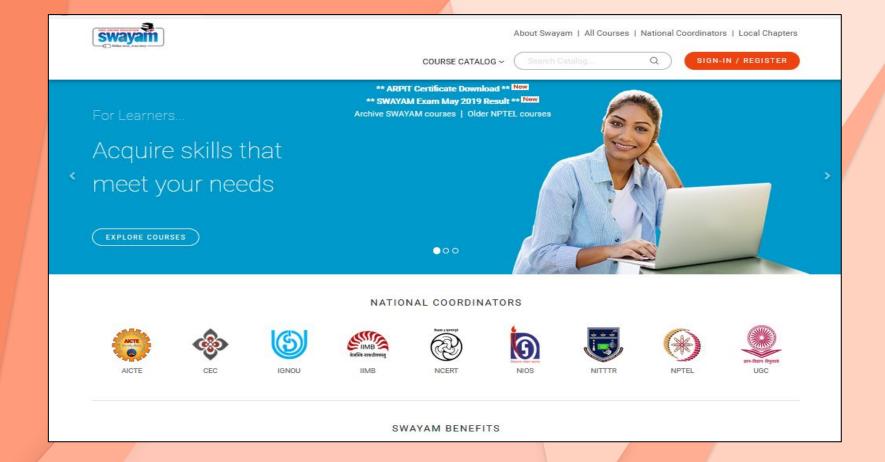


# MOOCs on SWAYAM for School Education

# MOOCs





# https://swayam.gov.in

# **SWAYAM**

(Study Webs of Active –Learning for Young Aspiring Minds) initiated by Ministry of Education, Govt. of India

- 1. One stop web and mobile based Interactive e-content for all courses from High School to University level.
- 2. High quality learning experience using multimedia on anytime, anywhere basis.
- 3. State of the art system that allows easy access and monitoring.
- 4. Hybrid model of delivery that adds to the quality of classroom teaching.

#### **MOOCs on SWAYAM**

- → Designed to achieve three cardinal principles of Education viz, access, equity and quality.
- → All the courses are interactive, prepared by the best experts in the country.
- → All the courses offered on SWAYAM are free of cost to the learners.
- → Instant assessment and feedback.
- → Interaction with the course mates all over the world through the discussion forum.

#### **Scope of Courses on SWAYAM**

- School education (classes IX-XII) modules.
- Teacher training as well as teaching and learning aids.
- Courses to learners to help them understand the subjects better and also to help them in better preparedness for competitive examinations for admissions to professional degree programmes.
- Skill based courses, which cover both post-higher secondary school skills that are presently the domain of polytechnics as well as industrial skills certified by the sector skill councils of various Ministries.
- Curricula and courses that can meet the needs of life-long learners.
- Independent courses which may not be part of any set curriculum and may be taught as awareness courses, continuing education programme and for training of specific skill sets.

# **SWAYAM - National Coordinators**

To ensure the best production and delivery of content in every domain, 9 National Coordinators have been appointed

S.No.	National Coordinator	Role or Sectors covered by NC
1.	AICTE (All India Council for Technical Education)	For self-paced and international courses
2.	UGC (University Grants Commission)  Non-Technical PostGraduate Degree Progra	
3.	NPTEL (National Programme on Technology Enhanced Learning)  Technical / Engineering UG & PG degree programme)	
4.	CEC (Consortium for Educational Communication)  Non Technical UnderGraduate Degree	
5.	NCERT (National Council of Educational Research and Training)  School Educational Programmes from Class 9 <sup>th</sup> to 12 <sup>th</sup>	
6.	NIOS (National Institute of Open Schooling)  Out of school children Educational Programmes from Class 9 <sup>th</sup> to 12 <sup>th</sup>	
7.	IGNOU (Indira Gandhi National Open University)	For out-of-school student
8.	IIMB (Indian Institute of Management, Bangalore)	Management Studies programmes
9.	NITTTR (National Institute of Technical Teachers Training and Research)	Teacher Training programme 8

# **Courses Launched by NCERT**

# Class XI 1. Accountancy, Class XI, Part-I 9. Geography, Class XI, Part-II

Riology Class XI Part-I

2.	Diology, Class AI, Fait-I	10.	iviamemanes, Class AI, Fait-I
3.	Biology, Class XI, Part-II	11.	Mathematics, Class XI, Part-II
4.	Business Studies, Class XI, Part-I	12.	Physics, Class XI, Part-I
5.	Chemistry, Class XI, Part-I	13.	Physics, Class XI, Part-II
6.	Chemistry, Class XI, Part-II	14.	Psychology, Class XI, Part-I
7	Economics, Class XI, Part-I	15.	Psychology, Class XI, Part-II
8.	Geography, Class XI, Part-I	16.	Sociology, Class XI, Part-1

10

Mathematics Class XI Part-I

# **Class XII**

	Class All				
1.	Accountancy, Class XII, Part-I	8.	Geography, Class XII, Part-I		
2.	Accountancy, Class XII, Part-II	9.	Geography, Class XII, Part-II		
3.	Biology, Class XII, Part-I	10.	Mathematics, Class XII, Part-I		
4.	Business Studies, Class XII, Part-I	11.	Physics, Class XII, Part-I		
5.	Chemistry, Class XII, Part-1	12.	Physics, Class XII, Part-II		
6.	Economics, Class XII, Part-I	13.	Psychology, Class XII, Part-I		
7	English, Class XII, Part-1 (APPEAR)	14.	Sociology, Class XII, Part-1		
	<u> </u>		11		

# **SWAYAM - Course Approach**

#### Quadrant 3

**Discussion forum** for raising of doubts and clarifying them on real time basis by the course coordinator or his/ her team

#### Quadrant-4

Assessment (MCQs, fill in the blanks, short Q/As, matching questions, quizzes, FAQs, assignments and solutions, clarification on general misconceptions etc.)

#### Quadrant 1

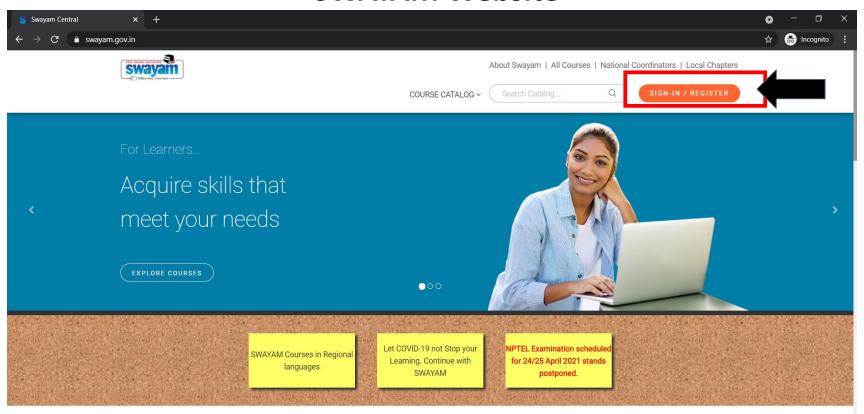
e-Tutorial (Video, Audio, Animation, Simulations, Video Demonstration, Virtual labs etc. along with the transcription)

#### Quadrant 2

e-Content (Self-instructional material, e-books, case studies, illustrations, presentations etc. and also contain web-resources, open source content etc.)

# **How to Join the Course?**

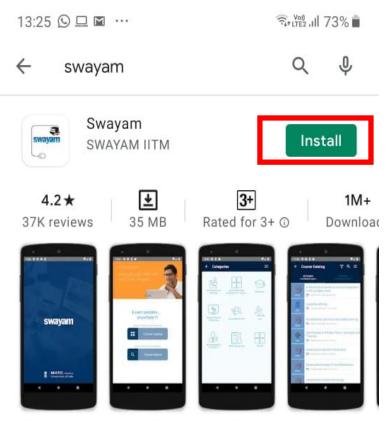
#### **SWAYAM Website**



NATIONAL COORDINATORS

(2)

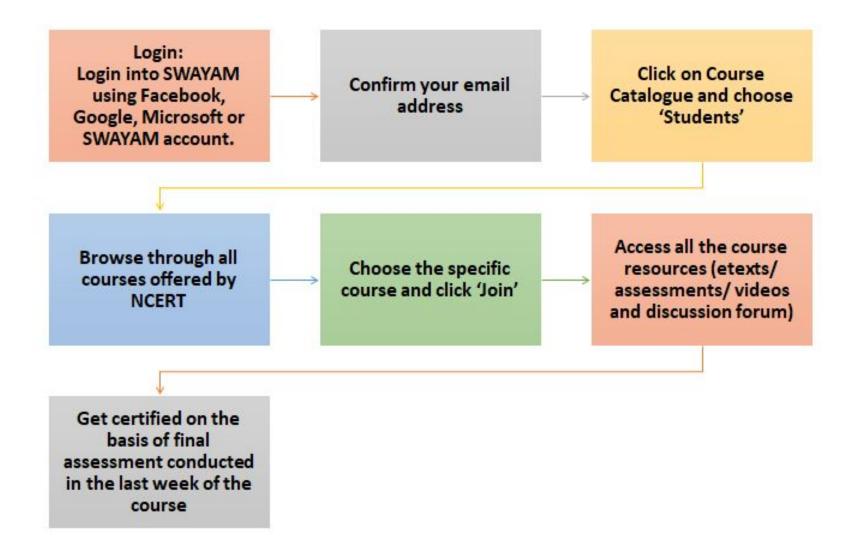




Designed for students to consume SWAYAM content anywhere, anytime and anywhere.

