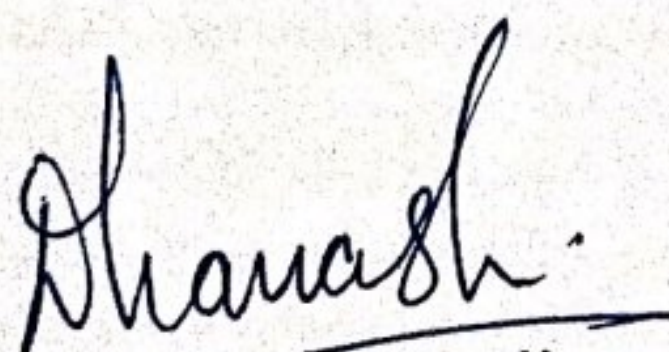


## NOTICE

All the students of B. Sc. Semester IV are hereby informed that Class Seminar activity for Physical Chemistry Paper II will be conducted during 20-21 April 2022 in the regular class. Interested students should register their name and topic with the teacher in charge till 15 April 2022.

Mode of presentation: Power Point

Time: 10 minutes



**Dr. Mrs. D. M. Borikar**  
Teacher In Charge

# DR. AMBEDKAR COLLEGE, DEEKSHABHOOMI, NAGPUR

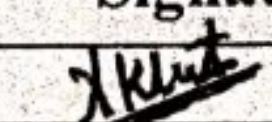
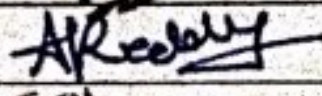
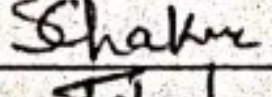
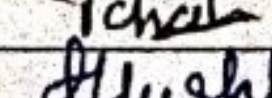
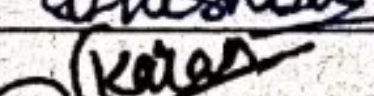
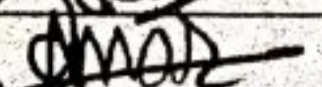

## DEPARTMENT OF CHEMISTRY

### STUDENT ACTIVITY: CLASS SEMINAR

B. Sc. , SEM IV ,Paper II ,Physical Chemistry, Session 2021-22

Teacher Incharge : Dr. D. M. Borikar

Students of B. Sc. Second year, semester IV participated in the student activity conducted by the teacher in the class as Class Seminar. Various topics from Physical Chemistry, paper II, were chosen by the students and the power point presentations were prepared by them. All the seminars were presented in the regular class during 20<sup>th</sup> and 21<sup>st</sup> April 2022. Students who excelled in this activity were awarded with Appreciation Certificates. The activity was conducted under the supervision of coordinator Dr. Mrs. D. M. Borikar.

Sr No.	Name	Topic	Signature
1.	Mr. Akshat Hatwar	Diatomic molecules as a rigid motor	
2.	Ms. Apeksha Reddy	Isotope effects	
3.	Ms. Sayali Chakre	Degree of freedom and modes of vibration	
4.	Ms. Tanushree Chauhan	Selection rules for Rotational spectroscopy	
5.	Ms. Khushbu Uikey	Application of Vibrational Rotational spectra	
6.	Mr. Karan Choudhary	Selection rules for Vibrational spectra	
7.	Mr. Amar Khurpade	Appearance of Rotational spectra	



