

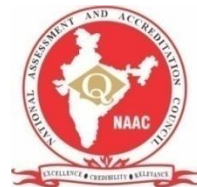
2.3.1

Student Centric Methods

For enhancing learning experiences

Third Cycle NAAC Accreditation

Submitted to



THE NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

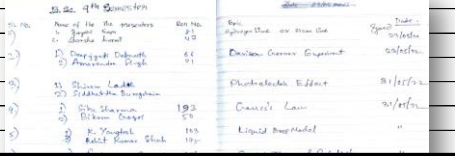
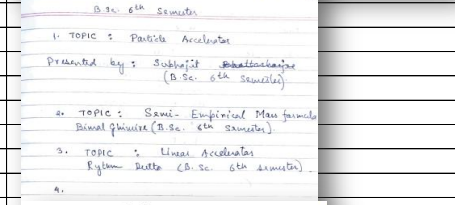
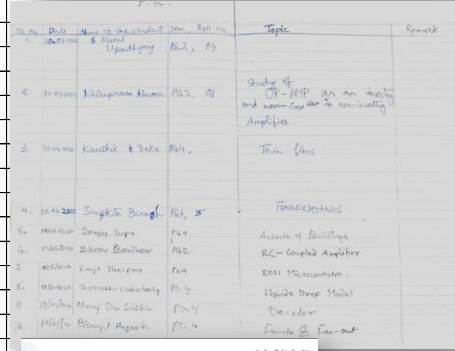
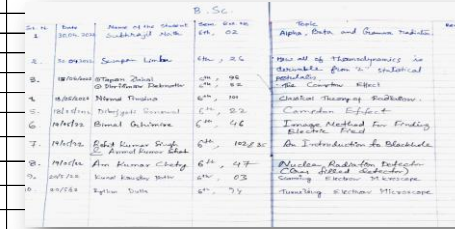
AQAR – 2022, Digboi College, Digboi