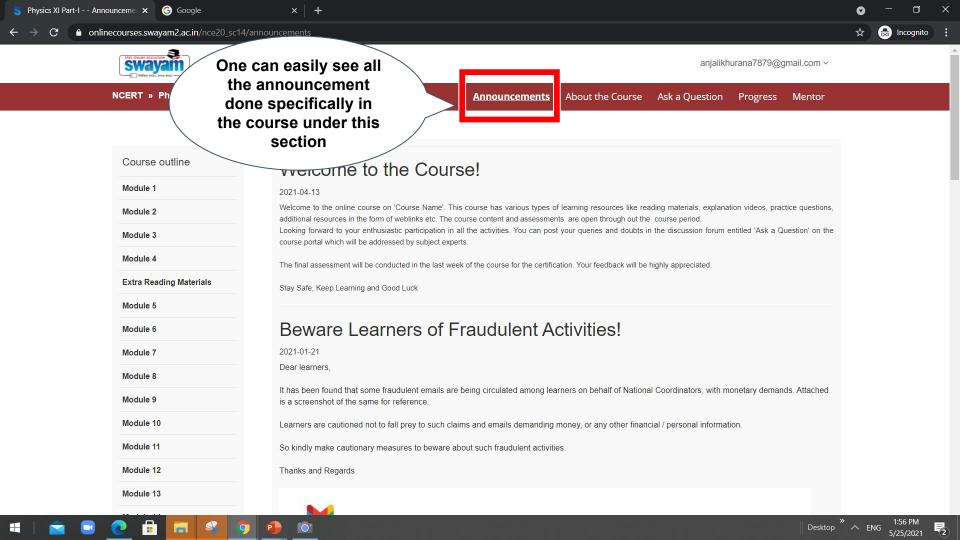
# **SWAYAM App**

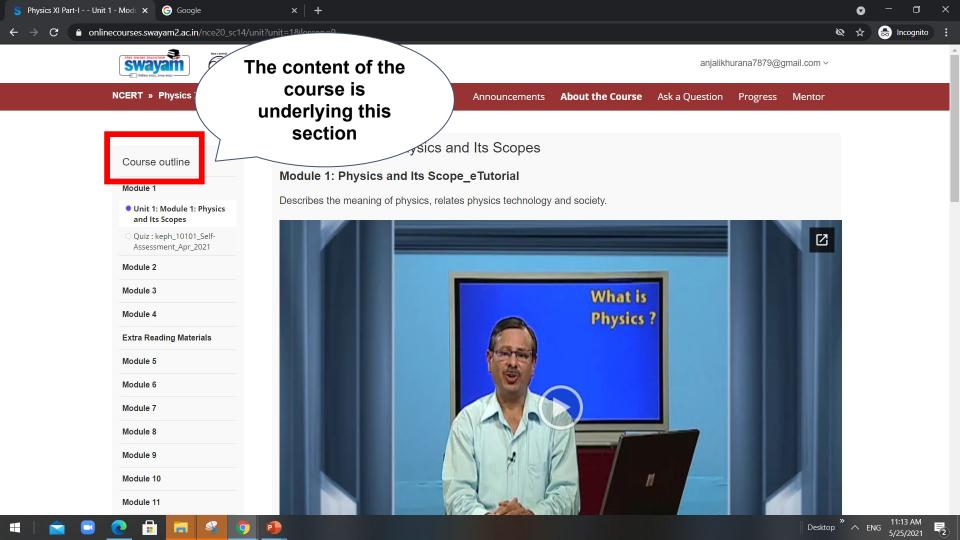
### **How to Access the Course?**

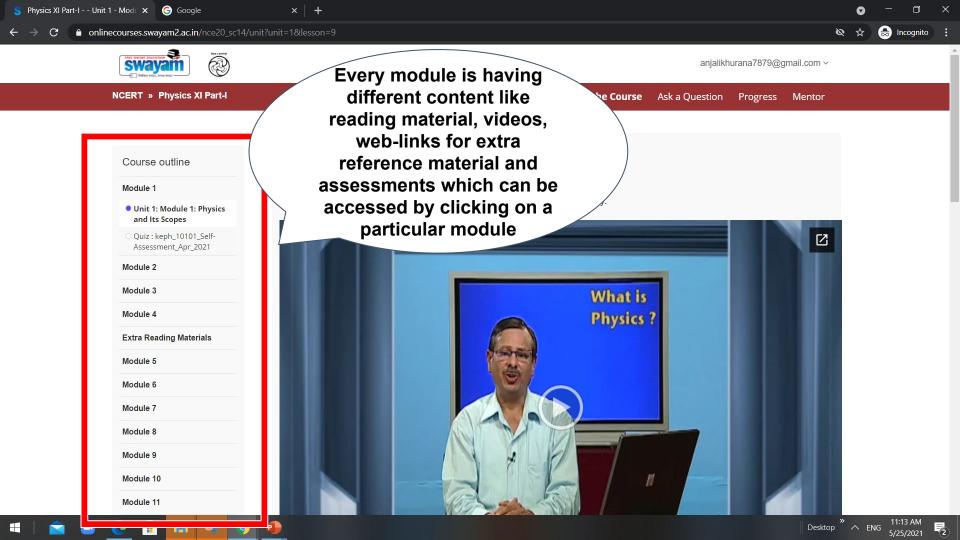


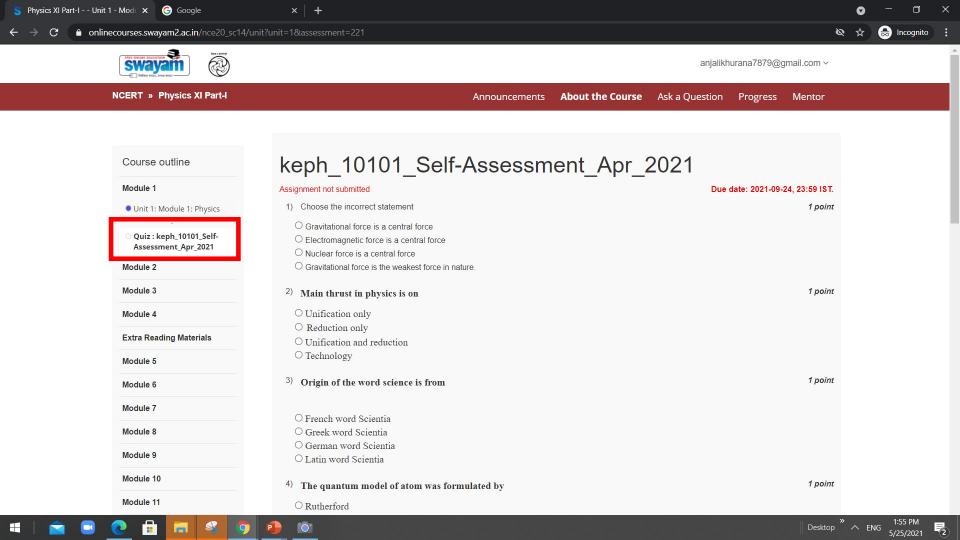
# How to Access the course

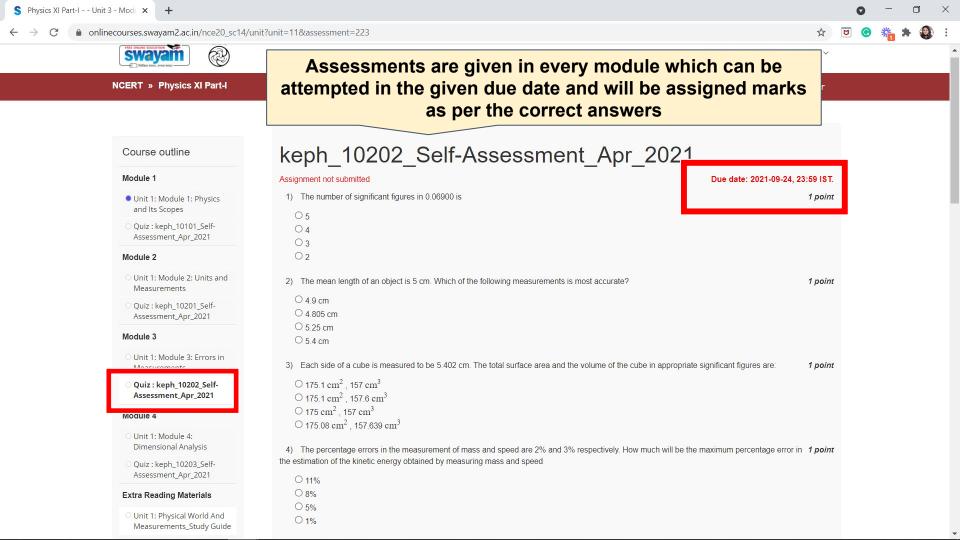
 Once you have successfully joined the course, now you can access the course content and different features provided by the platform for the interactiveness.

