

**Activity Report of Department of Biotechnology
2018-19**

Student seminars



Seema Begum 114018489023 presented seminar on the topic 'Pairwise sequence alignment' on 18.09.2018



Mede Havilah 114018572018 presented seminar on the topic BLAST on 18.09.2018

Student seminars



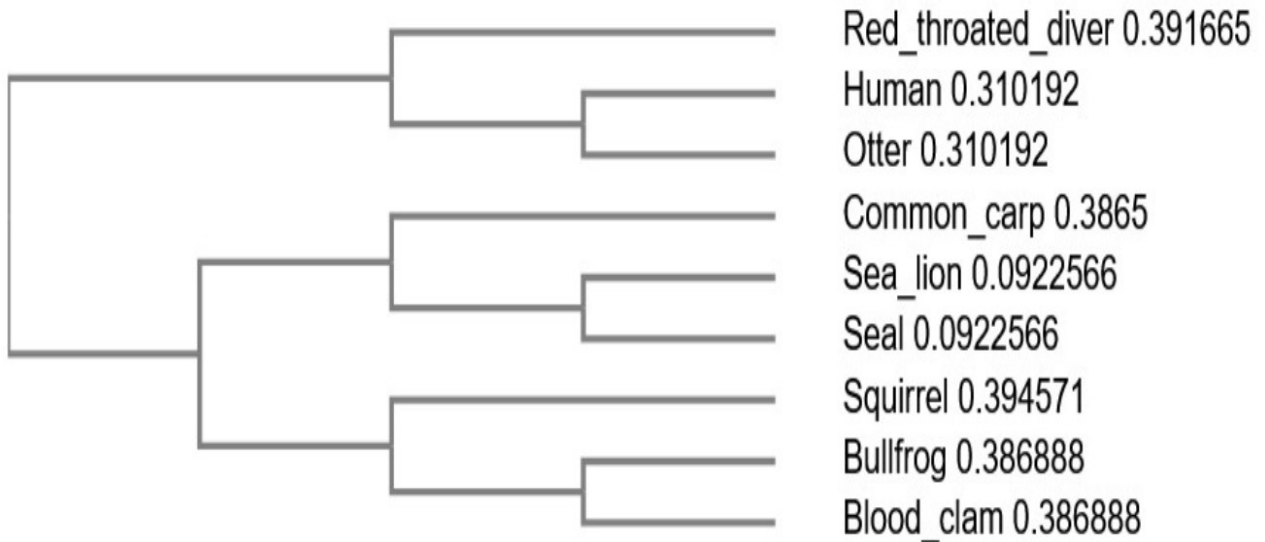
Karthik 114018489006 presented seminar on the topic Structure of Bacteria 26.09.2018



Likith Gomas 11401889012 presented seminar on the topic Cell Structure on 26.09.201

Student Project for the academic year 2018-19

Phylogenetic tree construction of hemoglobin beta subunit of 9 animal species



Students completed project on Phylogenetic tree construction of hemoglobin beta subunit of 9 animal species. Students involved in this project are Nimmala Lokesh, Chilkamari Manasa, Narla Ganesh, U Hemanth and Fouzia Begum. Based on the mutiple sequence alignmnet the following phylogenetic tree resulted.

Phylogenetic trees were constructed for the hemoglobin beta subunits by downloading the sequences in FASTA format (Annexure 1) with sequence data from distance method (NJ)

Activity Report of Department of Biotechnology 2019-20

Group Discussions

Dt. 20.08.2019

Chloroplast inheritance topic was assigned to the students to discuss in a group about inheritance of genes from chloroplast. Group A, B, C and D formed such that each group has 4 members. 30 minutes time was given to discuss among themselves and 5 min time was allotted for each group to speak about how chloroplast genes are inherited to the progeny. Group B performed well and appreciated for their efforts

Dt. 23.08.2019



Hardy-Weinberg equilibrium topic was assigned to the students to discuss in a group about how Hardy-Weinberg equilibrium influences the genetic pool. Group A, B, C and D formed such that each group has 4 members. 30 minutes time was given to discuss among themselves and 5 min time was allotted for each group to speak about Hardy-Weinberg equilibrium. Group C performed well in this Group discussion.

Guest Lecture

Dt. 07.09.2019



Ms. D. Annapurna, Assistant Professor of Biotechnology, Tara Govt. Degree College (Autonomous), Sangareddy delivered guest lecture on rDNA technology

Speaker highlighted the importance of rDNA technology in creating Genetically modified organisms. Cutting of DNA with restriction endonucleases, joining of gene of interest and selection of recombinants are the major aspects covered in this webinar. 24 students participated in this event.

Quiz

Dt. 21.10.2019

Quiz programme was conducted on Mendelian Genetics in 3 rounds. First round comprises of Fill in the blanks, 2nd round comprises of true or false and 3rd comprises of visual round questions. Group A, B, C and D formed such that each group has 4 members. Group C scored highest marks in this quiz. 12 students participated in this event.

