

## Instructions for students

1. Demonstration Class: There will be demonstration classes in the beginning (in which all the experiments will be discussed). You have to join these classes via WebEx on link: <https://iitpatna.webex.com/meet/webex13> as per following schedule:

Demonstration classes for groups G1-G6 (PHLG1-PHLG4)		
Date	Time	Instructor
30.11.2021	02:00 PM – 05:00 PM	Dr. A. K. Mukherjee Dr. Manas K Sarangi Dr. Ajay D. Thakur Dr. R. Laha
07.12.2021	02:00 PM – 05:00 PM	
14.12.2021	02:00 PM – 05:00 PM	

2. Video link and laboratory manual: The videos related to all the experiments are available throughout the semester on the following link <http://172.16.1.6/index.php/2015-02-12-04-35-25/b-tech-lab-videos-phy> (the link may be accessed via VPN) and laboratory manual is available on the link: [https://0477420b-ea71-47e8-9b17-d57c35c99d2e.filesusr.com/ugd/f31d29\\_a81d8fc115594b6397e6fb0c77bee94c.pdf](https://0477420b-ea71-47e8-9b17-d57c35c99d2e.filesusr.com/ugd/f31d29_a81d8fc115594b6397e6fb0c77bee94c.pdf)
3. Different experimental data for each experiment will be provided to students for the purpose of analysis on every Friday preceding the corresponding lab day. Details on this will be provided during demonstration classes. Students will learn the experiment from provided videos and prepare the laboratory report with the data provided separately to them.
4. Preparation of laboratory reports: Laboratory reports must be prepared in following manner:
  - a) The report for each experiment should be scanned in a single pdf with following file name format: Roll number\_ Experiment number.pdf  
For example, if your Roll number is 1821CS43 and experiment number is 03 then the file name should be 1821CS43\_03.pdf
  - b) The students in the lab groups PHLG1-PHLG4 (see tables at the end to find your groups) will have to submit the lab reports to their respective instructors through the google forms shared for the purpose. The link for the google forms will be provided in individual Microsoft Teams meant for PHLG1-PHLG4. The laboratory reports must be submitted strictly as per the deadline provided below:

Experiment number	Submission Deadline for Lab Report (by 9 PM)	Weekly Questionnaire (2-3pm)
01	21.12.2021	21.12.2021
02	28.12.2021	28.12.2021
03	04.01.2022	04.01.2022
04	18.01.2022	18.01.2022
05	25.01.2022	25.01.2022
06	01.02.2022	01.02.2022
07	08.02.2022	08.02.2022
08	15.02.2022	15.02.2022
09	22.02.2022	22.02.2022

10	01.03.2022	01.03.2022
Grand Questionnaire	-	05.03.2022

You must submit using the Google form provided for the purpose. NO OTHER MODES OF SUBMISSION WILL BE CONSIDERED.

- c) The report must include the data table, calculation, graph with regression analysis (where applicable) and error analysis. The marking criteria will be different from that mentioned in laboratory manual.

Particulars	Marks	No. of experiment	Total
Data table and graph with regression	10	10	100
Calculation	10	10	100
Error analysis	10	10	100
Questionnaire	10	10	100
Exam via questionnaire			100
Grand total			500

The final result will be prepared out of 500 marks.

- There will be questionnaire for each experiment during laboratory classes and a Google form/MS Teams form will be provided for the same every week in your registered email id. Students will have to join for weekly evaluation through questionnaire (02:00PM on prescribed dates; the Google /MS Teams forms will be sent to your IIT Patna email for this purpose)
- There will be an End-semester examination via questionnaire. Students will get the questionnaire on 05.03.2022 by 10:00 AM.

## Laboratory group distribution:

Laboratory Group: **PHLG 1**

Instructor: Dr. A. K. Mukherjee

Meeting Link:

[https://teams.microsoft.com/j/channel/19%3as2yS70vL\\_AJyRWZRAb8w4yUgkhtgeshqgmWBiT4gIzU1%40thread.tacv2/General?groupId=82bf3914-58bd-4a94-bd86-8d5122a5fc66&tenantId=a57f7d92-038e-4d4c-8265-7cd2beb33b34](https://teams.microsoft.com/j/channel/19%3as2yS70vL_AJyRWZRAb8w4yUgkhtgeshqgmWBiT4gIzU1%40thread.tacv2/General?groupId=82bf3914-58bd-4a94-bd86-8d5122a5fc66&tenantId=a57f7d92-038e-4d4c-8265-7cd2beb33b34)