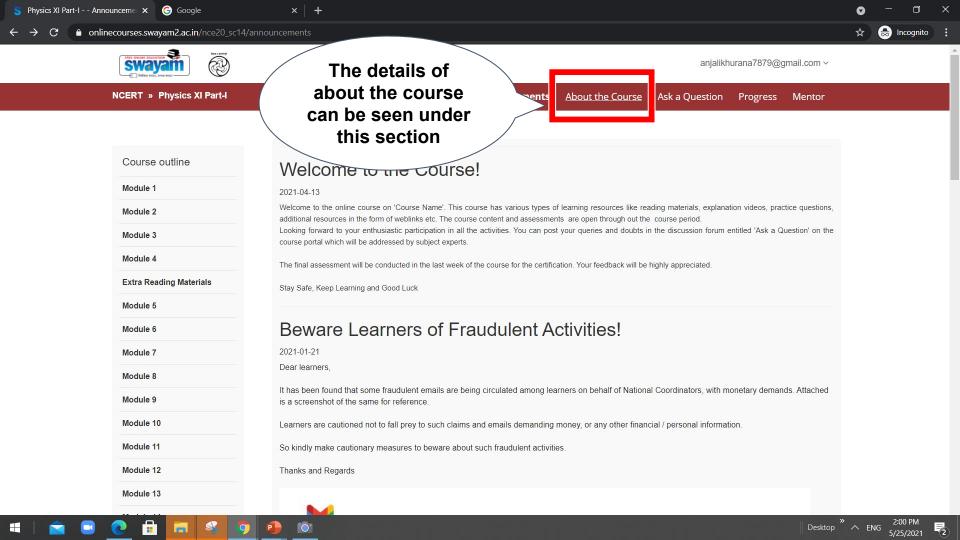


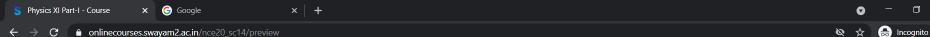












**®** 

Courses >

#### Physics XI Part-I

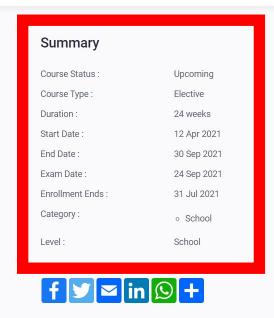
By Anuradha Mathur | CIET, NCERT, New Delhi

Go to course

Learners enrolled: 3467



The world around us has an astonishing variety of phenomenon. Science /Physics gives us a chance to take a closer look and try to understand these. We have evidence to support the work done since ancient times by thinkers, philosophers and scientists. They tried to unravel the mysteries around us. The excitement of learning, to do systematic scientific work is the root of this course. You will learn methods of measurementincluding universally accepted norms. Kinematics, that helps us to describe any motion and dynamics which helps us to identify the causes of motion. Some energy is required to move things and we will define these in ecientific terminology in a way that communication about physics to others is easy. In this course we will



About Swayam | All Courses | anjalikhurana7879@gmail.com >













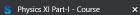






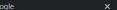






















• onlinecourses.swayam2.ac.in/nce20\_sc14/preview



About Swayam | All Courses | anjalikhurana7879@gmail.com >

#### Course layout

Unit No.	Module No.	Module Name		
	Module 1	Physics and its Scope		
Unit 1 -	Module 2	Units and Measurements		
Physical World and	Module 3	Errors in Measurements		
Measurements	Module 4	Dimensional Analysis		
	Extra Reading Materials			
	Module 5	Rest and Motion		
	Module 6	Distance and Displacement		
	Module 7	Speed and velocity		
	Module 8	Accelerated motion		
	Module 9	Solving Problems using equations of motion		
Unit 2 – Kinematics	Module 10	Vectors		
, and and	Module 11	Projectile Motion		
	Module 12	Circular motion		
	Module 13	Problems on motion in two dimensions		
	Module 14	Mathematical Tools For Solving Problems		
	Extra Reading Materials			
	Module 15	Newton's first law of motion		
	Module 16	Newton's second law of motion		
	Module 17	Third law of motion		
Unit 3 - Laws of	Module 18	Types of forces		
Motion	Module 19	Friction		
	Module 20	Circular motion and Banking of roads		
	Module 21	Solving problems using Newton's laws of motion		
	Extra Readin	o Materials		























About Swayam | All Courses | anjalikhurana7879@gmail.com >









#### Books and references

NCERT "Physics Part-I" for Class - XI url:- https://ncert.nic.in/textbook.php?keph1=0-8

#### Instructor bio



Anuradha Mathur CIET, NCERT, New Delhi

Anuradha Mathur has been teaching Physics since 1975 at secondary and senior secondary level. She has also taught physics to undergraduate students at Harvard University Boston She represented Indian schools at ICT conference in Hawaii, Paris GATE Global Alliance for Transnational Education, IIT Delhi and IIM Bangalore. At Modern School Vasant Vihar, New Delhi she was head of Physics and head of Resource Center. She set up the resource centre 1997 and a virtual school in 2000. She led the development of a diagnostic e-test, for the process of teaching and learning. She developed techniques to evolve net based projects, science exhibitions, science toys production and creative models, many of these were awarded at national and international level. She has been part of development team for teaching learning material for CBSE, NCERT, NIOS, ICSE since 1983. She was also member of Textbook Development Committee for senior secondary physics text book (2006). She is a Teacher trainer and conducts workshops to teacher groups. She has been associated with Hindustan Times PACE (Partnership for Action in Education) programme since 1998 developing curriculum support packages using newspapers for academics and education, She is currently actively working on development of material for National Repository of Open Educational Resource (NROER) at CIET NCERT. She has been associated with SWAYAM MOOC since its inception in 2015.