Haritha Haram-2020

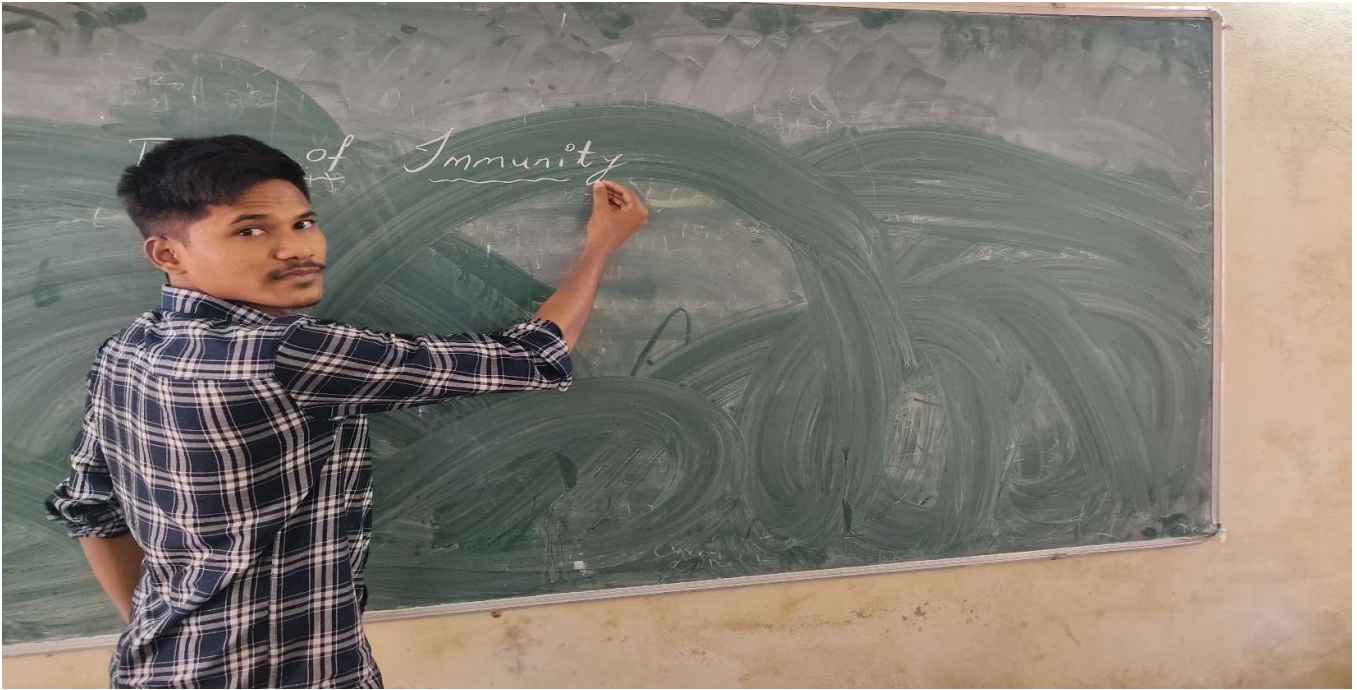
Dt. 17.02.2020



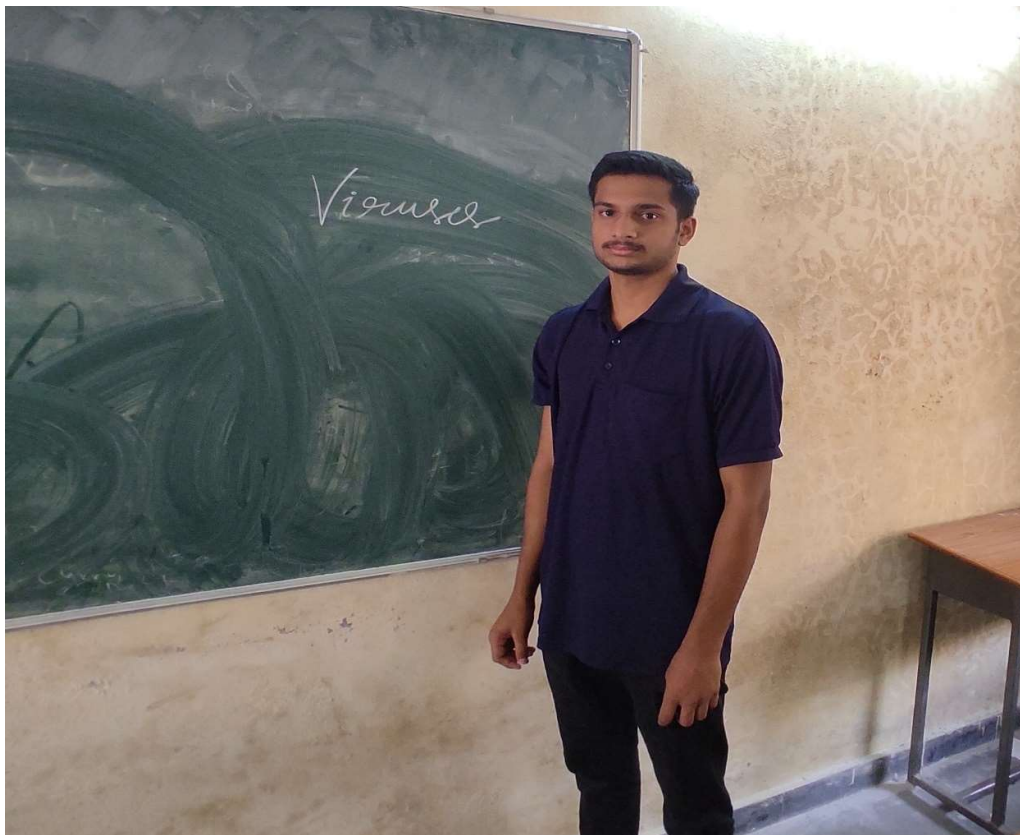
Participated in the Haritha Haram Program organized in the college.

Student seminars

Dt. 14.09.2019



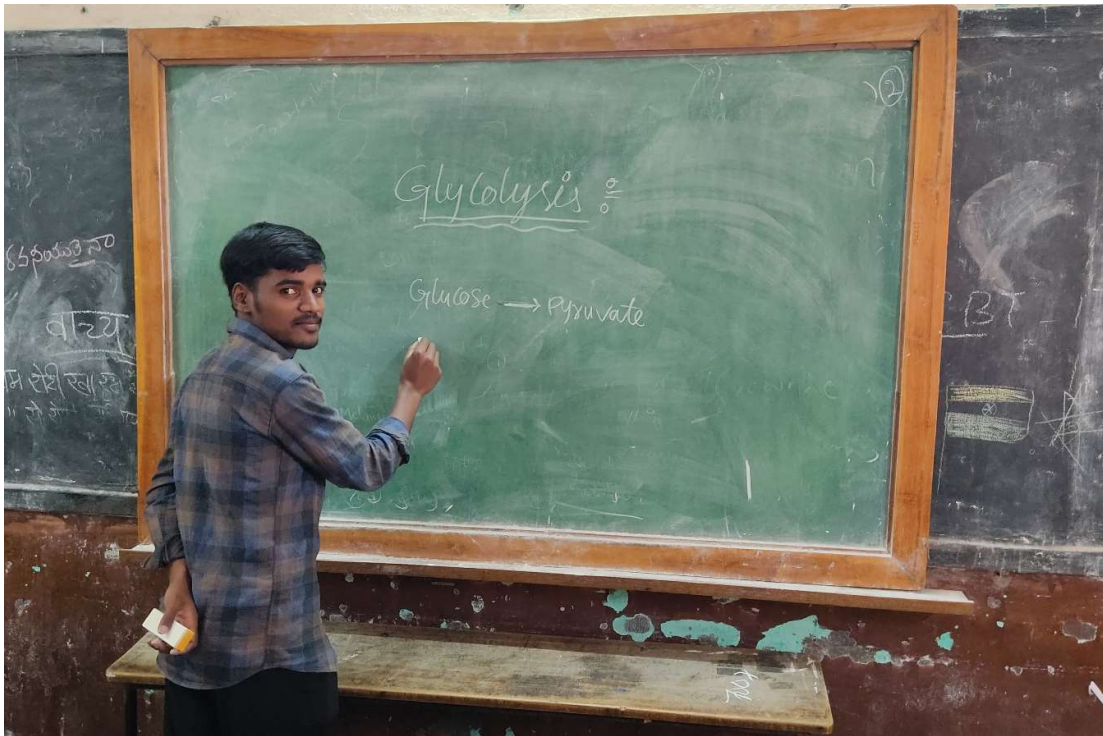
G. Srikanth 114019342008 presented seminar on the topic Types of immunity



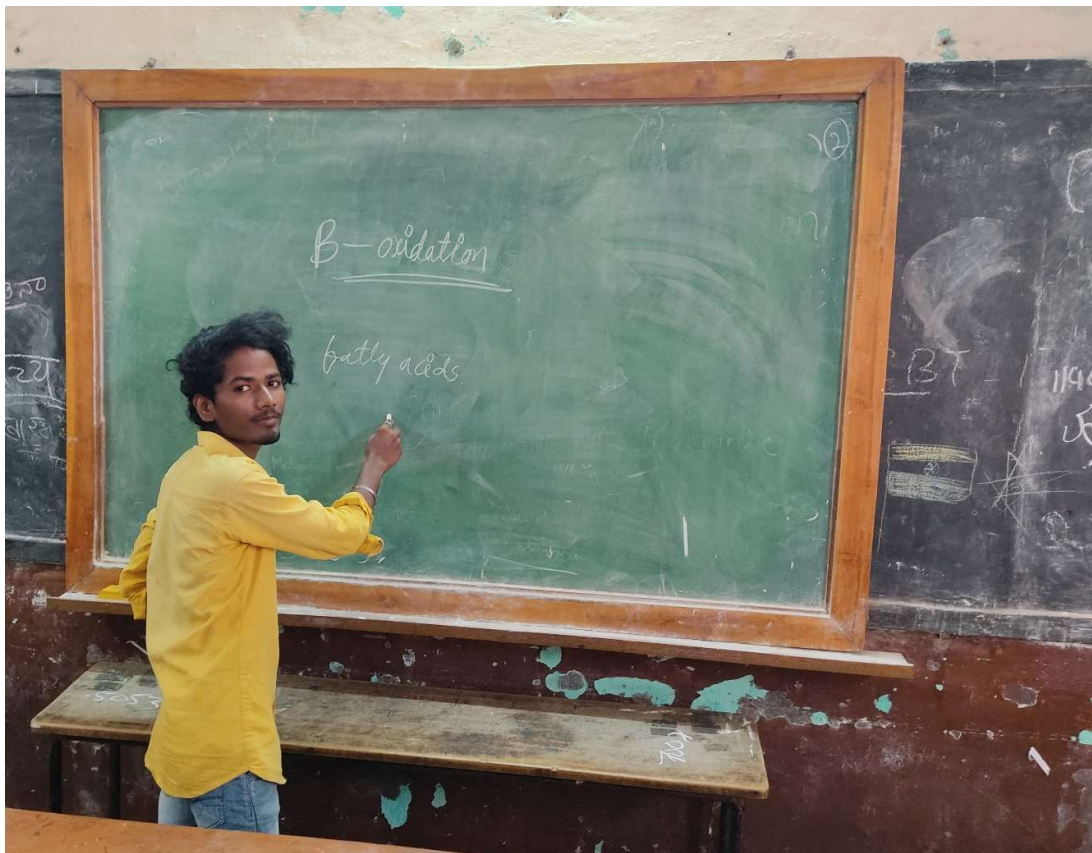
Goli Harish 114019572011 presented seminar on the topic Viruses