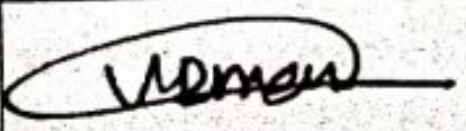
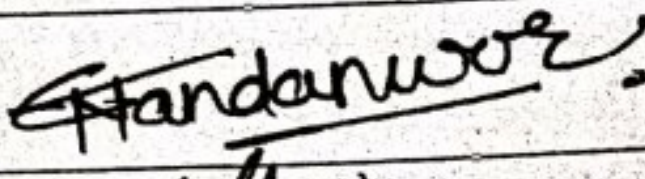
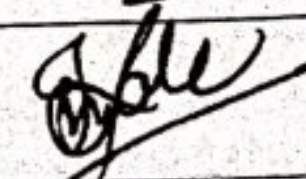
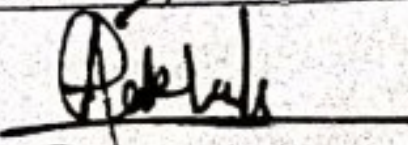
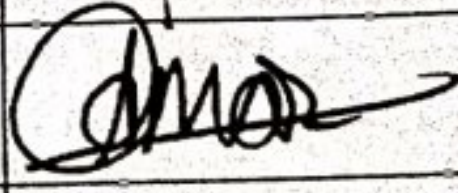
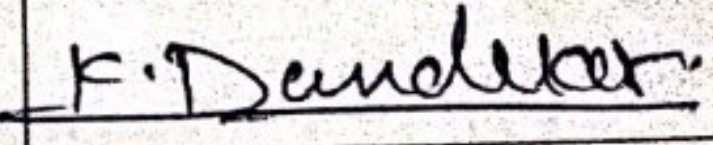
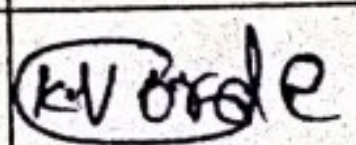
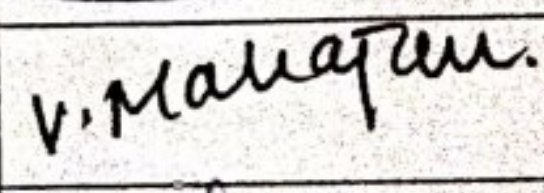
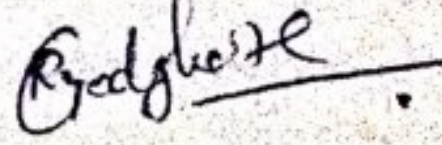
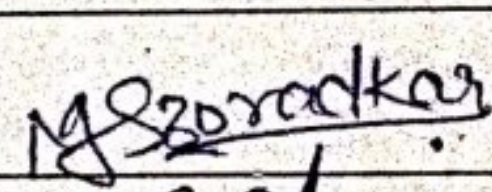
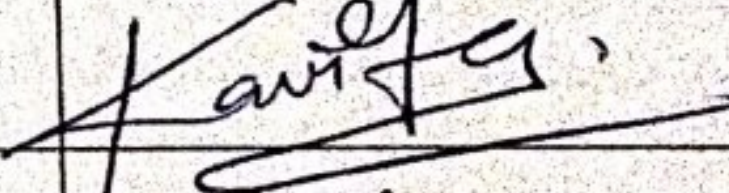
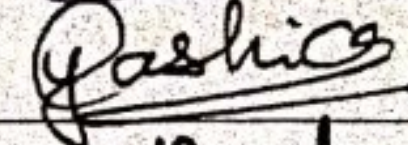
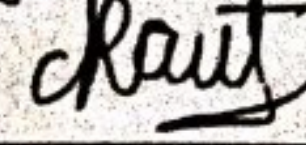
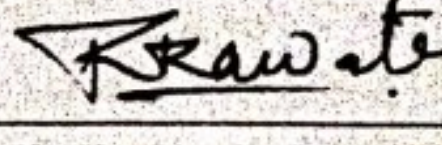

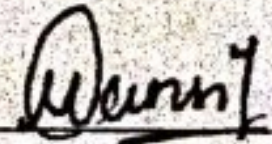
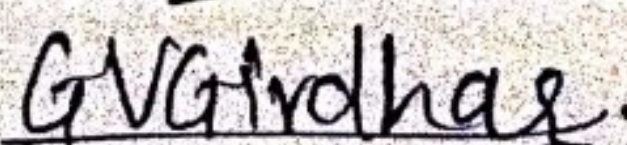
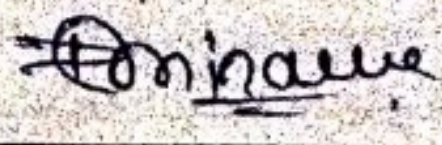
# DR. AMBEDKAR COLLEGE, DEEKSHABHOOMI, NAGPUR

DEPARTMENT OF CHEMISTRY  
STUDENT ACTIVITY: CLASS SEMINAR

B. Sc. , SEM IV , Paper II , Physical Chemistry, Session 2021-22

Teacher Incharge : Dr. D. M. Borikar

Date : 20<sup>th</sup> - 21<sup>st</sup> April . 2022

SR. NO.	NAME	SIGNATURE
1.	Vinil D. Masran	
2.	Tejas. G. Nandanwar	
3.	Tushar M. Kale	
4.	Abhas Patilhole	
5.	AMAR. D. KHURPADE	
6.	Khushali Dandekar.	
7.	Vaishnavi. Korde	
8.	Vedanti Mahajan	
9.	Riya. K. Godghate	
10.	Manalee S. Borackar	
11.	Kavita Rankawat	
12.	Yashica Chawla	
13.	Chetana Raut	
14.	Rashmi Rawate	
15.	Khushi Hadke	
16.	Mansi Parihar	
17.	Gauri Girdhar	
18.	Dilsha K. Nandave	