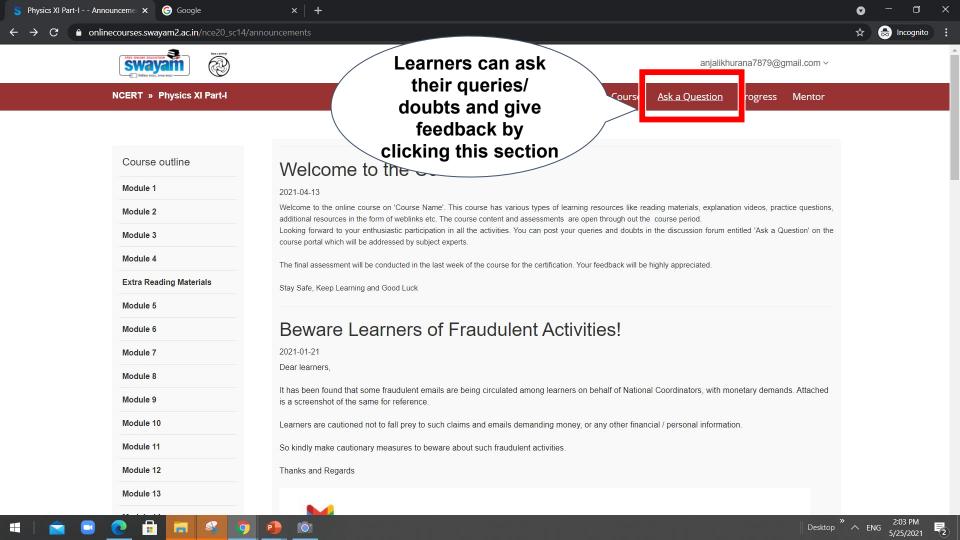


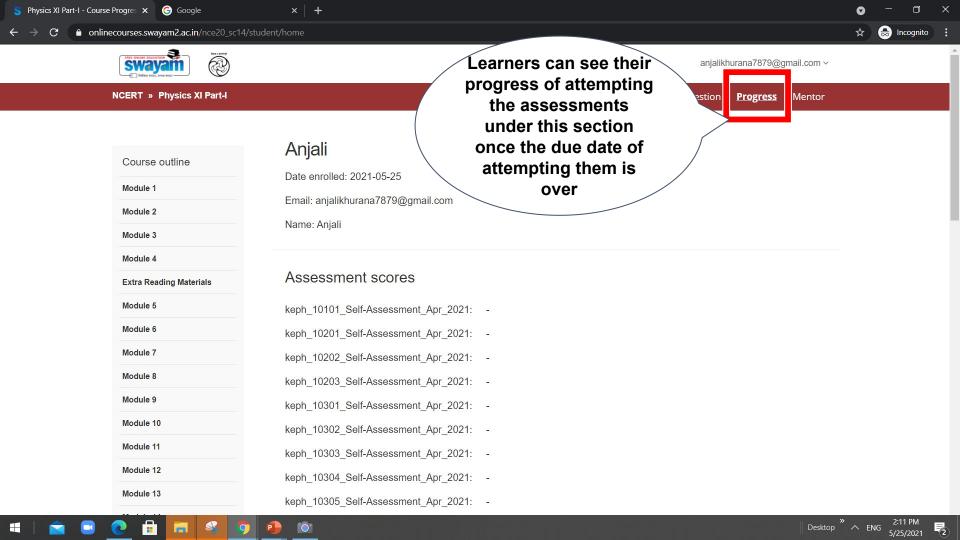


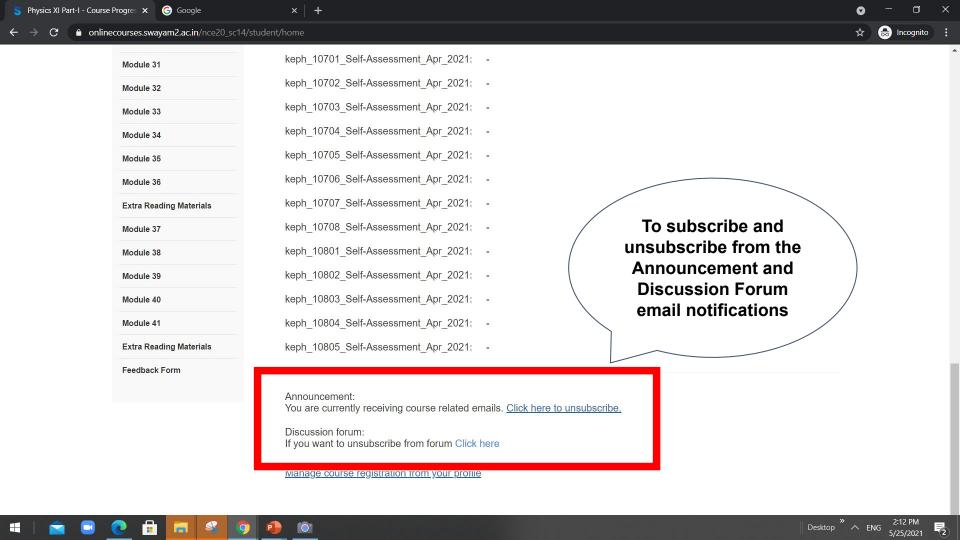


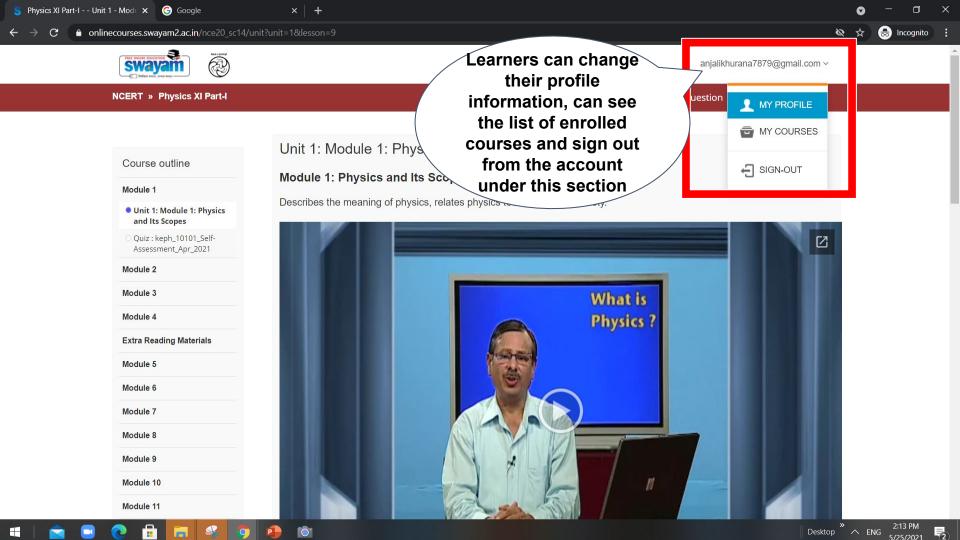


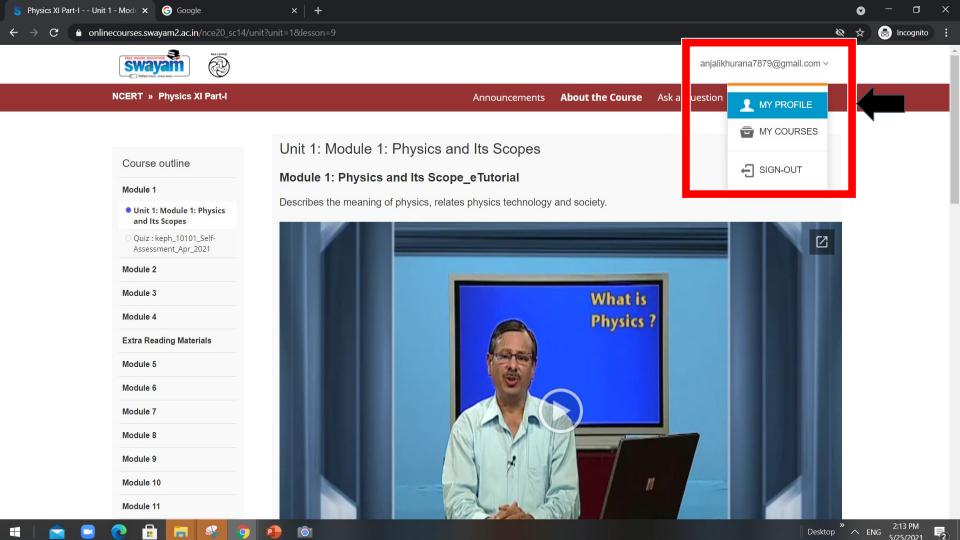


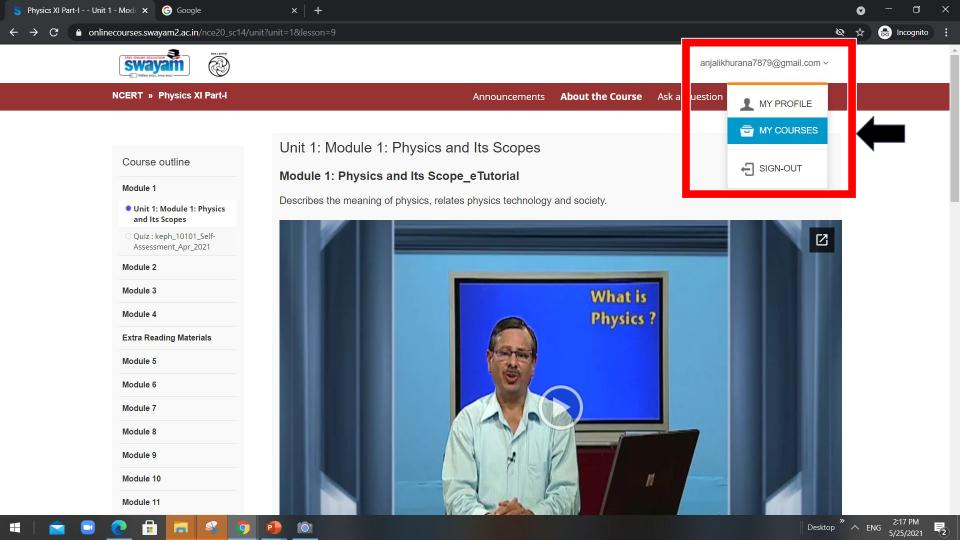


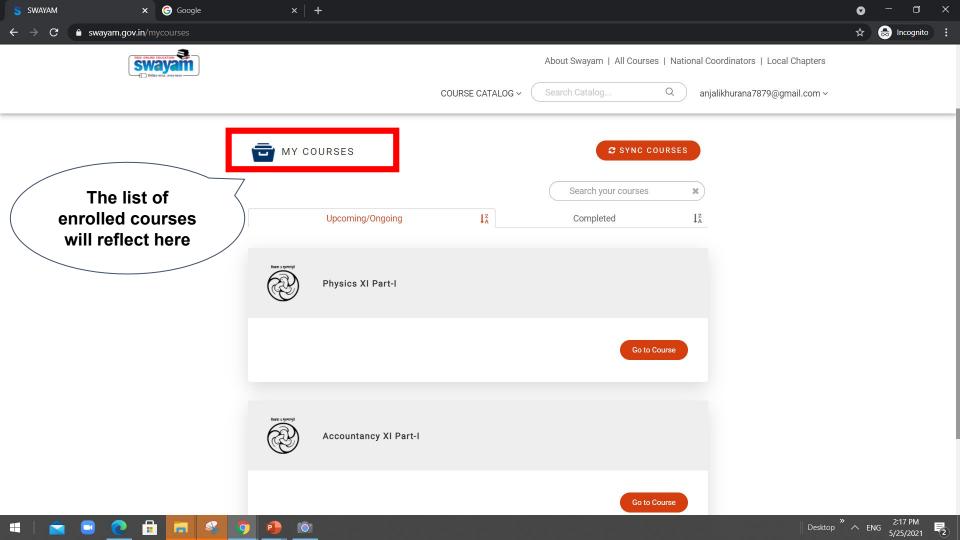


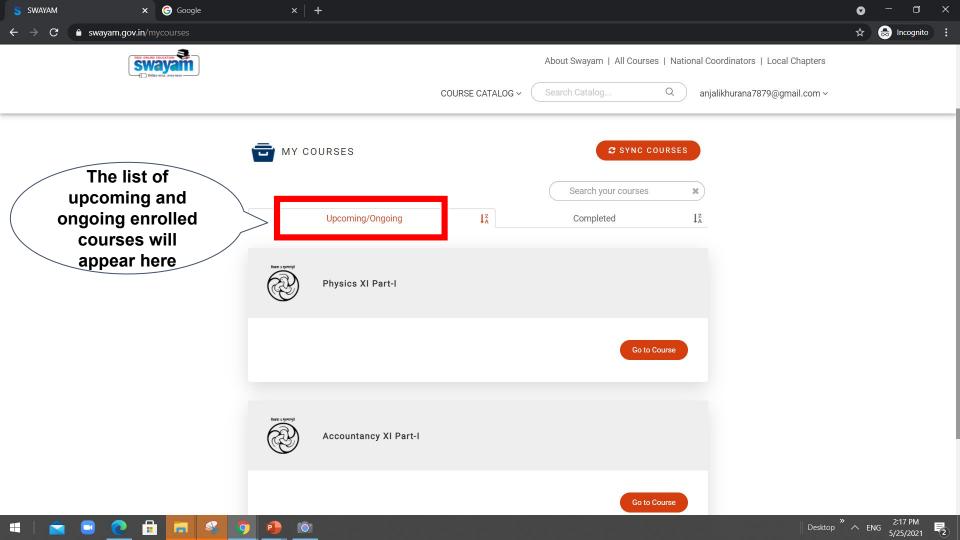


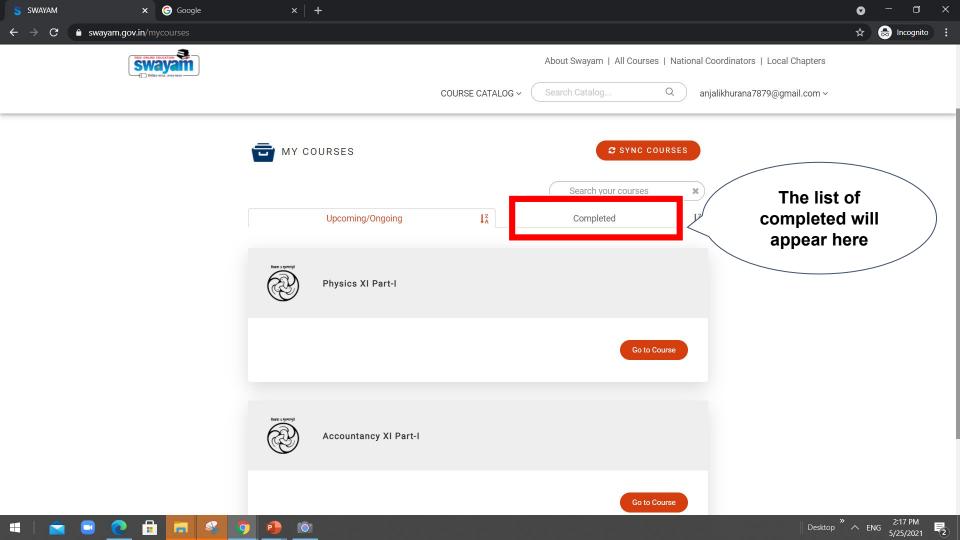








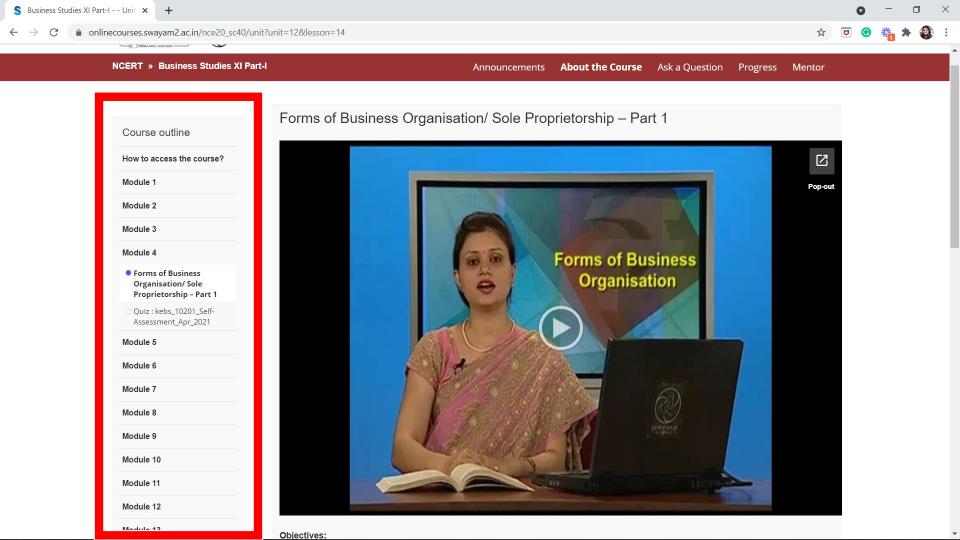


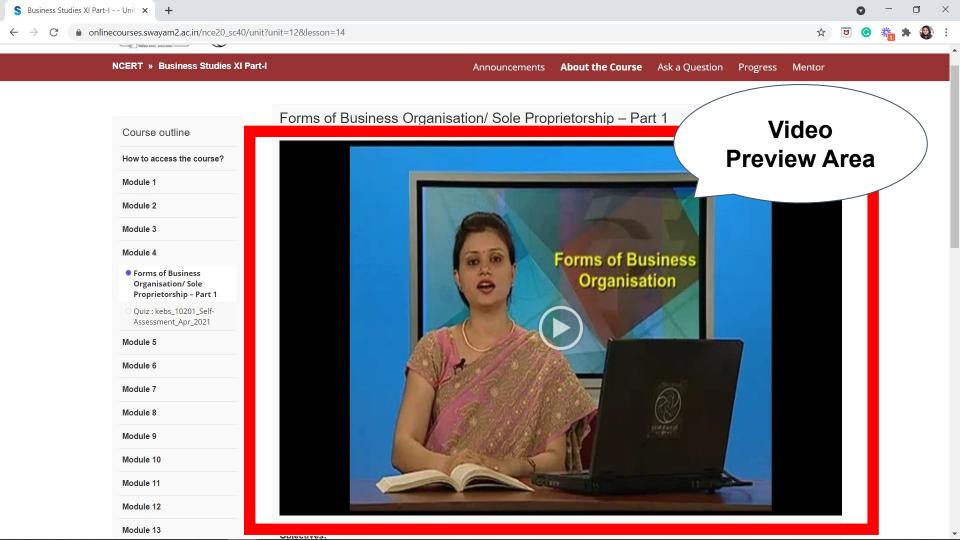