Student seminars

Dt. 22.10.2019



M. Kranthi Kumar 114018572017 presented seminar on the topic Glycolysis



M. Praveen Kumar 114018489017 presented seminar on the topic beta-Oxidation

Debate on Bt Cotton

Dt. 07.09.2020

Zoom Meeting 40-Minutes

Remaining Meeting Time: 06:28 | Upgrade to Pro

00:34:14 Speaker View

Participants (13)

Find a participant

Dr. Y. Venkateswarlu (Host, me)

114019572007 D Mahesh || BTBC

Annapurna(BTBZ)114019342018

Bhandhavi (114019342002)(BTB...

Harish (btbc)114019572026

J Arundhathi btbz

k.Maheshwari 2013(Btbc)

Karanam Chandana 2012(BTBZ)

M srikanth (BTBC)114019572015

Mohammed Imran (Btbc)11401...

Saivarsha K(114019572014)

Uday114019572027(btbc)

varshithaq 114019572010 (BTBC)

srikanth (BT...

Saivarsha K(114...

Bhandhavi (114...

Mohammed Imran (B...

Arundhathi bt...

114019572007 D Mah...

varshithag 114019572...

Annapurna(BTB...

Karanam Chand...

Mute Stop Video Security Participants Chat Share Screen Record Reactions End

Type here to search

11:35 AM 07-09-2020

Debate conducted on line through zoom meeting. Students expressed different views on Bt cotton. Major conclusion from this debate is that Bt Cotton is not harmful to the animals and humans because it is toxic to the bollworms. Animals and Humans does not have receptor for Bt toxin in the intestine region. 12 students participated in this event.

Career guidance

Dt. 08.09.2020

The image shows a Zoom meeting interface with 13 participants. The main grid displays the following names and avatars:

- V. Uday 114019... (Dr. Y. Venkateswarlu)
- Divya Sri Btbz
- Karanam Chand...
- Arundhathi bt...
- k.Maheshwari 2...
- Bhandhavi (114...
- Md Imran (Btbc)1140...
- varshithag 114019572...
- Saivarsha K(11401957...
- 114019572007 D Mah...
- M srikanth (BT...
- Samreen btbz

The right sidebar shows a list of participants with their names and IDs:

- Dr. Y. Venkateswarlu (Host, me)
- 114019572007 D Mahesh || BTBC
- Bhandhavi (114019342002)(BTB...
- Divya Sri Btbz
- J Arundhathi btbz
- k.Maheshwari 2013(Btbc)
- Karanam Chandana 2012(BTBZ)
- M srikanth (BTBC)114019572015
- Md Imran (Btbc)114019572019
- Saivarsha K(114019572014)
- Samreen btbz
- V. Uday 114019572027(btbc)
- varshithag 114019572010 (BTBC)

The bottom of the screen shows the Windows taskbar with the time 10:54 AM on 08-09-2020.

Career guidance given to the students. Mostly concentrated on how to prepare for PG entrance exams of nation wide and few important books referred to the students. 12 students participated in this event.

Invited talk
Dt. 15-05-2020.

**MVS GOVERNMENT DEGREE COLLEGE (A),
MAHABUBNAGAR**

WELCOME

**DEPARTMENT OF BIOTECHNOLOGY
CORDIALLY INVITES YOU FOR THE GUEST LECTURE ON
"INTRODUCTION TO PROTEOMICS"
BY
Dr. Venkateswarlu Yadavalli
Assistant Professor of Biotechnology, Govt. Degree College, Khairatabad.**

**M. Mallesh Deepthy Sane Lt. Dr. M. Vijay Kumar
HOD Lecturer In Biotechnology Principal**

Zoom Meeting 40-Minutes

Recording... Remaining Meeting Time: 04:24 | Upgrade to Pro 00:38:18 Speaker View

Participants (25)

VENK... (Host, me) Mute More

Deepthy Sane

2006

-871

Addula pavani btbz 2001

Bindhu

Harini K

K Meghamala

K Meghamala

Nandini.mosati

Manikeshwari

Manasa Chilka...

Manasa Chilkamari

Manikeshwari

Nandini.mosati

Unmute

Mute Stop Video Security Participants Chat Share Screen Pause/Stop Recording Reactions End