S. No.	Roll No.	Name	S. No.	Roll No.	Name
1.	2101AI01	AADIT NAYYAR	36.	2101CE38	NIKITA SRIVASTAVA
2.	2101AI02	AADIT SHARMA	37.	2101CE39	PRAKASH KUMAR
3.	2101AI03	AKASH SINHA	38.	2101CE49	RISHIT BAL
4.	2101AI13	DEVENDRA PRATAP SINGH	39.	2101CE50	SHASHIKANT KUMAR
5.	2101AI14	DIKSHA BARNWAL	40.	2101CE51	SHLOK GARG
6.	2101AI15	GUNDA SREYA	41.	2101CE61	VARIKUTI SUSMITHA VADHANA
7.	2101AI25	RACHAKONDA ESHWAR	42.	2101CE62	YASH SRIVASTAV
8.	2101AI26	RAKESH KUMAR	43.	2101CE63	YUVRAJ JADAV
9.	2101AI27	RAMAVATH VINOD	44.	2101CS01	A S POORNASH
10.	2101CB01	ABHAY KUMAR	45.	2101CS02	ABHIJEET KUMAR
11.	2101CB02	ABHILASHA	46.	2101CS03	ACHHADA HIREN RAJKUMAR
12.	2101CB03	ABHISHEK KUMAR	47.	2101CS13	ASIF HUSSAIN
13.	2101CB13	ARUN SINGH CHAUHAN	48.	2101CS14	ATHARVA SANDIP DESHMUKH
14.	2101CB14	ATHARV TAPADIA	49.	2101CS15	AYUSH SHARMA
15.	2101CB15	ATUL KUMAR	50.	2101CS25	DHRUV CHOUDHARI
16.	2101CB25	DIPTADIP MALLIK	51.	2101CS26	DHRUV KUMAR AGRAWAL
17.	2101CB26	DIVYANSHEE VERMA	52.	2101CS27	DIVIT AJMERA
18.	2101CB27	DIYA GHOSH	53.	2101CS37	KHUSHI SINGH
19.	2101CB37	MD. DAUD	54.	2101CS38	KIRTAN JAIN
20.	2101CB38	MRINAL TIWARI	55.	2101CS39	KOMMALAPATI LAHARI
21.	2101CB39	NANDAN KUMAR SINGH	56.	2101CS49	NAITIK RAJ
22.	2101CB49	SAHINI VENKATA SITARAM SRUTI	57.	2101CS50	NIKHIL PATHAK
23.	2101CB50	SAI SUNDARA SANDEEP GANTI	58.	2101CS51	NIRAJ
24.	2101CB51	SAIF RAHMAN	59.	2101CS61	PRAVEEN KUMAR
25.	2101CB61	YOGESH KUMAR	60.	2101CS62	PRINCE KUMAR
26.	2101CE01	ABHRANEEL SAHA	61.	2101CS63	RAJ RAUSHAN
27.	2101CE02	ADITYA PANDEY	62.	2101CS73	SHUBHAM KUMAR YADAV
28.	2101CE03	ADITYA PRAKASH	63.	2101CS74	SRAVYASRI MORTHA
29.	2101CE13	ASHUTOSH RAJ	64.	2101CS75	SURAJ S WARRIER
30.	2101CE14	AYUSH RAJ	65.	2101EE01	AAKASH SHARMA
31.	2101CE15	CHANDAN KUMAR	66.	2101EE02	AASTIK KUMAR VERMA
32.	2101CE25	HARSH RAJ	67.	2101EE03	AGNIPROVO MANDAL
33.	2101CE26	HIMANSHI	68.	2101EE13	ARITRA BHADURI
34.	2101CE27	JAGDISH RANDHAVE	69.	2101EE14	ARJUN SINGH
35.	2101CE37	MANISH KUMAR MEENA	70.	2101EE15	ARUJ GAUTAM

Laboratory Group: **PHLG 2**

Instructor: Dr. Ranjit Laha

Meeting Link:

[https://teams.microsoft.com/l/channel/19%3aThNJWKHQyV-xGBdenJZt3u\\_t\\_GT1ZYnbhqkdeqEeSg1%40thread.tacv2/General?groupId=9cafbe34-517e-4277-a73c-a35600f391b5&tenantId=a57f7d92-038e-4d4c-8265-7cd2beb33b34](https://teams.microsoft.com/l/channel/19%3aThNJWKHQyV-xGBdenJZt3u_t_GT1ZYnbhqkdeqEeSg1%40thread.tacv2/General?groupId=9cafbe34-517e-4277-a73c-a35600f391b5&tenantId=a57f7d92-038e-4d4c-8265-7cd2beb33b34)