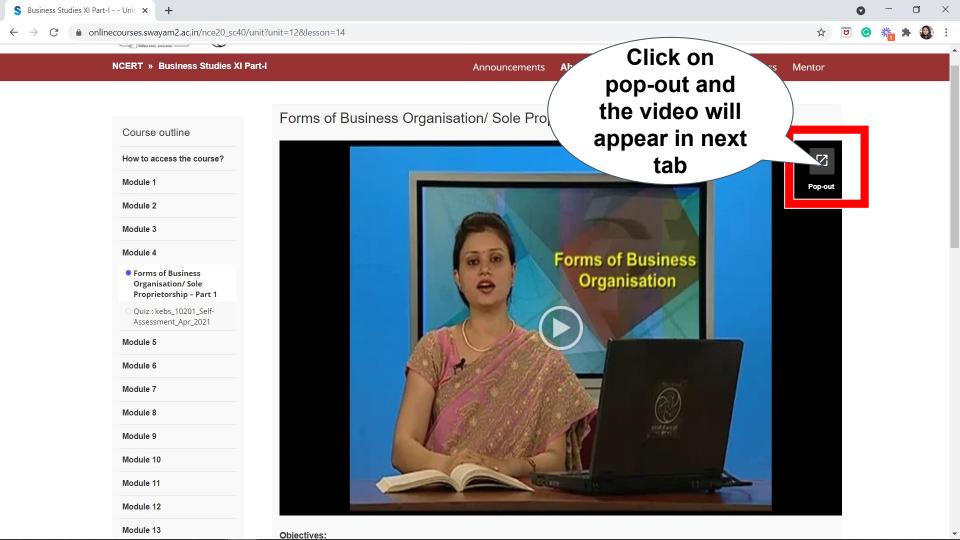
### **How to Download the Content?**

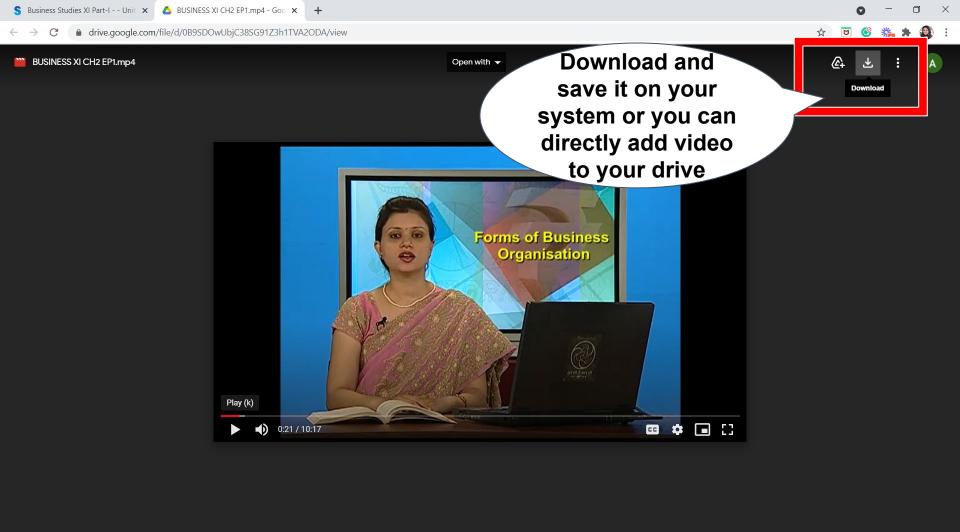
# **How to Download the Content**

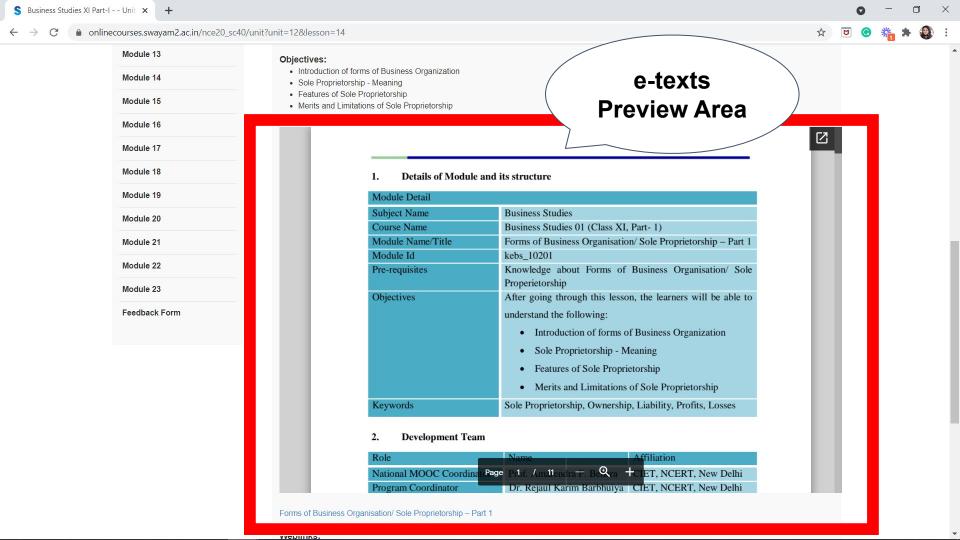
- Under the Content Outline tab, learner can access the course content in which reading material and videos are open to download.
- The downloaded material can be saved in the system and learners can use them even after the course is over, or offline.