Experiential Learning

Student Seminar Presentation

Department of Physics Student Seminar Presentation 2021-22

Sl No.	Date of event	Student Name	Programme	Roll No.	Topic	Photo
1	30.04.2022	Diprjit Nath	B.Sc 6th Semester	2	Alpha, Beta and Gamma Radiation	
2		Swapan Limbu	B.Sc 6th Semester	26	How all thermodynamics is derivable from "2" statistical postulates	
3	18.05.2022	Tapan Dahal	B.Sc 6th Semester	95	The Compton Effect	
		Dhritiman Debnath	B.Sc 6th Semester	52		
4		Nirmal Timsina	B.Sc 6th Semester	101	Classical Theory of Radiation	
5		Dibyoyoti Sonowal	B.Sc 6th Semester	22	Compton Effect	
6	19.05.2022	Bimal Ghimire	B.Sc 6th Semester	46	Image method for finding electric field	
7		Rohit Kumar Singh	B.Sc 6th Semester	102	An introduction to Black Hole	
		Anmol Kumar Sah	B.Sc 6th Semester	35		
8		Am Kumar Chetry	B.Sc 6th Semester	47	Nuclear Radiation Detector	
9	20.05.2022	Kunal Kaustav Nath	B.Sc 6th Semester	3	Scanning Electron Microscope	
10		Rhythm Dutta	B.Sc 6th Semester	94	Tunneling Electron Microscope	
11	30.04.2022	Kunal Upadhyay	PG 2nd Semester	4	Study of OPAMP as an inverting and non inverting amplifier	
		Khiruprava Konwar		3		
12		Kaushik Deka	PG 4th Semester	9	Thin Films	
13		Sangshita Baruah		15	Ferroelectrics	
14		Sanjay Thapa		16	Acoustics of Buildings	
15		Saurav Bardhan	PG 2nd Semester	10	RC-coupled Amplifier	
16		Ranjeet Newpane	PG 4th Semester	14	8051 Microcontroller	
17		Saptasikha Chakraborty	PG 4th Semester	17	Liquid Drop Model	
18	19.05.2022	Monuj Das Saikia	PG 4th Semester	10	Decoder	
19		Biswajit Hazarika	PG 4th Semester	3	Fan-in and Fan-out	
20	02.05.2022	Subhroj Nath	B.Sc 6th Semester		Particle Accelerator	
21		Bimal Ghimire	B.Sc 6th Semester	46	Semi-Empirical Mass Formula	
		Rhythm Dutta	B.Sc 6th Semester	94	Linear Accelerator	
22	19.05.2022	Gayatri Devi Sonowal	PG 4th Semester	5	Semiconductor Laser	
23		Gayatri Phukan	PG 4th Semester	6	Microprocessor	
24		Abhinob Paul	PG 4th Semester	1	Nuclear Power Plant	
25		Nishant Kashyap	PG 4th Semester	12	Optical Fibre	
26		Dakhina Duarah	PG 4th Semester	4	Dielectrics	
		Silpisikha Baruah	PG 4th Semester	18	BCS theory	
27	20.05.2022	Shyam Sundar Borah	PG 2nd Semester	11	R-2R Ladder Network DAC	
		Saswata Roy Purkayastha	PG 2nd Semester	9	Study of astable, monostable and bistable multivibrator	
28	23.05.2022	Gayatri Thapa	B.Sc 4th Semester	81	Hydrogen line or 21cm line	
		Barsha Kurmi		47		
29		Deepjyoti Debnath	B.Sc 4th Semester	66	Davison Germer Experiment	
		Amarendra Singh		21		
30	31.05.2022	Shivam Lodh	B.Sc 4th Semester	190	Photoelectric effect	
		Siddhartha Buragohain	B.Sc 4th Semester	195		
31		Sibu Sharma	B.Sc 4th Semester	193	Gauss's Law	
		Bikram Gogoi	B.Sc 4th Semester	50		
32		K. Yangtsh	B.Sc 4th Semester	103	Liquid Drop Model	
		Rohit Kumar Shah	B.Sc 4th Semester	175		
33		Pradyumna Sarmah	B.Sc 4th Semester	151	Special Theory of Relativity	
		Samujjal Sarkar	B.Sc 4th Semester	181		
34		Sushmita Gogoi	B.Sc 4th Semester	208	Nuclear Reactor	
		Debangshee Paul	B.Sc 4th Semester	62		
35	01.06.2022	Ankit Kumar Mahato	B.Sc 4th Semester	31	Half Wave Rectifier	
36		Uddhab Upadhyay	B.Sc 4th Semester	217	Data Converter	
		Pankaj Dahal	B.Sc 4th Semester	143		
37		Tara Konwar	B.Sc 2nd Semester	134	Electrostatics of conductors	
38		Giteema Kishan	B.Sc 2nd Semester	40	Electric Field	
		Rumi Das	B.Sc 2nd Semester	189		



Scientific Experiments

Department of Physics

Glimpses of Scientific Experiments performed by students in the Department laboratory



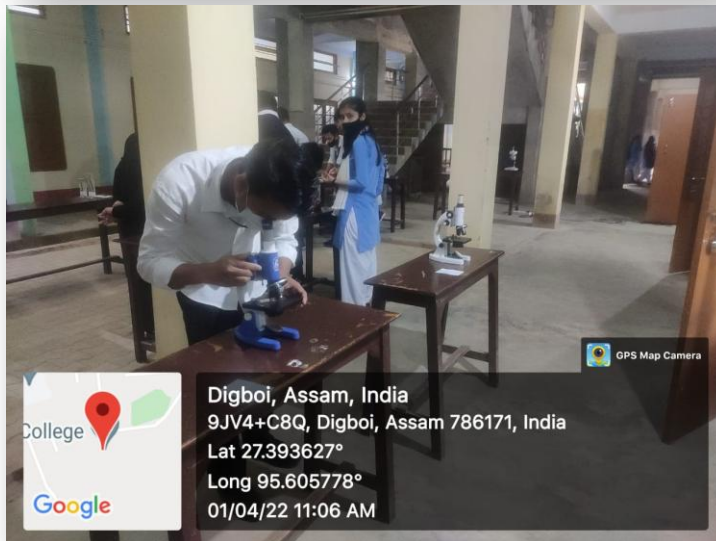
Department of Chemistry

Glimpses of Scientific Experiments performed by students in the Department laboratory