DR. AMBEDKAR COLLEGE, DEEKSHABHOOMI, NAGPUR

DEPARTMENT OF CHEMISTRY

STUDENT ACTIVITY: CLASS SEMINAR

B. Sc. , SEM IV , Paper II , Physical Chemistry, Session 2021-22

Teacher Incharge : Dr. D. M. Borlikar Date : 20<sup>th</sup> - 21<sup>st</sup> April 2022

SR. NO.	NAME	SIGNATURE
19.	Rutuu Patil	Rutuu Patil
20.	Anjali . A. Mishra	Anjali
21.	Karan D. Choudhary	Karan
22.	Anushka . v. Pedraj	Pedraj
23.	Farhadi f. Farbandhu	Farhadi
24.	Snehal . R. Mishra	Snehal
25.	Mukul Kumar	Mukul
26.	Ramkumar Wani	Ramkumar
27.	Indrajit C. Shrivastava	Indrajit
28.	Vishakha W. Mave	Vishakha
29.	Puja S. Meshram	Puja
30.	Arpita R. Sakharakar	Arpita
31.	Shweta . G. Dhoke	Shweta
32.	Akanksha Madavi	Akanksha
33.	Pradyumna Bisne	Pradyumna
34.	Harshal Bhondekar	Harshal
35.	Vishal Kudre	Vishal
36.	Akshat Hatwar	Akshat
37.	Deepthi Digambar Samteke	Deepthi
38.	Indrakshi S. Surpatne	Indrakshi



P. P. Dr. Babasaheb Ambedkar Smarak Samiti's

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Deekshabhoomi, Nagpur

## Certificate of Appreciation

*Awarded to*

Mr./Ms. Akshat Hatwar

of B.Sc 2<sup>nd</sup> Year Sem IV

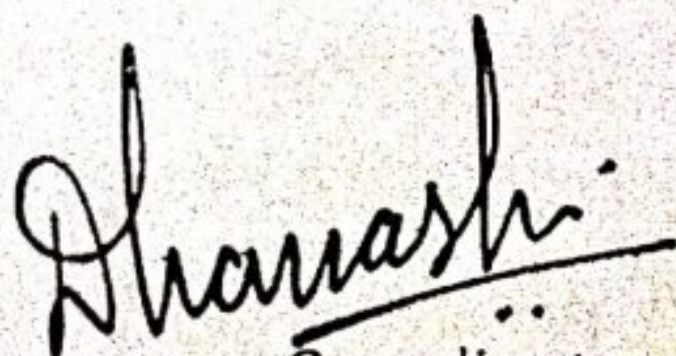
for his/h<sub>er</sub> participation / performance in Class Seminar

Diatomic Molecules as a Rigid Motor.

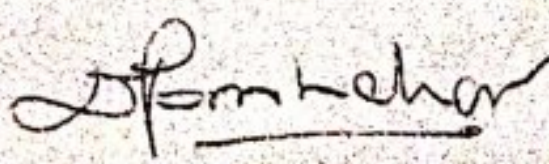
conducted by Department of Chemistry

during the session 2021 - 22 on 20/04/2022 for having

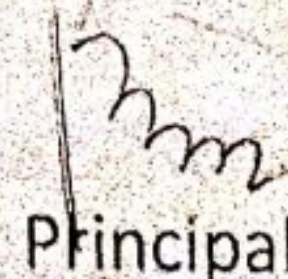
secured I<sup>st</sup> position.



Programme Coordinator



Head of the Department



Principal





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## Certificate of Appreciation

*Awarded to*

*Mr./Ms.* Apexha Reddy

*of* B.Sc 2nd Year Sem IV

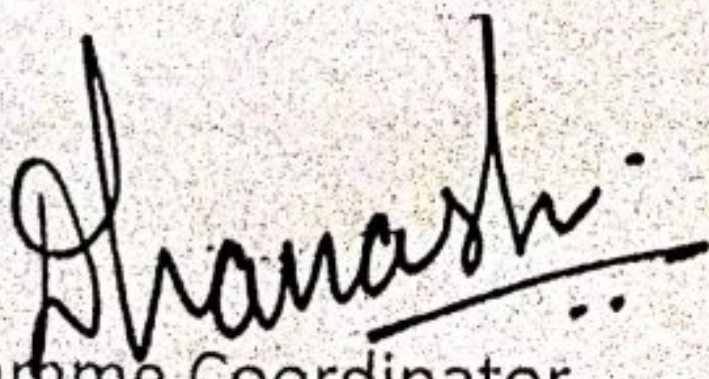
*for his/her participation / performance in* class seminar