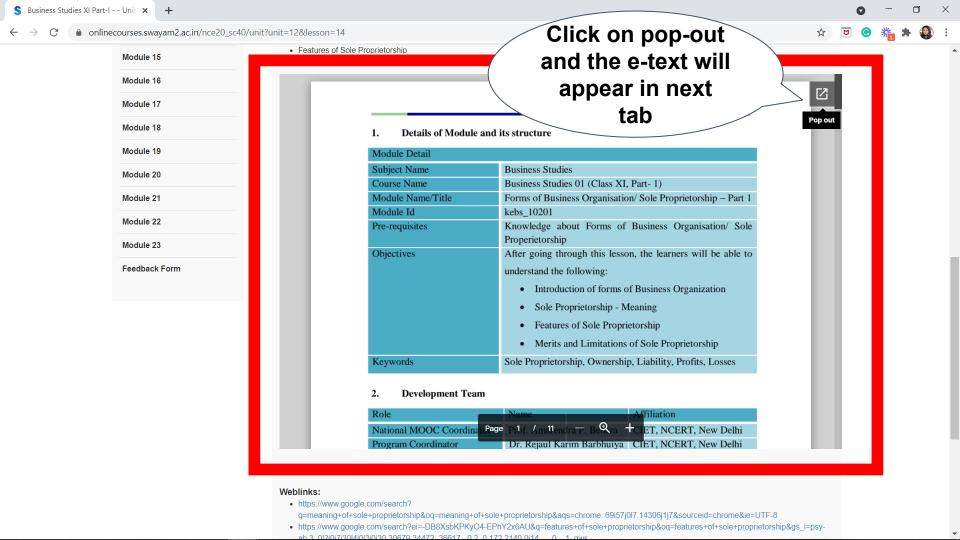


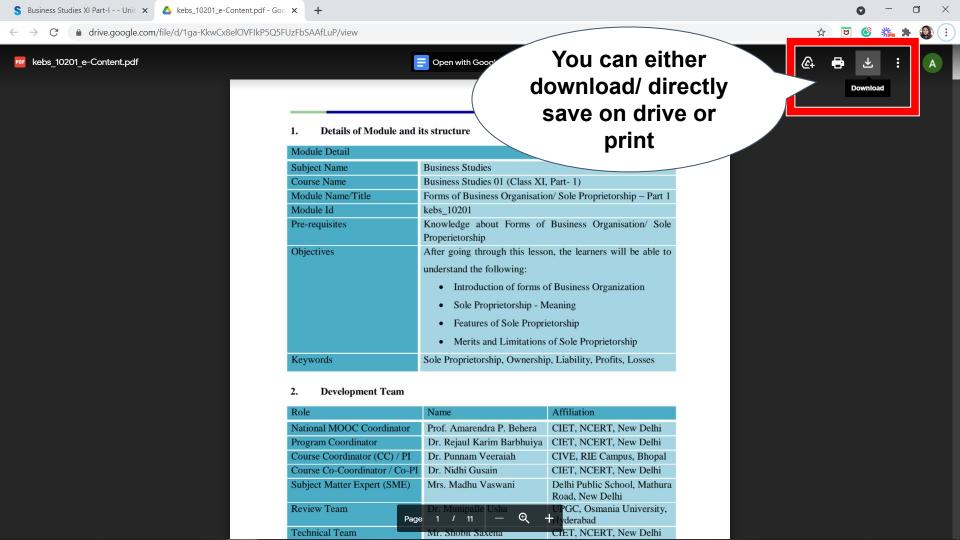






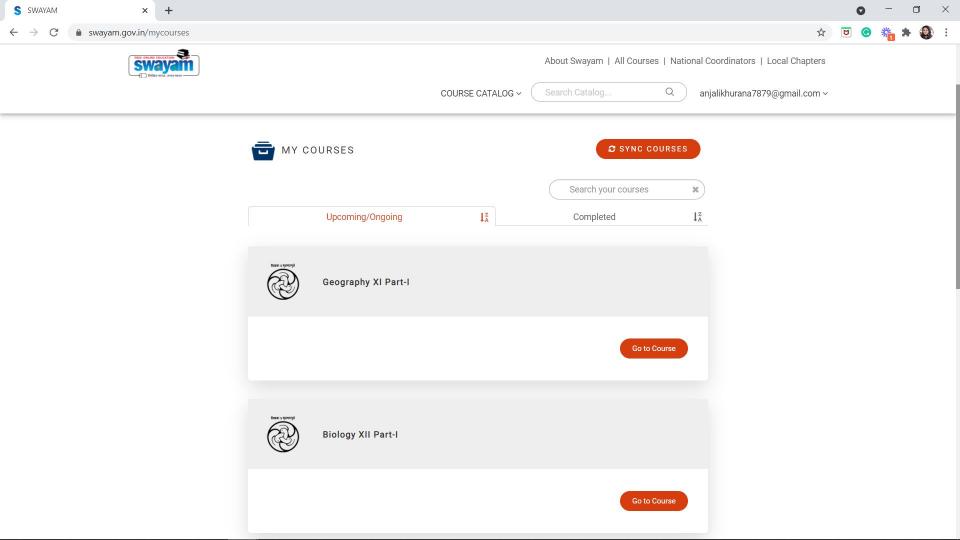


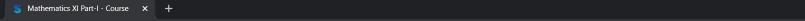




## **How to Join the Discussion Forum**

- After signing in and selecting the course, Go to Course
- Choose the option 'Ask a Question' from the menu options
- A new page will appear showing to Join Group.
- For joining the group, choose the required notifications mode to be turned on





















onlinecourses.swayam2.ac.in/nce20 sc18/course?user email=anjalikhurana7879@qmail.com

NCERT » Mathematics XI Part-I

Announcements

**About the Course** 

Ask a Question

Mentor Progress

anjalikhurana7879@gmail.com v

#### Course outline

How to access the course?

Module 1

Module 2

Module 3

Module 4

Module 5

Assignment 1

Module 6

Module 7

Module 8

Module 9

Assignment 2

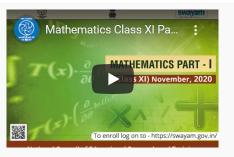
Module 10

Module 11

Module 12

#### Mathematics XI Part-I

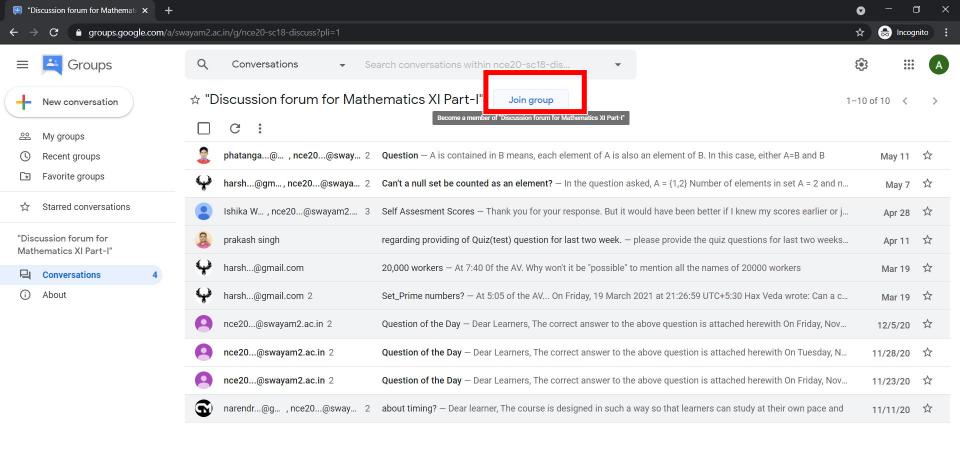
Mathematics is a human activity, a social phenomenon a set of methods used to help illuminate the world . It is said so because it makes a man systematic. It nurtures the power of reasoning, creativity, critical thinking and problem solving ability. Mathematics is a part of our life experience which we will talk about in this course. Mathematics is the foundation and vitalizing energy for the basic sciences. This course will not only help to understand new concepts but also develop a new insight to view mathematics as an effective and joyful learning. The course will deal with the concepts from class 11th mathematics like sets and certain functions, trigonometric functions, quadratic equations, principle of mathematical induction, complex numbers, linear inequalities and permutation and combination. The course chapters are divided into certain modules which have been organized into week wise schedule where learners can have access to highly multimedia enriched videos along e-text, reading material, references and online assessments.