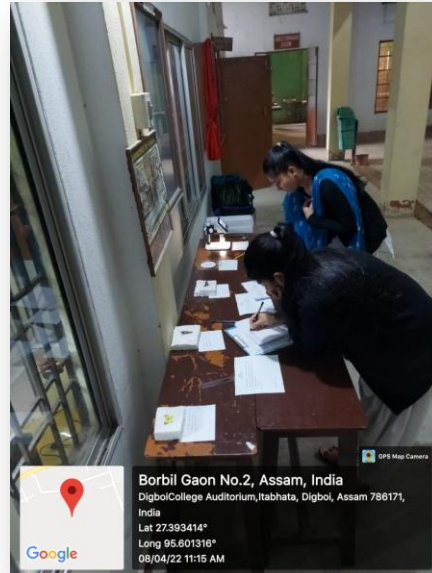
Department of Botany

Glimpses of Scientific Experiments performed by students in the Department laboratory

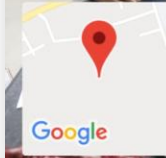


Department of Zoology

Glimpses of Scientific Experiments performed by students in the Department laboratory



Borbil Gaon No.2, Assam, India
DigboiCollege Auditorium,Itabhata, Digboi, Assam 786171, India
Lat 27.393414°
Long 95.601316°
08/04/22 11:15 AM



Borbil Gaon No.2, Assam, India
DigboiCollege Auditorium,Itabhata, Digboi, Assam 786171, India
Lat 27.393414°
Long 95.601316°
08/04/22 11:15 AM



Participative Learning

Peer Coaching

Department of Physics

Glimpses of peer coaching activities undertaken by students-



Learning by Doing

Environmental Studies

Learning amidst nature



Preparation of Wall Magazine

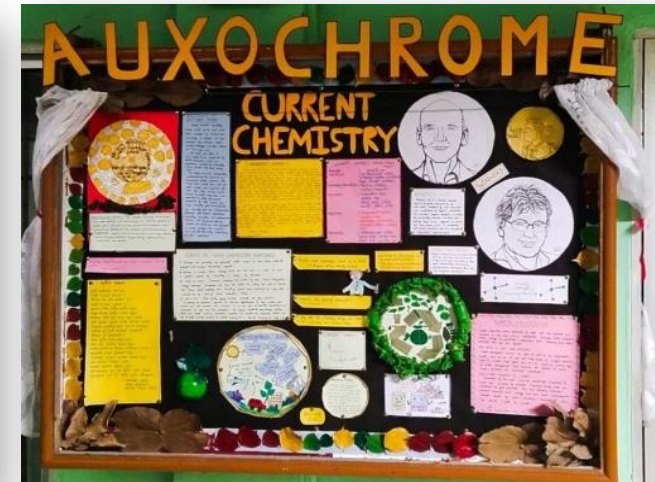
Glimpses of Wall Magazines of various departments



Department of Assamese



Department of Botany



Department of Chemistry



Department of Geography



Department of Mathematics



Department of Political Science

Glimpses of Wall Magazines of various departments



Department of Physics



Department of Zoology

Problem Solving Methodology

Higher order thinking Assignments

Department of Chemistry

Glimpses of problems assigned to students

15:03

26 points

Instructions Student work

0 Assigned 0 Turned in 29 Graded

GRADED

Student	Score
ALEKH BORUAH	26/26
Abhisek Poudel	26/26
Akash Sonowal	26/26
Akhilesh Rai	26/26
Ankur Das	26/26
Ankurjyoti Moran	22/26
Anshik Dey	26/26

15:03

Instructions Student work

Due Jul 28, 2021, 11:30

P-C 202

26 points

Attachments

Question paper 202 Physical Honours.pdf

Class comments

Add class comment

14:58

10 points

Instructions Student work

12 Assigned 17 Turned in

TURNED IN

Student	Submission Status
Akash Sonowal	Turned in
Akhilesh Rai	Turned in
Anshik Dey	Turned in Done late
Biswarup Mazumdar	Turned in Done late
Dalisha Mili	Turned in Done late
Dhiraj Moran	Turned in
Digbijoy Borgohain	Turned in Done late