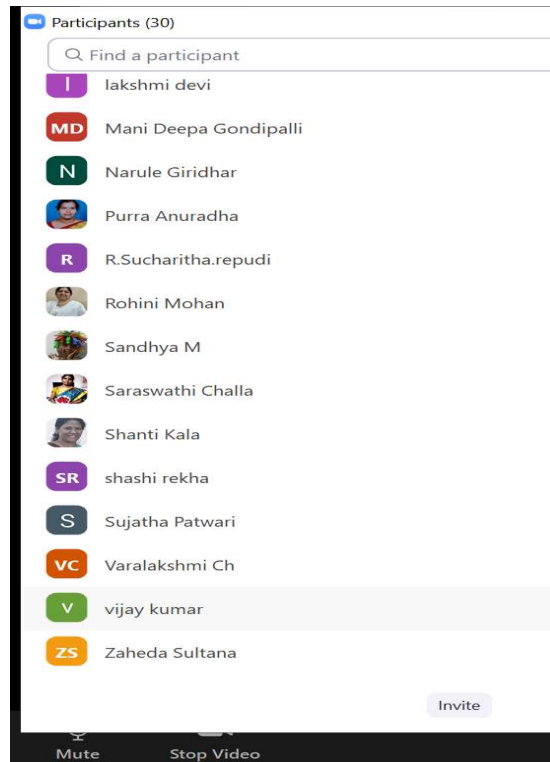
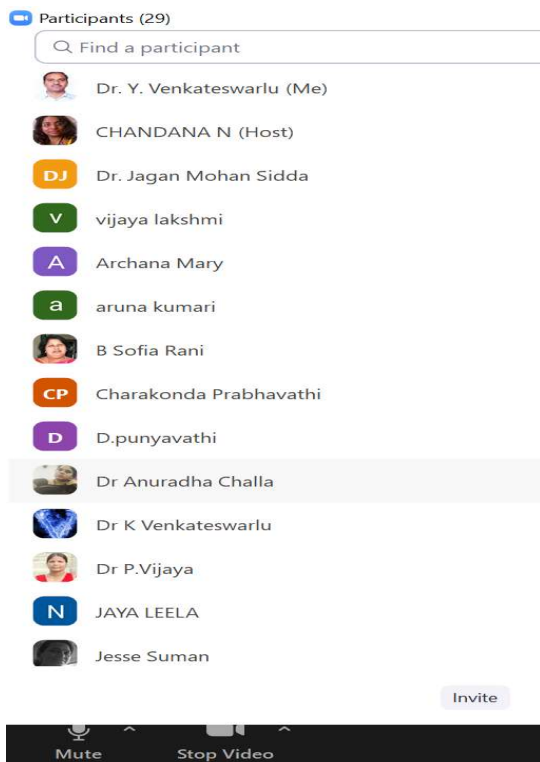
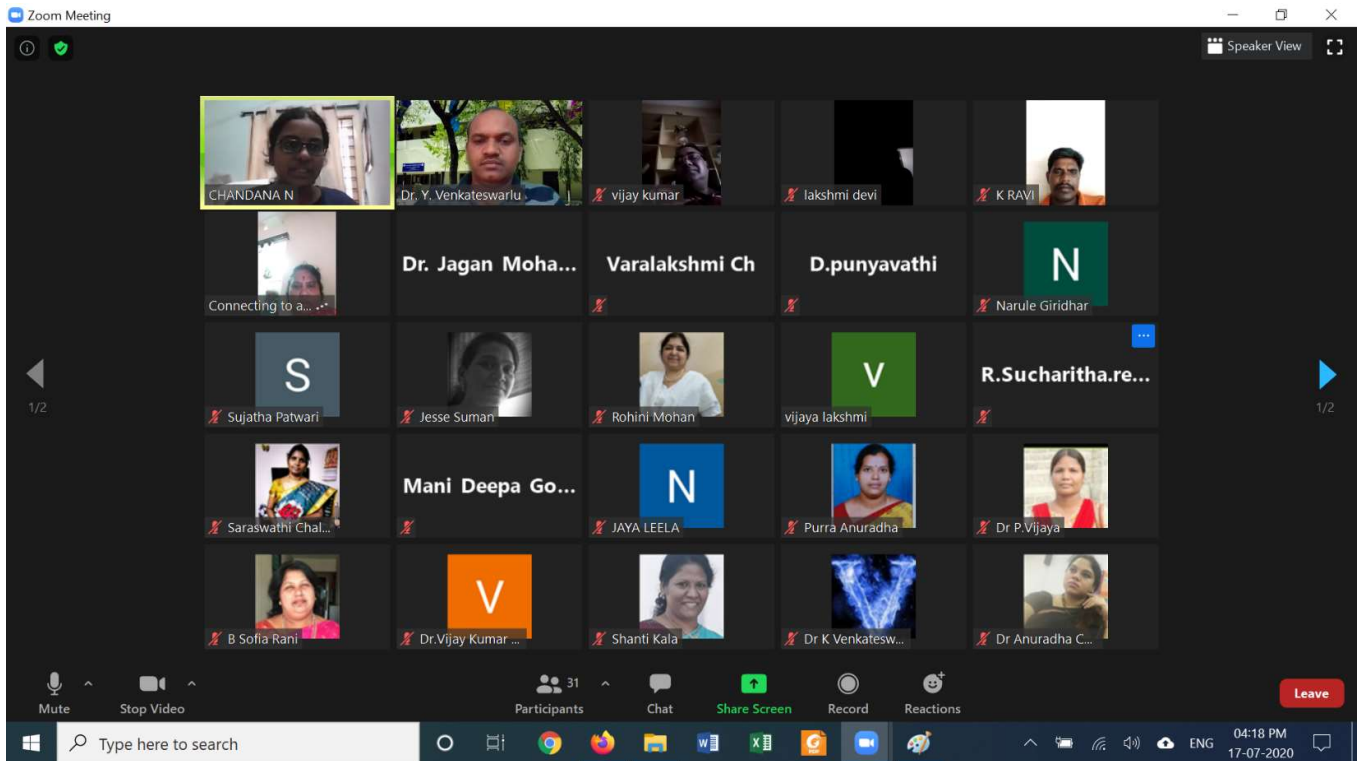
Type here to search

11:34 AM 15-05-2020

Delivered online invited talk on “Introduction to Proteomics” to the students of MVS Govt. Degree & PG College (Autonomous), Mahabubnagar. Explained about Structural Proteomics, Functional Proteomics and Expressional Proteomics. 31 teaching staff participated in this event.

Workshop on "How to create a video, edit video and upload in youtube"

Dt. 17.07.2020

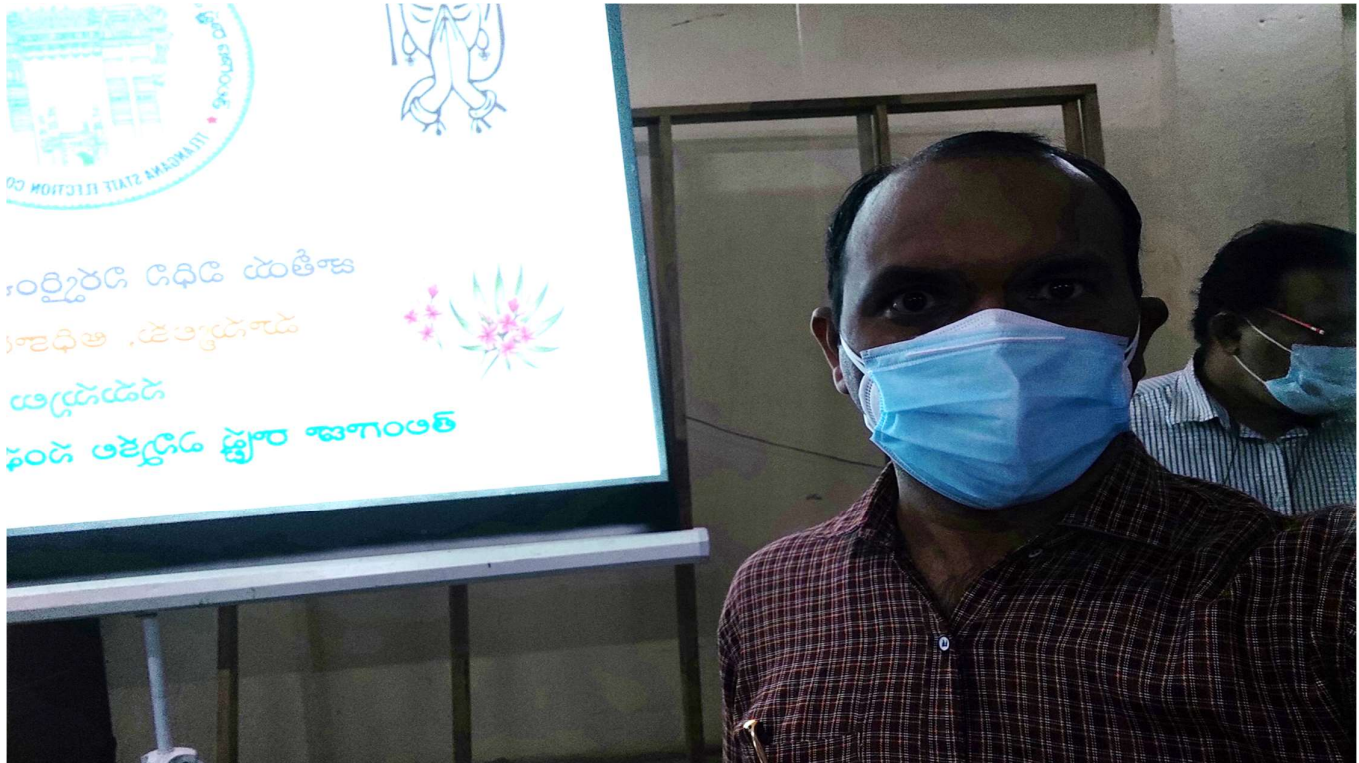


An workshop organized for the faculty of the college to familiarize in creating videos, editing videos and uploading into the youtube through Youtube studio. In view of the lockdown during the Covid 19 virus pandemic this activity planned to continue the teaching and learning. 24 students participated in this event.