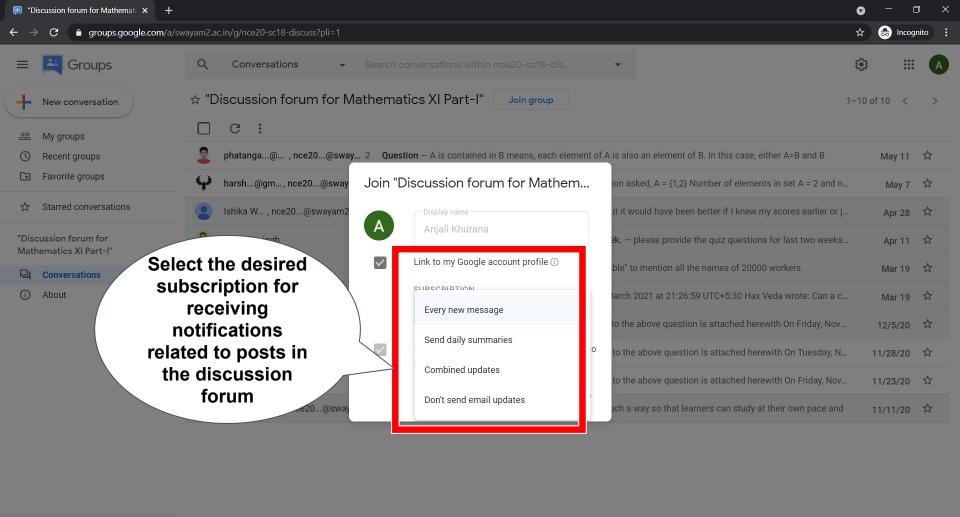


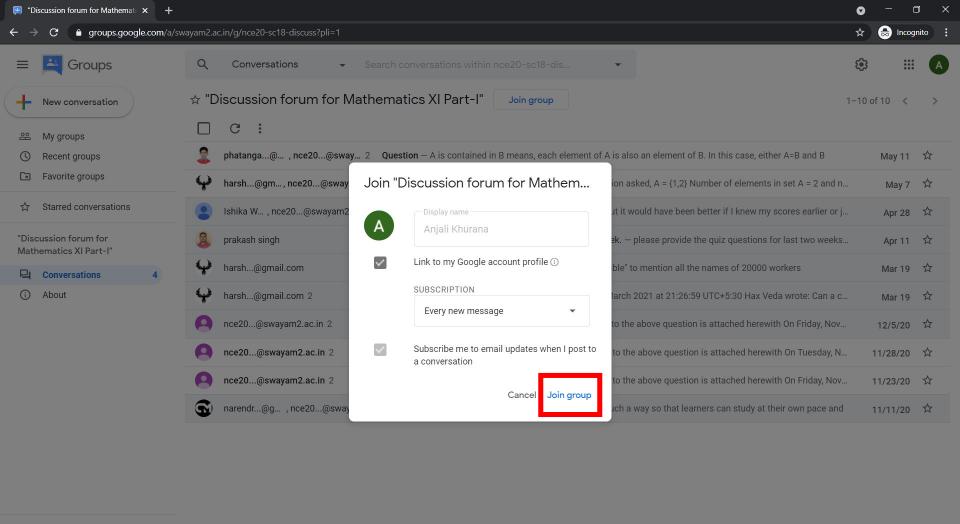


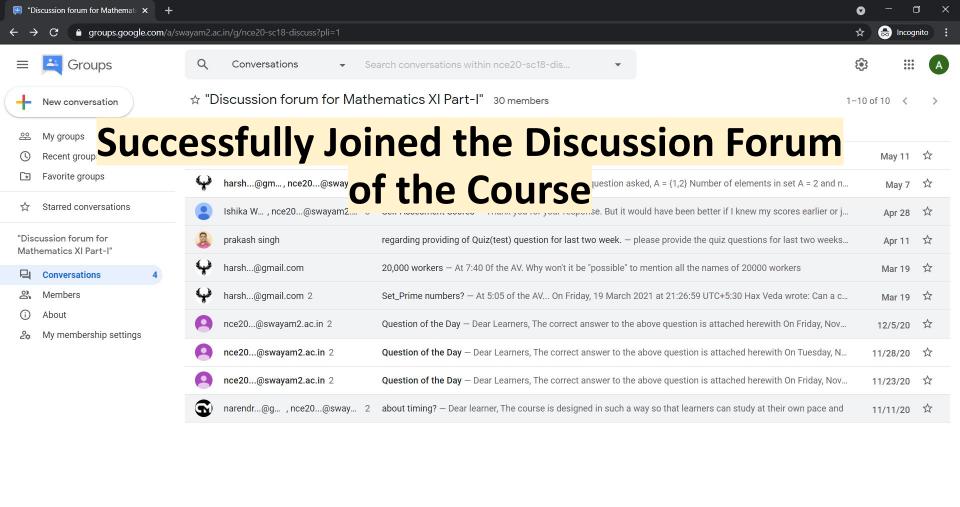
Prof T P Sarma Educational Qualification M.Sc., Ph.D. (Mathematics) from University of Delhi

Areas of Work Mathematics Education at School level Development of Teaching Materials, Teacher Training Material, Textual Material Research: Primary Mathematics, Mathematics Education, Mathematics.