15:01

26 points

Instructions Student work

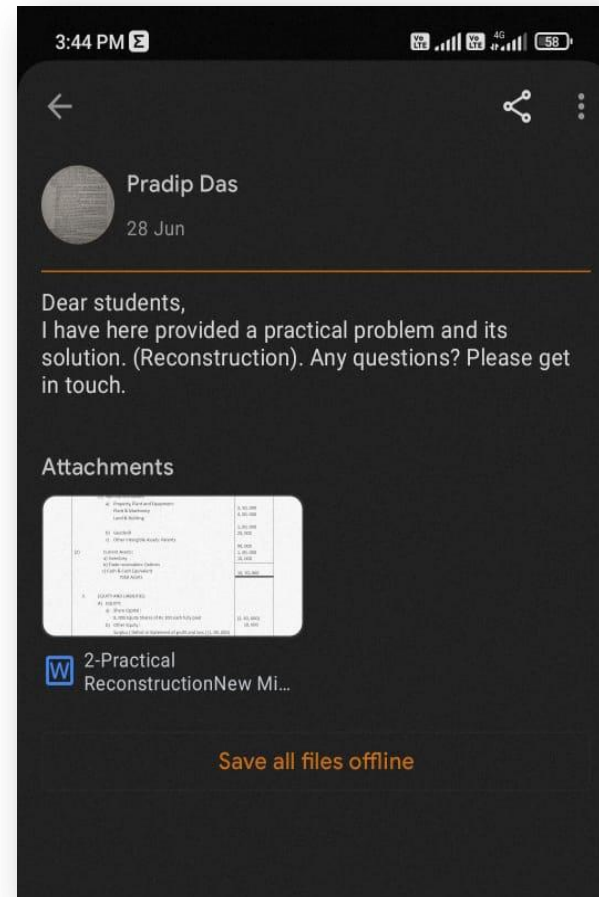
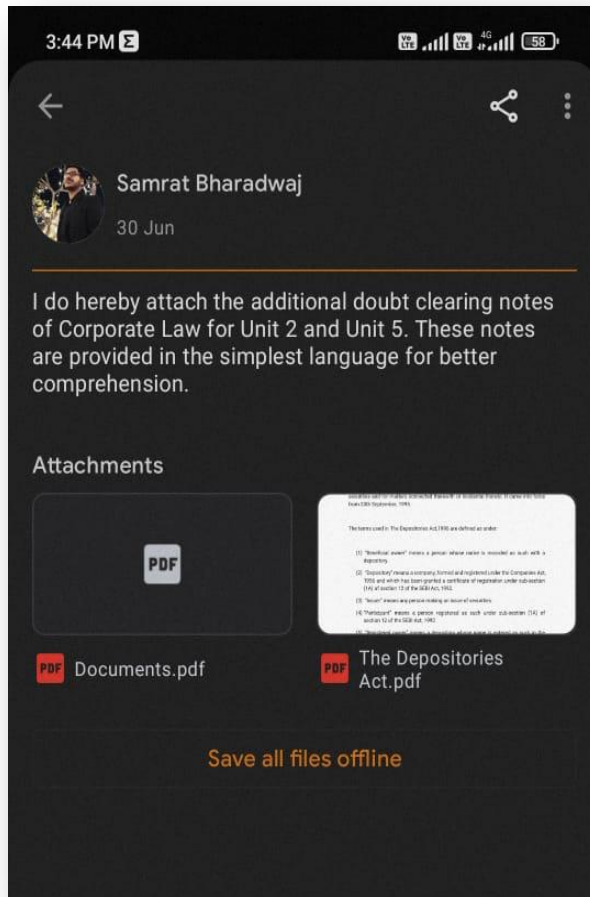
0 Assigned 21 Turned in

TURNED IN

Student	Submission Status
AKASH DEEP	Turned in Done late
Abhijit Borah	Turned in Done late
Abhisekh Das	Turned in Done late
Bikrom Kotoky	Turned in Done late
Geeta Upadhyay	Turned in Done late
Himangshu Baruah	Turned in Done late
Himanshu Saikia	Turned in Done late