Activity Report of Department of Biotechnology 2020-21

Master trainer for Polling staff involved in GHMC-2020 elections

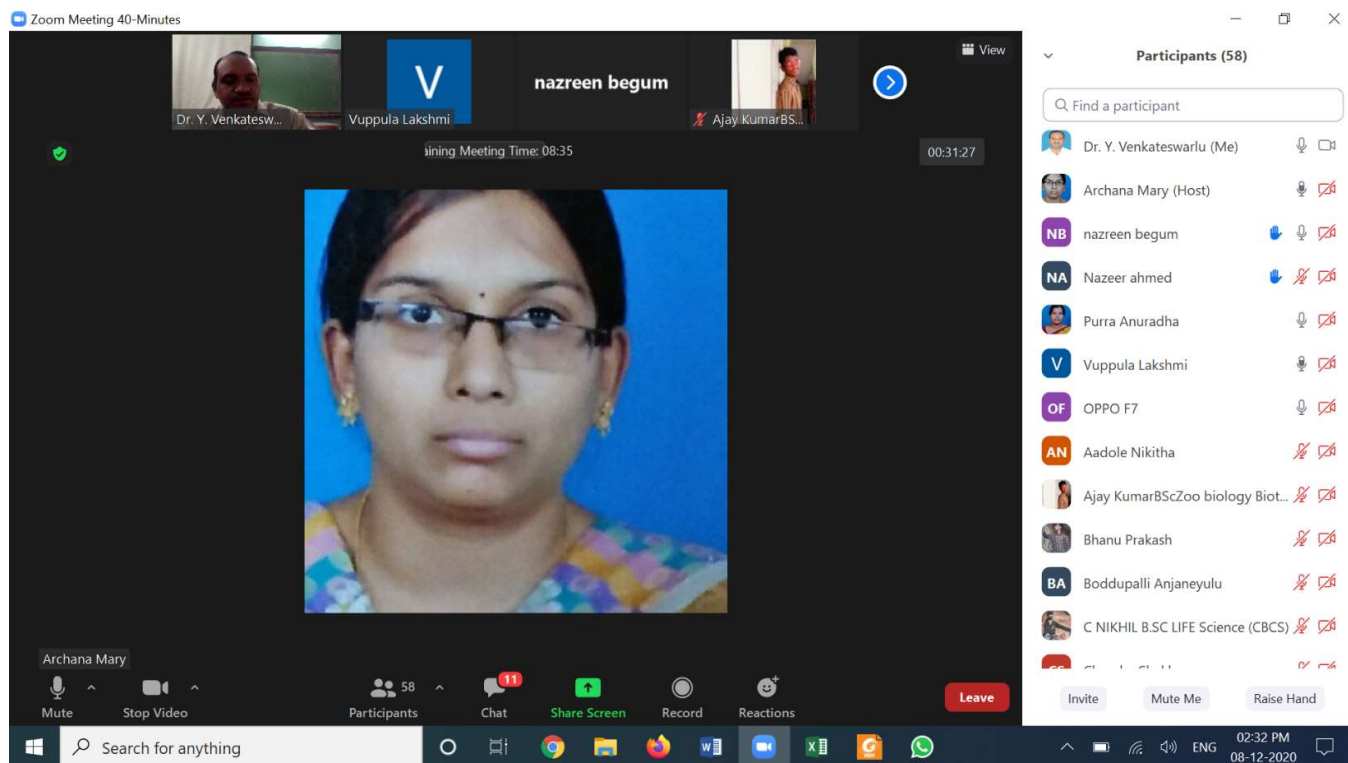
Dt. 30-11-2020



Trained Presiding officers, Assistant Presiding officers in smooth conduct of GHMC-2020 elections at Nizam college, Hyderabad for Goshamahal circle 14 of GHMC. More than 200 participants attended in this event.

Orientation Program for first year students

Dt. 08.12.2020



Orientation programme conducted for first year admitted students to introduce about the college, departments and NCC, NSS, Sports. Also given information about the academic aspects such as semester system, examinations and valuation, grading criteria. Dr. Y. Venkateswarlu, Dr. P. Anuradha, and Ms. P Archana Mary from the college involved in this activity. 58 participants attended in this event.

Certificate course on 'Basics of Forensic Science'

Dt. From 10.02.2021 to 23.03.2021

1

Dept. of Biotechnology Certificate course on 'Basics of Forensic Science'

Dt: 19/1/2021

- Dept. of Biotechnology resolved to introduce one certificate course in the Academic year 2020-21 for Biotechnology course.
- Basics of Forensic Science would be the best choice as students already has theoretical knowledge on molecular biology technique and also this course would help in planning their career in m.sc forensic science.
- The total duration of this course will be 30 hrs of teaching and no practicals.
- Syllabus will be framed based on topics related to forensic science.
- The number of students permitted to register for this course will be 20 to 30.
- valuation: valuation is based on both continuous attendance 75% and Final examination, no internal exam.
- 40 marks final examination will be held.
- Those who will score minimum 50%, i.e. 20 marks will be treated as successful candidates in this certificate course.
- A certificate will be issued to all the successful/ scored 50% marks in final exam.

[Signature]

The following students show interest in attending Certificate course 'Basics of Forensic Science'

It is scheduled from 10.2.2021 to 23.02.2021 for a maximum of 30 hrs of teaching.

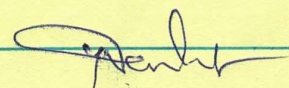
<u>SNO</u>	<u>Name of the student</u>	<u>Roll number</u>
1.	Aula mahender	114018489003
2.	Chintapalli kasthik	1140.18489006
3.	Pallavi mudhiraj	114018 489011
4.	Jambiga Pruthi charan	114018489013
5.	Chilkemari manasa	114018572004
6.	Fauzia Begum	114018572008
7.	Nayla Ganesh	114018572021
8.	Nimmala Lokesh	114018572022
9.	Pendota Srija	114018572025
10.	U. Hemeth	114018572026
11.	mede Hani llah	114018572018
12.	B. Bhandari	114019342002
13.	J. Jaipal	114019342010
14.	J. Arundhati	114019342011
15.	Muskan Moheen	114019342015
16.	Anupama Sahu	114019342018
17.	Sany Shwarsiya	114019342020
18.	K. Saiversha	114019572014
19.	medgala Srikanth	114019572015
20.	Mohammed Imran	114019572019

Syllabus for certificate course.

on 'Basis of Forensic Science'

The following syllabus drafted for 30hr of teaching

1. Historical aspects of forensic Science
2. Definitions and concepts of forensic Science
3. Basic Principles of Forensic Science
4. Crime - Introduction nature
5. Causes and consequences of crime
6. Procedures involved in the detection of crime
7. Filing of criminal charges
8. Indian Police system - The police act.
9. Forensic Science laboratory
10. Government examiners of questioned documents
11. Chemical examiners laboratory
12. Duties of forensic Scientist
13. Biomolecules
14. DNA
15. Proteins
16. Molecular biology techniques
17. Polymerase chain reaction
18. Blotting techniques
19. Restriction endonucleases
20. Bases
21. SDS-PAGE
22. Human blood groups
23. Microscopy
24. Thin layer chromatography technique
25. Single nucleotide Polymorphisms
26. Simple sequence repeats
27. DNA fingerprinting
28. Fingerprint Bureaus
29. Drug enforcement administrator
30. Revision of important topics.