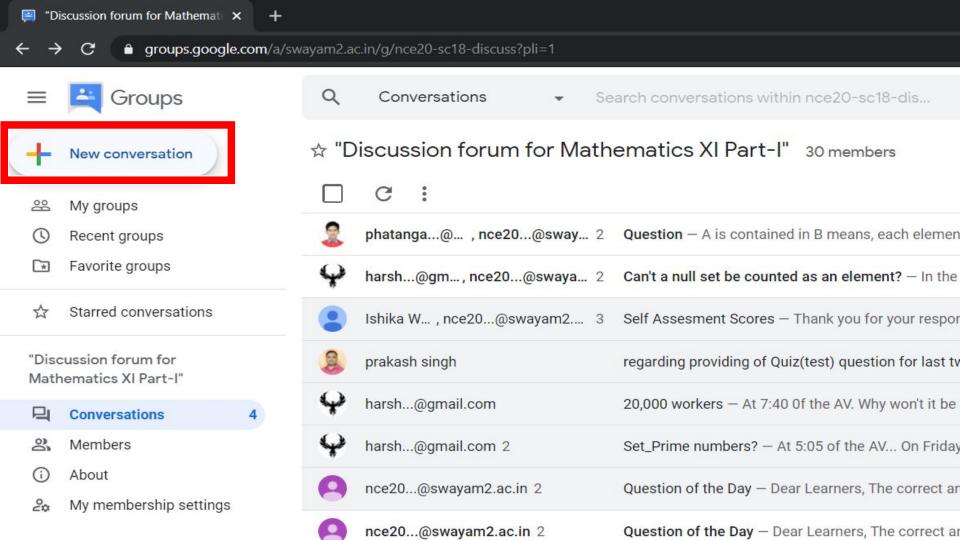


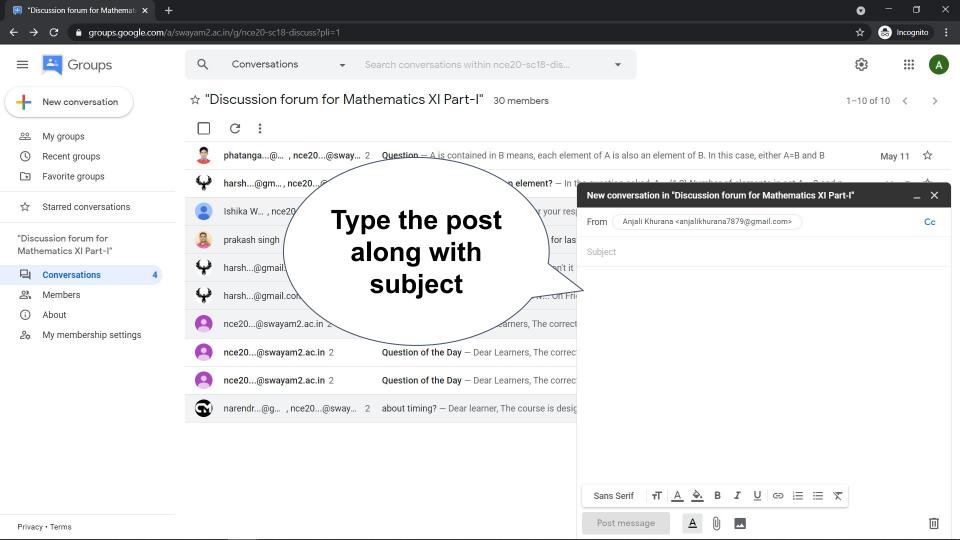


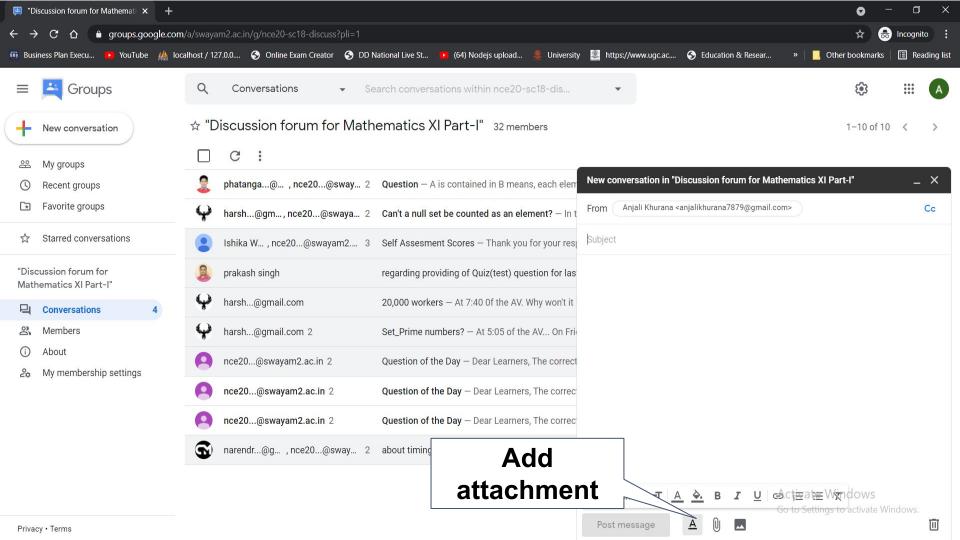


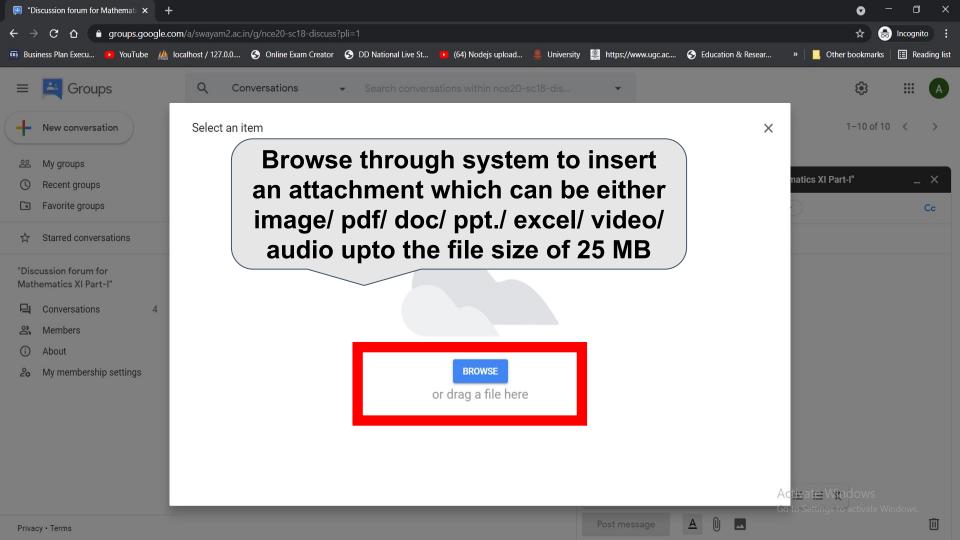


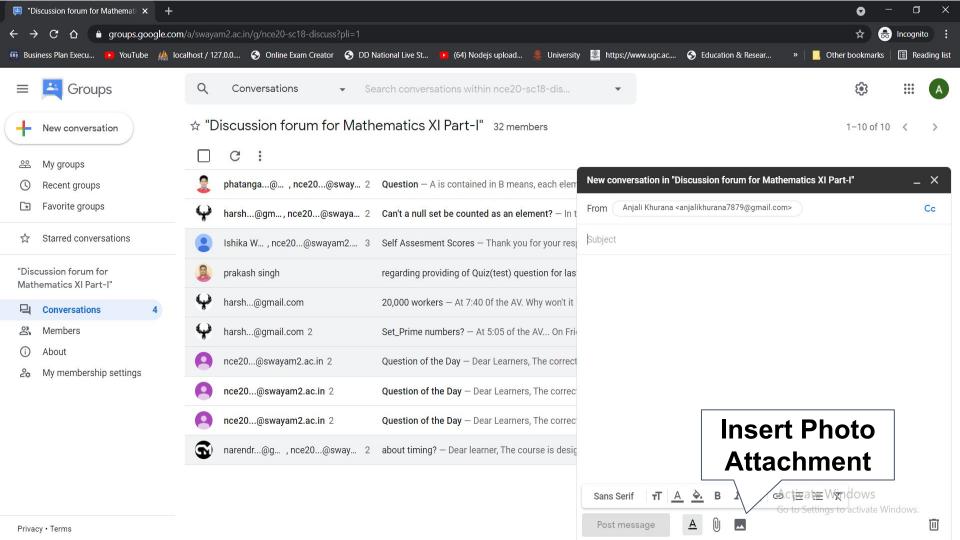
# How to Participate in the Discussion Forum?

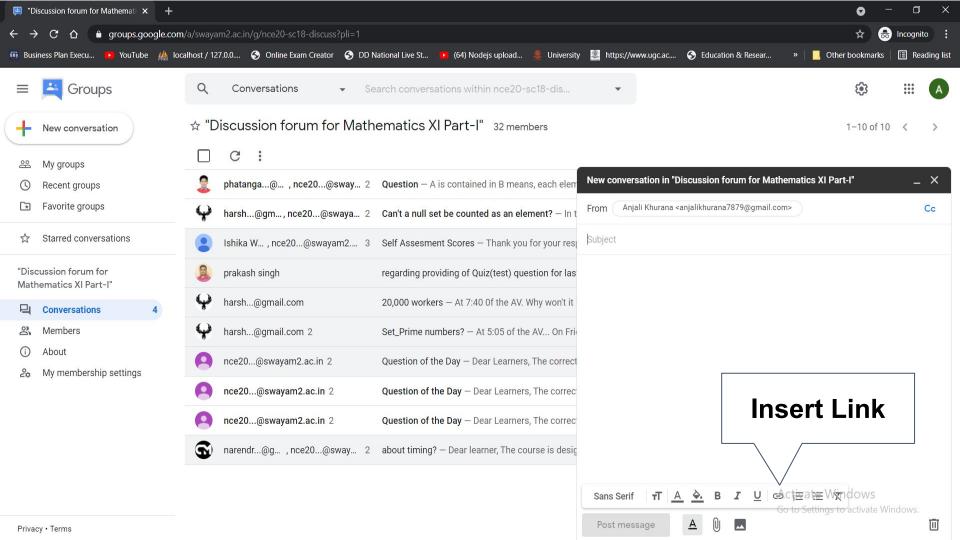


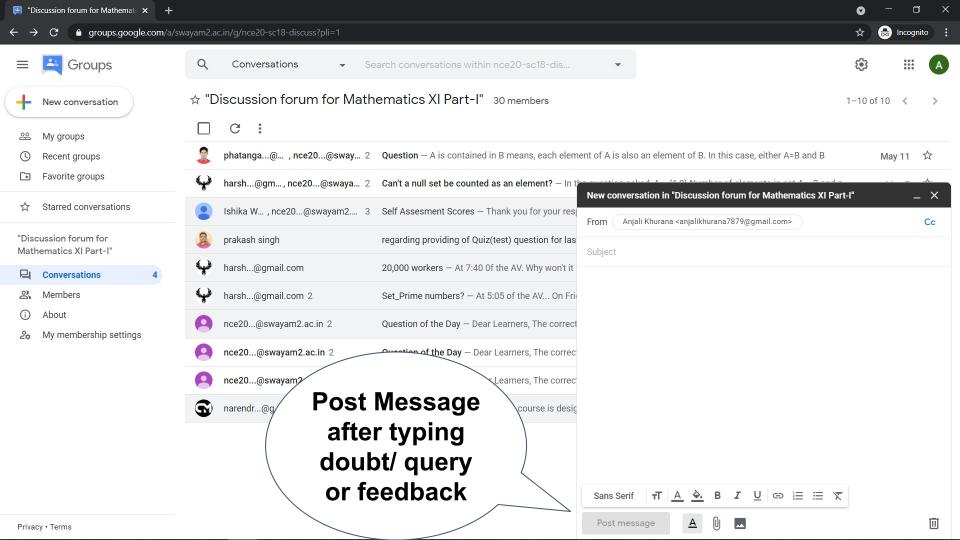


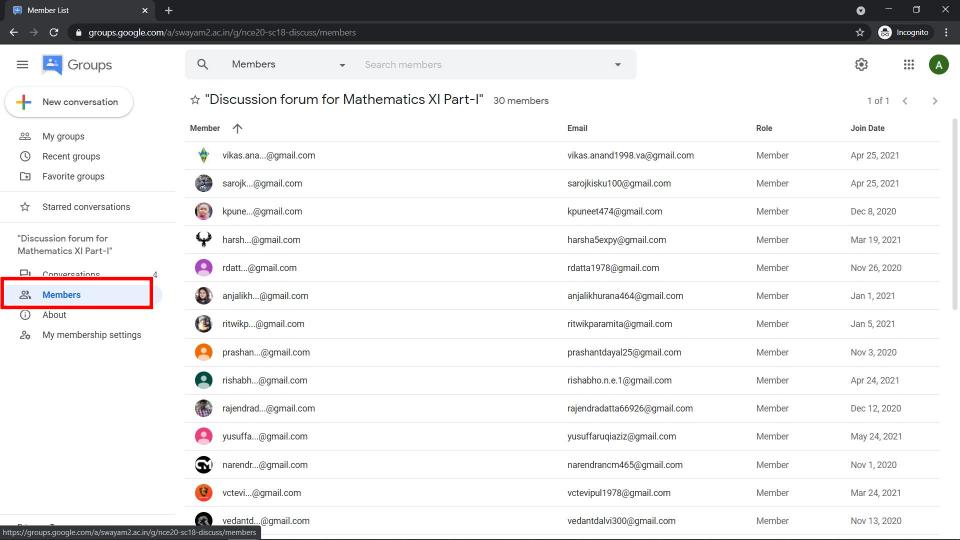












# **Thanks**

moocs@ciet.nic.in