Department of Commerce

Glimpses of problems assigned to students



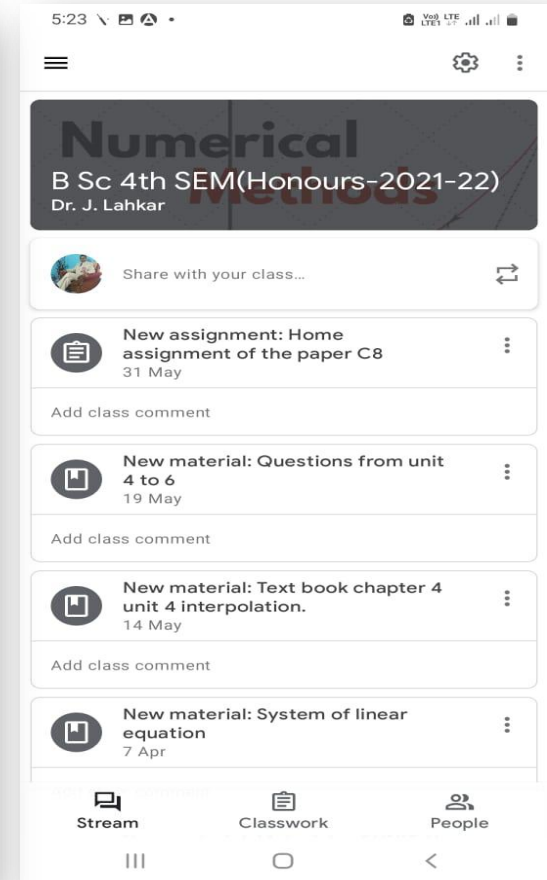
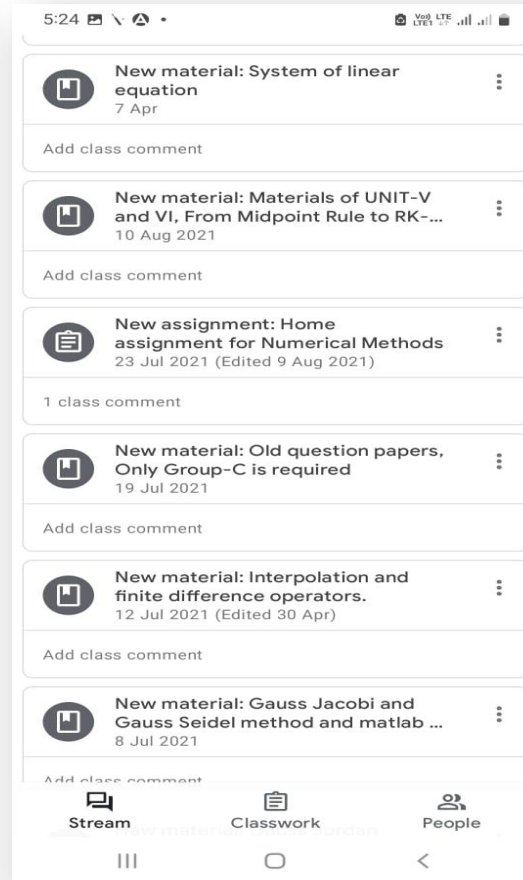
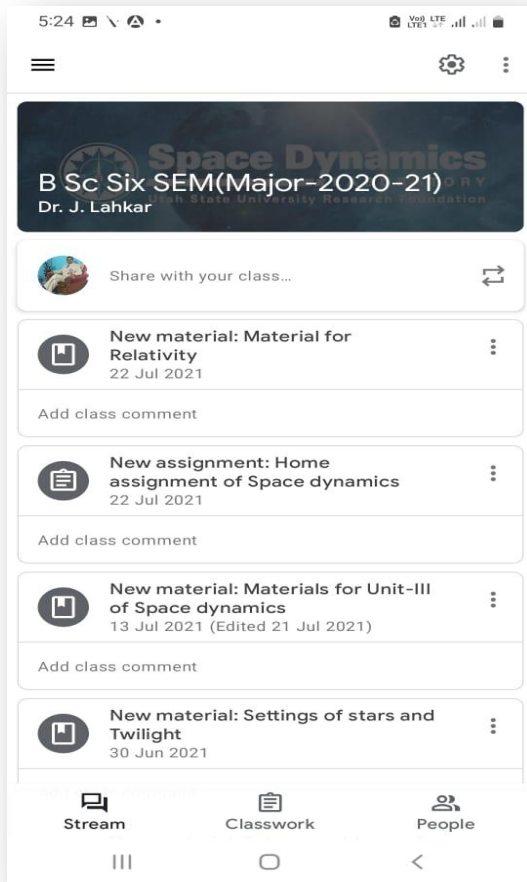
Department of English