Government Degree College,
Khairatabad,
Department of Biotechnology,
Hyderabad, T.S.-500 004.



Certificate



This is to certify that Mr./Miss. _____ of this college has successfully completed certificate course on “Basics of Forensic Science” conducted from 10.02.2021 to 23.03.2021 in the academic year 2020-21.

Head of the Department

Principal

Certificate course started on ‘Basics of Forensic Science’. Total 20 students registered for this course. The course duration is 30 working days. In this several techniques used for identification of culprits thought. All the students passed this certification course.

Haritha Haram-2021



Participated in the Haritha Haram Program organized in the college.

National Webinar on "Career opportunities after B.Sc. Biotechnology"

Dt. 17.03.2021

The poster is for a national webinar. At the top, it identifies the Department of Biotechnology at Government Degree College, Khairatabad, Hyderabad, Telangana. It features a Zoom ID (842 4838 4364) and PC (517644) in a yellow starburst, and a note that an E-Certificate will be provided in another yellow starburst. The main title is 'National Webinar on Career opportunities after B.Sc. Biotechnology'. The resource person is Dr. Sambashiva. D, founder of Abhignya Biotechnology Consultants, Hyderabad. The convenor is Dr. Y. Venkateswarlu, Head of the Dept. of Biotechnology. The chairperson is Dr. DSR. Rajender Singh, Principal & JD (FAC). The webinar is on Wednesday, March 17, 2021, from 6:00-7:00 PM. A registration link is provided: <https://forms.gle/jaKLDqwxctC7N3xu9>. Co-organizers are represented by various institutional logos, and Abhignya Biotechnology Consultants is the associate partner.

Department of Biotechnology
Government Degree College,
Khairatabad, Hyderabad, Telangana

Zoom ID
842 4838 4364
PC: 517644

E-Certificate
will be
provided

National Webinar
on

Career opportunities
after B.Sc. Biotechnology

Resource Person
Dr. Sambashiva. D
Founder
Abhignya Biotechnology Consultants
Hyderabad

Convenor
Dr. Y. Venkateswarlu
Head
Dept. of Biotechnology

Chairperson
Dr. DSR. Rajender Singh
Principal & JD (FAC)

Join us on,
Wednesday, March 17, 2021
Time: 6:00-7:00 PM

Registration Link: <https://forms.gle/jaKLDqwxctC7N3xu9>

Co-Organizers

Associate Partner
Abhignya Biotechnology Consultants



The screenshot displays a Zoom meeting in progress. The main content is a presentation slide from 'ABHIGNYA BIOTECHNOLOGY CONSULTANTS' titled 'Are you a Biotechnologist?'. The slide outlines 'FOUR STEPS TO BECOMING A BIOTECHNOLOGIST':

- STEP 1: COMPLETE A BACHELOR'S DEGREE
- STEP 2: COMPLETE AN INTERNSHIP
- STEP 3: PURSUE POST GRADUATION
- STEP 4: FIND A BIOTECHNOLOGIST POSITION

The meeting interface includes a top bar with 'Zoom Meeting', 'You are viewing Dr. Sambashiva's screen', and 'View Options'. The top navigation bar shows 'Divya', 'Shekar B', and 'Tejaswi BtBZ'. The bottom toolbar contains 'Unmute', 'Start Video', 'Security', 'Participants (460)', 'Chat', 'Share Screen', 'Reactions', 'More', and 'Leave'. On the right, a 'Participants (460)' list is visible, including names like 'Dr. Y. Venkate...', 'Divya (Host)', 'Dr. Sambashi...', '16GN1R 0028', 'Akshaya', 'Mahesh Vankudothu', 'Karli Geethanjali, ... (Co-host)', 'Sugantha Mala (Co-host)', '----- Shashi', '001.Bijja pavani BTZC', '005.Sony Btzc', and '1769273 SADHIDDHI NUTHANI'. The system tray at the bottom shows the search bar, taskbar, and system clock (06:12 PM, 17-03-2021).

Dr. Sambashiva, Assistant Professor, Nizam College and Founder of Abhignya Biotechnology Consultants. Dr. Sambasiva enlightened the opportunities available after B.Sc Biotechnology. Hyderabad is one of the vaccine hub to the entire world. Highlighted the importance of internship during B.Sc to enter into the Biotech industries. Also highlighted about the opportunities in higher studies and top most institutes of Biotechnology. 460 participants attended in this event.