Isotope Effects

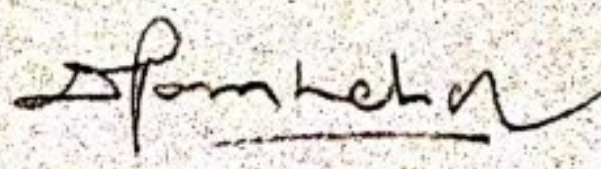
*conducted by* Department of chemistry

*during the session* 2021-22 *on* 20/04/2022 *for having*

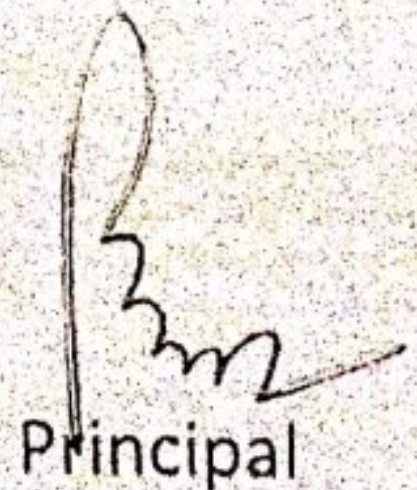
*secured* II<sup>nd</sup> *position.*



Programme Coordinator



Head of the Department



Principal



P. P. Dr. Babasaheb Ambedkar Smarak Samiti's

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Deekshabhoomi, Nagpur

## Certificate of Appreciation

Awarded to

Mr./Ms. Sayali Chakre

of B.Sc 2<sup>nd</sup> Year Sem IV

for his/her participation/performance in Class Seminar

Degree of Freedom and modes of vibration

conducted by Department of Chemistry

during the session 2021-22 on 20/04/2022 for having

secured III<sup>rd</sup> position.

*Shanash*

Programme Coordinator

*S. P. Chakre*

Head of the Department

*[Signature]*

Principal





P. P. Dr. Babasaheb Ambedkar Smarak Samiti's

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Deekshabhoomi, Nagpur

## Certificate of Appreciation

*Awarded to*

*Mr./Ms.* Tanushree Chauhan

*of* B.Sc 2nd Year Sem IV

*for his/her participation / performance in* Class Seminar

Selection rules for Rotational spectroscopy

*conducted by* Department of chemistry

*during the session* 2021-22 *on* 20/04/2022 *for having*

*secured* \_\_\_\_\_ *position.*

Programme Coordinator

Head of the Department

Principal







P. P. Dr. Babasaheb Ambedkar Smarak Samiti's

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Deekshabhoomi, Nagpur

## Certificate of Appreciation

*Awarded to*

*Mr./Ms. Khushbu Uikey*

*of B.Sc 2<sup>nd</sup> Year Sem IV*

*for his/her participation / performance in Class Seminar*

*Application of Vibrational Rotational Spectra.*

*conducted by Department of Chemistry*

*during the session 2021-22 on 20/04/2022 for having*

*secured \_\_\_\_\_ position.*

Programme Coordinator

Head of the Department

Principal





P. P. Dr. Babasaheb Ambedkar Smarak Samiti's  
**DR. AMBEDKAR COLLEGE**

Deekshabhoomi, Nagpur

# Certificate of Appreciation

*Awarded to*

Mr./Ms. Karan choudhary

of B.Sc 2nd Year Sem IV

for his/her participation / performance in Class Seminar

Selection Rules for Vibrational Spectra

conducted by Department of Chemistry

during the session 2021-22 on 20/04/2022 for having

secured \_\_\_\_\_ position.

Programme Coordinator

Head of the Department

Principal





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Deekshabhoomi, Nagpur

## Certificate of Appreciation

*Awarded to*

Mr./Ms. Amar Khurpade

of B.Sc 2<sup>nd</sup> Year Sem IV

for his/h<sub>er</sub> participation / performance in Class Seminar

Appearance of Rotational spectra

conducted by Department of chemistry

during the session 2021-22 on 20/04/2022 for having

secured \_\_\_\_\_ position.

Programme Coordinator

Head of the Department

Principal

In case of anharmonic oscillator, the selection rules changes to

$$\Delta v = \pm 1, \pm 2, \pm 3, \dots$$

Most intense band for transition  $v=0$  to 1

These intense band is called fundamental vibrational band

The absorption corresponding to these is called fundamental absorption.

Weak intensity band corresponding to transition from  $v=0$  to 2 is called first overtone.



GPS Map Camera

**Nagpur, Maharashtra, India**

**43H9+F2V, Nagpur, Maharashtra 440010, India**

**Lat 21.128904°**

**Long 79.067059°**

**20/04/22 01:48 PM**