Glimpses of problems assigned to students

The screenshot shows a Google Classroom interface. At the top, there are three browser tabs: 'Inbox (49) - pabitrabharali77@g...', 'Classwork for 3rd Sem English H...', and 'Home Assignment, 2021: C3 - G...'. The address bar shows a Google URL. Below the browser tabs, the Classroom navigation bar includes 'Honours 2021-22', 'Stream', 'Classwork' (which is underlined), 'People', and 'Grades'. The main content area is titled '2nd Sem Home Assignment, 2021'. Below this title is a card for the assignment 'Home Assignment, 2021: C3' with a due date of 'Due Aug 5, 2021'. The card contains the text: 'Posted Jul 29, 2021 (Edited Jul 29, 2021)', 'Dear students, You are required to submit Home Assignment on two topics. Write them as standard essays by including three sections- Introduction, Analysis and Conclusion. Word Limit 800.', and a 'View assignment' button. To the right of the text, there are two statistics: '37 Turned in' and '18 Assigned'. Below the assignment card, there is a link to a Google Docs document titled 'Home Assignment, 2021: ...'. At the bottom of the screenshot, the Windows taskbar is visible with icons for Firefox, Edge, Word, File Explorer, Teams, OneDrive, and Chrome. The system tray shows the date and time as '28°C Partly cloudy'.

Department of Mathematics

Glimpses of problems assigned to students



Department of Physics

Glimpses of problems assigned to students

SEM-II PHY HONS 2022

Instructions Student work

Return Ungraded

All students

Sort by status

Turned in

15 Turned in, 14 Assigned

C-3 Assignment (DKK)

Student	Status
Otheema Kishan	Turned in
Himani Gurung	Turned in
Kabita Sonar	Turned in
Koushik Karmakar	Turned in
Nishi Sonowal	Turned in

Submitted work includes: Scanned_20220604-1, Magnetic properties p..., 4 attachments, koushik karmakar/174, Nishi Sonowal, northamant, Pari Gogoi, Prakash Mandal.

SEM-VI (CBCS) 2022

Instructions Student work

Return 100 points

All students

Sort by status

Turned in

20 Turned in, 5 Assigned

Student	Status
Abhijit Buragohain	Done late
abhishek dutta	Done late
Am Kumar Chetry	Done late
Anmol Kumar Sah	Done late
Bhaskar Bora	Done late

Submitted work includes: Rollno41 Abhijit Buragohain, 3_25_Abhishek_Dutta, M-Kumar Assignment, Roll no-35 Anmol k., 3_78_B.Sc. 5th Sem, B., DocScanner Apr 21, 2., 2 attachments, Bobita mittal.

PG-2 2022

Instructions Student work

Return 50 points

All students

Sort by status

Turned in

7 Turned in, 0 Assigned

Assignment No:1 (Definition of Plasma)

Student	Status
Abhinandan Sah	Done late
Aunkita Kundu	Done late
Kunal Upadhyay	Done late
Prajwal Prasad	Done late
Saswata Roy Purkayastha	Done late

Submitted work includes: Abhinandan (Plasma), plasma assignment.pdf, Physics Assignment p., Assignment of plasm., Saswata Roy Purkayastha, Sourav Barshan, Shyam Sundar Borah.