Group Discussions

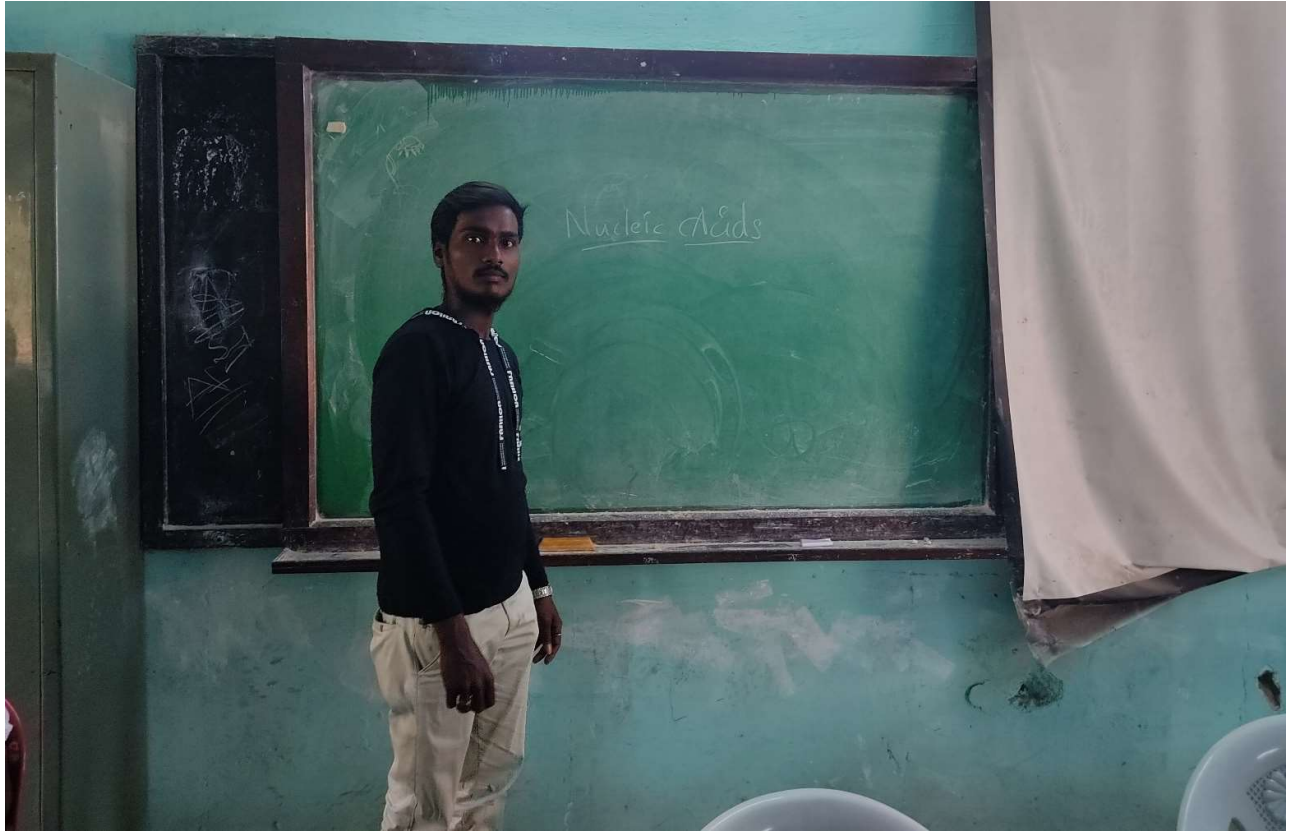
Dt. 20-03-2021



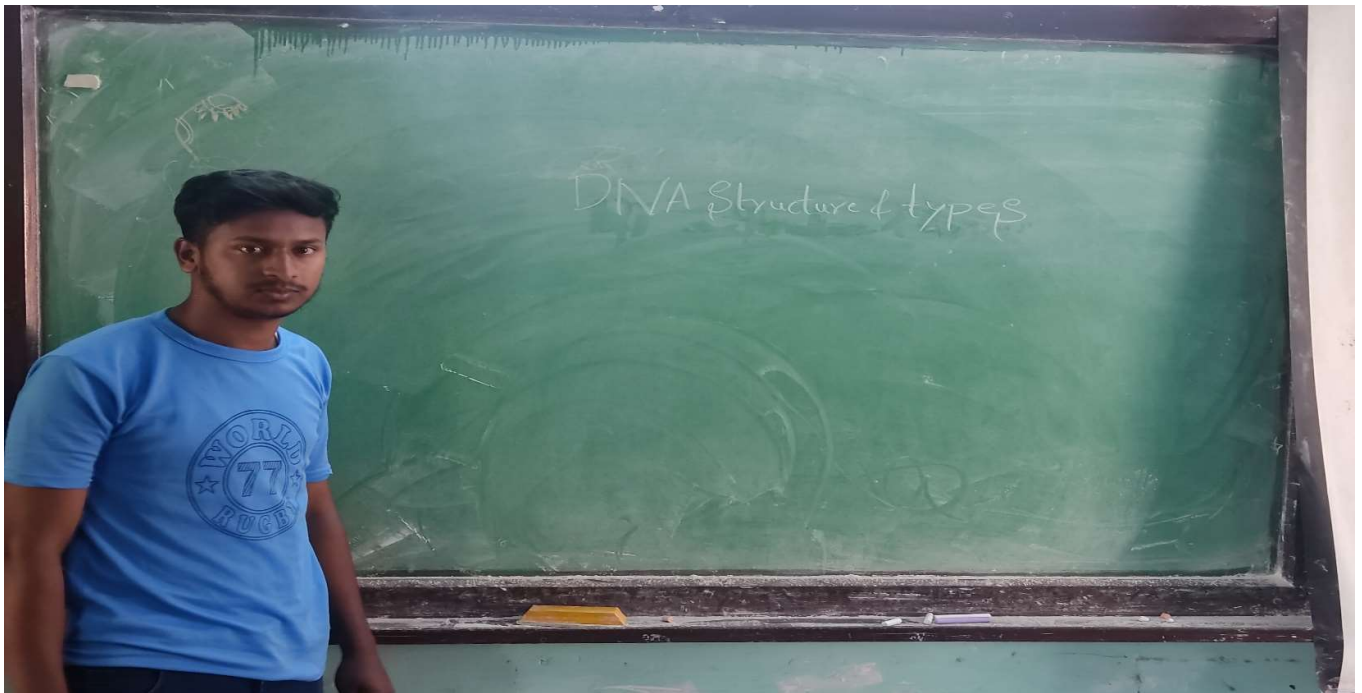
Apoptosis topic assigned to the students to discuss in a group about Pros and cons on Apoptosis. Group A, B, C and D formed such that each group has 6 members. 30 minutes time was given to discuss among themselves and 5 min time was allotted for each group to speak Pros and Cons of Apoptosis. Group B performed well and appreciated for their efforts.

Student seminars

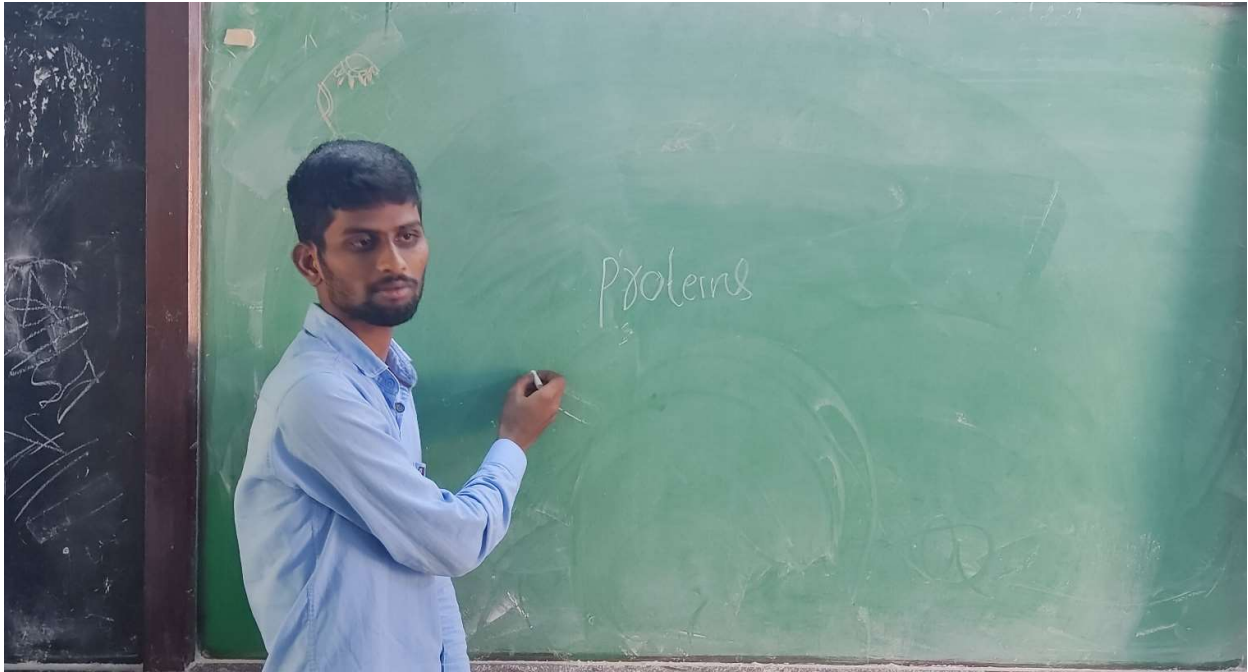
Dt. 22-03-2021



D. Mahesh 1140195720070 presented seminar on the topic Nucleic acids



Mohammed Imran 114019572019 presented seminar on the topic DNA structure and types of DNA