S. No.	Roll No.	Name	S. No.	Roll No.	Name
1.	2101AI04	ANURAG DEO	34.	2101CE40	PRANAV SHAJAN CHANDHIRATHIL
2.	2101AI05	ARCHIT SHARMA	35.	2101CE41	PRASHANT PATHAK
3.	2101AI06	ARYAN SAHOO	36.	2101CE42	PRAVIN KUMAR PRAJAPATI
4.	2101AI16	ISHANI SHARMA	37.	2101CE52	SHRIYANSH SINHA
5.	2101AI17	LALIT CHANDRA ROUTHU	38.	2101CE53	SHRUTI DEY
6.	2101AI18	MEDIKONDA DHEERAJ	39.	2101CE54	SHUBHAM SATYAM
7.	2101AI28	RANGAPURAM SAI VARSHITH	40.	2101CS04	ADITHYA RAVI RATHOD
8.	2101AI29	SAI SRAVANTH DATTI	41.	2101CS05	ADITYA PODDAR
9.	2101AI30	SHIVAM GUPTA	42.	2101CS06	AISHEZ SINGH
10.	2101CB04	ABHISHEK WAZAL	43.	2101CS16	BADDI SATYA SAHITHI
11.	2101CB05	ADITI KUMARI	44.	2101CS17	BELLAMKONDA SURYA TEJA
12.	2101CB06	ADITYA GUPTA	45.	2101CS18	BHAGAT RAJNISH OMPRAKASH
13.	2101CB16	AVINASH TYAGI	46.	2101CS28	DIVYAM RAJ
14.	2101CB17	AVIRAL SRIVASTAVA	47.	2101CS29	GANJI SREE HARSHA PRANEETH
15.	2101CB18	AYUSH KUMAR	48.	2101CS30	GURUBELLI RAGHAVENDRA
16.	2101CB28	HARSH KUMAR SINGH	49.	2101CS40	M SHANMUKHA PRIYA
17.	2101CB29	KARAN RAJ	50.	2101CS41	MAILARAM SAI CHAITANYA
18.	2101CB30	KONA NAGA SURYA SIVA SAI	51.	2101CS42	MAMTA KANWAR
19.	2101CB40	PANKAJ RAWAT	52.	2101CS52	NISHANT KUMAR
20.	2101CB41	PARSHANT VERMA	53.	2101CS53	NISHITA KAMAL LATH
21.	2101CB42	PRADEEP KUMAR	54.	2101CS54	NITYANAND KUMAR
22.	2101CB52	SAKSHAM GAMBHIR	55.	2101CS64	RAMAN BANSAL
23.	2101CB53	SHAAZ HUSSAIN	56.	2101CS65	RAYUDU VIVEK
24.	2101CB54	SHARIQUE AHMAD AZIZY	57.	2101CS66	RISHIKANT CHIGRUPAATII
25.	2101CE04	ALEKH SRIVASTAVA	58.	2101CS76	SWAPNIL SARASWAT
26.	2101CE05	AMAN RAJ	59.	2101CS77	TATIPARTHI SAINADH
27.	2101CE06	ANAND KUMAR	60.	2101CS78	TEJAS TUPKE
28.	2101CE16	DEBASHISH KALITA	61.	2101EE04	AJEETESH AWADH
29.	2101CE17	DEVANSH RAI	62.	2101EE05	AJMEERA JAGADISHWAR
30.	2101CE18	DEVENDRA PRATAP SINGH RATHORE	63.	2101EE06	AKASH KUMAR
31.	2101CE28	JALLIPALLI PRASANTH	64.	2101EE16	ARVIND MEENA
32.	2101CE29	JANGAM TEJAS ROY	65.	2101EE17	ARYAN CHUGH
33.	2101CE30	JEEVAN JYOTI	66.	2101EE18	ARYAN KUMAR

Laboratory Group: **PHLG 3**

Instructor: Dr. Manas Kumar Sarangi

Meeting Link:

[https://teams.microsoft.com/j/channel/19%3al8OCBVES2960Y84EAsCS20KSjhqW\\_cQDLB0h2h34PaY1%40thread.tacv2/General?groupId=87739ffc-2908-4da4-98b2-1ea92cfc1578&tenantId=a57f7d92-038e-4d4c-8265-7cd2beb33b34](https://teams.microsoft.com/j/channel/19%3al8OCBVES2960Y84EAsCS20KSjhqW_cQDLB0h2h34PaY1%40thread.tacv2/General?groupId=87739ffc-2908-4da4-98b2-1ea92cfc1578&tenantId=a57f7d92-038e-4d4c-8265-7cd2beb33b34)

S. No.	Roll No.	Name	S. No.	Roll No.	Name
1.	2101EE25	CHITRAKSH DHINGRA	36.	2101MC39	SARTHAK SHARMA
2.	2101EE26	DHRUTISUNDAR SAHOO	37.	2101ME01	ABHAY CHAUHAN
3.	2101EE27	DOWLESWARAPU SRI SAI SRUJAN KAMAL VEER	38.	2101ME02	ABHINAV ANAND
4.	2101EE37	HONEY KHATRI	39.	2101ME03	ABISH PUJARI GIRITEJA
5.	2101EE38	HRIDYANSHU SINGH GHURA	40.	2101ME13	ARUN KUMAR MEENA
6.	2101EE39	ISHAN GARG	41.	2101ME14	ARYAN
7.	2101EE49	PARTH AGARWAL	42.	2101ME15	ASHISH KUMAR
8.	2101EE50	PARTHA SARATHI DUTTA	43.	2101ME25	GYAN PRAKASH
9.	2101EE51	PIYUSH OJHA	44.	2101ME26	HARSH JHA
10.	2101EE61	RESHIKA VEDICHERLA	45.	2101ME27	HARSHITA UPPAL
11.	2101EE62	SANDHYA RANI	46.	2101ME37	KSHITIJ CHAUDHARY
12.	2101EE63	SATYAM VYAS	47.	2101ME38	MAHIBA AFTAB
13.	2101EE73	TEJAS BUDHWAL	48.	2101ME39	MANISH SINGH CHAUHAN
14.	2101EE74	THANNEERU VARUNTEJA	49.	2101ME49	PRAGATI BAJPAI
15.	2101EE75	TRIPTI	50.	2101ME50	PRAJWAL ASHOK SATANNAVAR
16.	2101PH01	AABHAS AGRAWAL	51.	2101ME51	PRIYANSHU KUMAR
17.	2101PH02	AAKHYAT BAGGA	52.	2101ME61	SAURABH KUMAR
18.	2101PH03	ABHINAV T V	53.	2101ME62	SHIVAM KUMAR
19.	2101PH13	AYUSH SINGH	54.	2101ME63	SHIVAM K <sub>r</sub> DUBEY
20.	2101PH14	BISURKAR PAVAN DATTATRAYA	55.	2101ME73	SUSHANT VERMA
21.	2101PH15	CHANDAN KUMAR	56.	2101ME74	SWABNAM GUNJAN BORAH
22.	2101PH25	RAJNEESH SINGH	57.	2101ME75	SWAPNIL YADAV
23.	2101PH26	RIBHU	58.	2101MM01	ADITI VERMA
24.	2101PH27	S RAMAKRISHNA	59.	2101MM02	ADITYA TOMAR
25.	2101MC01	ABHASH KUMAR	60.	2101MM03	ANANMAY DWIVEDI
26.	2101MC02	ADITYA KUMAR	61.	2101MM13	NISHANT MANJUNATH
27.	2101MC03	AMAN VERMA	62.	2101MM14	PADALA RAJESH
28.	2101MC13	ASMIT GANGULY	63.	2101MM15	PALVE SHIVAM RAJENDRA
29.	2101MC14	BADDALA SHREE VAISHNAVI	64.	2101MM25	SARTHAK MANDAL
30.	2101MC15	CHAUDHARI MOHITKUMAR	65.	2101MM26	SATWIK KHATTAR
31.	2101MC25	KAMBLE PRAJWAL SURYAKANT	66.	2101MM27	SATYAM GOYAL
32.	2101MC26	KASHISH GARG	67.	2101MM37	VARESH MUKHEKAR
33.	2101MC27	KOTLA SAI CHARAN	68.	2101MM38	VIKAS SWAMI
34.	2101MC37	SAKET KUMAR SINGH	69.	2101MM39	WAGHCHOURE YASH DINESH
35.	2101MC38	SAKSHAM			

Laboratory Group: **PHLG 4**

Instructor: Dr. Ajay D. Thakur

Meeting Link:

[https://teams.microsoft.com/l/channel/19%3aBwsZESnh7cZHGJUzQkwHQEknTSfGm6U\\_2VvAv14DPew1%40thread.tacv2/General?groupId=25b79e05-7b34-4e09-9109-a212c1a623aa&tenantId=a57f7d92-038e-4d4c-8265-7cd2beb33b34](https://teams.microsoft.com/l/channel/19%3aBwsZESnh7cZHGJUzQkwHQEknTSfGm6U_2VvAv14DPew1%40thread.tacv2/General?groupId=25b79e05-7b34-4e09-9109-a212c1a623aa&tenantId=a57f7d92-038e-4d4c-8265-7cd2beb33b34)

S. No.	Roll No.	Name	S. No.	Roll No.	Name
1.	2101EE28	GADDE JEEVAN KUMAR	36.	2101MC42	T ANUDEEP
2.	2101EE29	GAURANG BANSAL	37.	2101ME04	ADE NAVNEETH SINGH
3.	2101EE30	GAURAV KUMAR	38.	2101ME05	ADITYA KUMAR
4.	2101EE40	KATTA RAM SHASHANK REDDY	39.	2101ME06	AJAY
5.	2101EE41	KAUR UDIT PRATAP	40.	2101ME16	ASHRAF ALI
6.	2101EE42	KENZ ABDULLA	41.	2101ME17	AWANTIKA SINGH
7.	2101EE52	POKALA JAGAN MOHAN REDDY	42.	2101ME18	AYUSH BHASKAR SINGH
8.	2101EE53	PRATHIPATI YADU VAMSI VENKATA SAI	43.	2101ME28	HIMANSHI SRESTHA
9.	2101EE54	PRAVEEN BABU GARJI	44.	2101ME29	HITIN BAJAJ
10.	2101EE64	SHAAN JIJOE	45.	2101ME30	JAHNAVI SINHA
11.	2101EE65	SHAILENDRA MISHRA	46.	2101ME40	MELVIN YESUDAS GEORGE
12.	2101EE66	SHASHI RANJAN	47.	2101ME41	MIHIR
13.	2101EE76	TULSI KUMARI	48.	2101ME42	MISHRA AYUSH RAKESH
14.	2101EE77	UDITA DAS	49.	2101ME52	PUSHKAR RAJ
15.	2101EE78	USAKOYALA RAM PRASAD	50.	2101ME53	RAHUL SAHU
16.	2101PH04	ABHISHEK SHAW	51.	2101ME54	RISHABH RAUNAK
17.	2101PH05	AMAN KUMAR	52.	2101ME64	SHIVANI
18.	2101PH06	AMAR KUMAR	53.	2101ME65	SHUBHASHANI SHEKHAR
19.	2101PH16	KADAM TANISHK JEEVAN	54.	2101ME66	SHUDHANSHU
20.	2101PH17	KANISHKA SINGH SOLANKI	55.	2101ME76	UMESH PRAFUL CHAVDA
21.	2101PH18	KOMMUNURI ELISHA JOEL	56.	2101ME77	VAIBHAV KUMAR
22.	2101PH28	SALOCHANA	57.	2101ME78	VIDIT RAJENDRA KOTHARI
23.	2101PH29	SANJANA KUMARI	58.	2101MM04	ARYAN DEV VERMA
24.	2101PH30	SHILPA KANJILAL	59.	2101MM05	AVNISH ARYAN
25.	2101MC04	ANIKET JAISWAL	60.	2101MM06	BHASKAR MISHRA
26.	2101MC05	ANJALI SINGH	61.	2101MM16	PARTH SARTHY YADAV
27.	2101MC06	ANSHIKA CHOURASIA	62.	2101MM17	PRATYUSH MANAS
28.	2101MC16	DEVESH KUMAR PANDEY	63.	2101MM18	PRIYANKA RANJAN
29.	2101MC17	DHRUV GUPTA	64.	2101MM28	SHANTANU VISHAL PUNDE
30.	2101MC18	DIPANSHU CHAUHAN	65.	2101MM29	SHIVAM RATHORE
31.	2101MC28	KUNAL JHA	66.	2101MM30	SHIVAM TRIPATHI
32.	2101MC29	MOHD DARISH KHAN	67.	2101MM40	YASH VERMA
33.	2101MC30	PANUGANTI AISHWARYA	68.	2101MM41	YASHESH PRATAP SINGH
34.	2101MC40	SHIVAM	69.	2101MM42	
35.	2101MC41	SURYANSH JAISWAL			