Sem-III (GENERIC) CBCS -2021

Instructions Student work

Return 30 points

All students

Sort by status

Turned in

20 Turned in, 6 Assigned

Physics GE3: Thermal Physics and Statistical Mechanics

Student	Status
Aaryan Chhetri	Done late
Abhishek Poudel	Done late
Abhishek Chetry	Done late
Ankurjyoti Moran	Done late
Barsha Rani Sonowal	Done late

Submitted work includes: Aaryan Chhetri (02), BSC 3rd SEMESTER G., DocScanner Jan 27, 2., GE-3 roll no 38.pdf, Barsha Rani Sonowal, Bishal Bhattarai, Dhruj Moran, Drishti Sharma.

Department of Physics

Glimpses of problems assigned to students

PLASMA PHYSICS

ASSIGNMENT NO: II

Based on Unit-II

(Single particle motions)

1. Discuss the motion of a charged particle in uniform electric field. Discuss the associated drift and path of the particle. 4
2. Discuss the motion of a charged particle in uniform magnetic field. Discuss the associated drift and path of the particle. 4
3. Discuss the motion of a charged particle in uniform electric and magnetic field. Discuss the associated drift and path of the particle. 5+2=7
4. What would be the drift on a particle under an arbitrary force? 2
5. Discuss the motion of a charged particle in time varying electric field. 5
6. Discuss the motion of a charged particle in converging magnetic field. 5
7. Describe the terms: Magnetic mirror, magnetic bottle, loss cone, trap cone, Mirror ratio, co-efficient of reflection of particles. 7x2=14
8. Describe the frozen in flux concept of plasma. 4
9. Discuss the motion of a charged particle in time varying electric field? What is gradient drift? Derive an expression for gradient drift. 3+1+3=7
10. Discuss the motion of a charged particle in curved magnetic field. What is curvature drift? Derive an expression for curvature drift. 3+1+3=7
11. Discuss the motion of a charged particle in space varying magnetic field. 4
12. Describe the 1st, 2nd and 3rd Adiabatic invariants in plasma. 2x3=6

PLASMA PHYSICS

ASSIGNMENT NO: I

Full marks:30

1. "A plasma can have several temperature at the same time" justify. What would be the temperature of a 2 eV plasma? 4+1=5
2. A plasma can shield out and electric field created by a charge introduced into it. Discuss how. Can the shielding possible to any distance? Explain. 2+1+3=6
3. Can every ionized gas be called a plasma? When can it be called plasma? 1+3=4
4. Write a note on the various classifications of plasma. 4
5. Describe the various applications of plasma. 5
6. Verify that the following table satisfy the condition: 2x3=6
 $N_D \gg 1$ where N_D is the number of particles in the Debye sphere

Type of plasma	n_e (m^{-3})	T_e ($^{\circ}K$)	λ_D (m)
Interstellar gas	10^3	10^2	10
Sunspot	10^{17}	4×10^3	10^{-5}
Ionosphere	10^{12}	10^3	10^{-3}

Department of Rural Development

Glimpses of problems assigned to students

PROJECT SUBMISSION

Turned in: 6, Assigned: 57

Student Name	Submission Status
Arindam BuraGohain -26	RD Survey Report.pdf Turned in
Dikhamoni Gohain	RD Assignment on "W... Turned in
EASHA SHARMA - 91	Rural Development As... Turned in
Parinita Gogoi	"C" Group Survey Proj... Turned in
Shantoni Gohain	RD assignment.pdf Turned in
Suman Yadav	Project on rural devel... Turned in
Abhijit konwar	No attachments Missing
Anisha Sris	No attachments Missing
Ankita Debnath	No attachments Missing
Antarikhya Kalita	No attachments Missing

HOME ASSIGNMENT : What are the main causes of rural backwardness?

Turned in: 74, Assigned: 34

Student Name	Submission Status
7 SE-En	"Rural200 sandip chetri" Turned in
Anannya Sankha	Turned in
Ananya Chetta pator	Turned in
Anjali Chetry	Turned in
Anjita Sarmah	"Anjita sarmah , roll no 247" Turned in
Anjali Chetry	2 attachments Turned in
Ankita Chetri	2 attachments Turned in
Ankita Chetri	6 attachments Turned in

Department of Zoology

Glimpses of problems assigned to students