G. Srikanth 114019342008 presented seminar on the topic Proteins



Goli Harish 114019572011 presented seminar on the topic Lipids



Geddam Varshita 114019572010 presented seminar on the topic Bacterial growth



C. Bavyesh 1140195720060 presented seminar on the topic Microscope



S. Annapurna 114019342018 presented seminar on the topic Carbohydrates



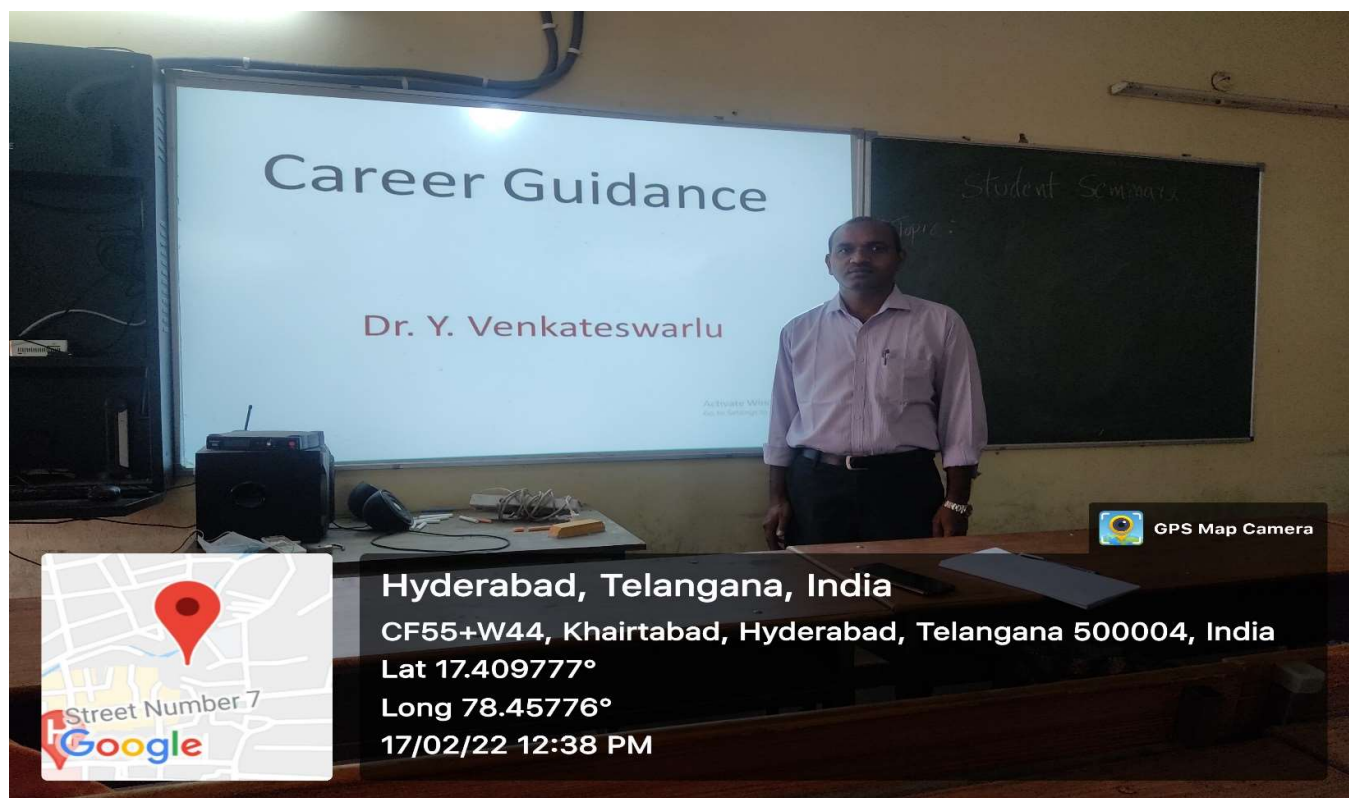
Patloth Nikhitha 114019342016 presented seminar on the topic Proteins

Activity Report of Department of Biotechnology 2021-22

Group discussion dt. 30-12-2021

Sex linked diseases topic was assigned to the students to discuss in a group about how Sex linked disease genes pass from mother to progeny. Group A, B, C and D formed such that each group has 6 members. 30 minutes time was given to discuss among themselves and 5 min time was allotted for each group to speak about Sex linked diseases. Group C performed well in this Group discussion.

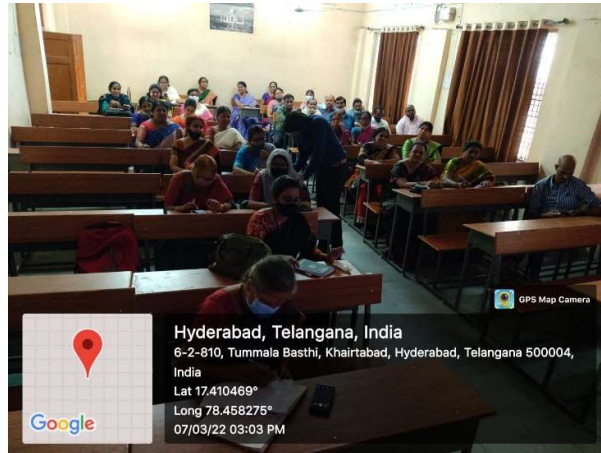
Career Guidance Dt. 17-02-2022



Guided the students about different options available after B.Sc in Higher studies as well as job oriented options. Encouraged the students to pursue higher studies.

Octopod demo to the faculty

Live Demo on usage of GDC Khairatabad Octopod app to the teaching staff held on 07.03.2022. This app has several features such as students attendance marking, teaching diary, time table, Exam result, assignments, posting etc.

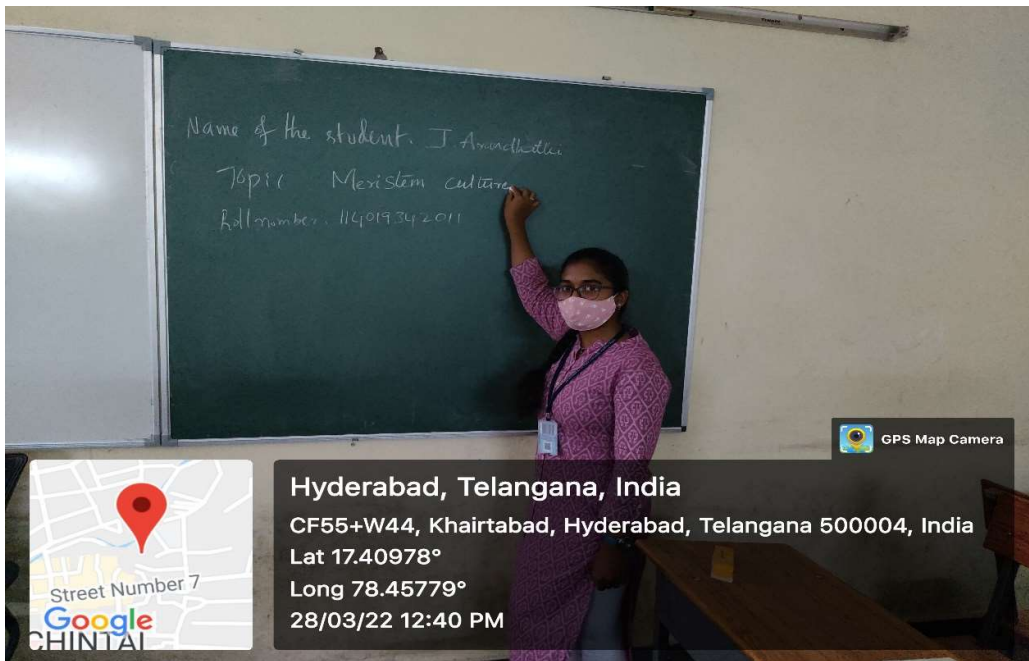


Student seminars Dt. 17-02-2022



Students delivered seminar topics on Mitosis (Bhanu Prasad) and Cell Division (K. Vishnu)

Student seminars Dt. 28-03-2022



J. Arunhathi explaining about meristem culture



K. Sai Varsha explaining about Synthetic seeds



B. Shiva Charan explaining about Gene transfer techniques

Field trip



Visited GHMC dustbin spots on 28.03.2022 and explained to the students about segregation of solid wastes collected from house holds. Further, treatment of these segregated solid wastes explained

MOU with BJR Govt. Degree College, Narayanaguda



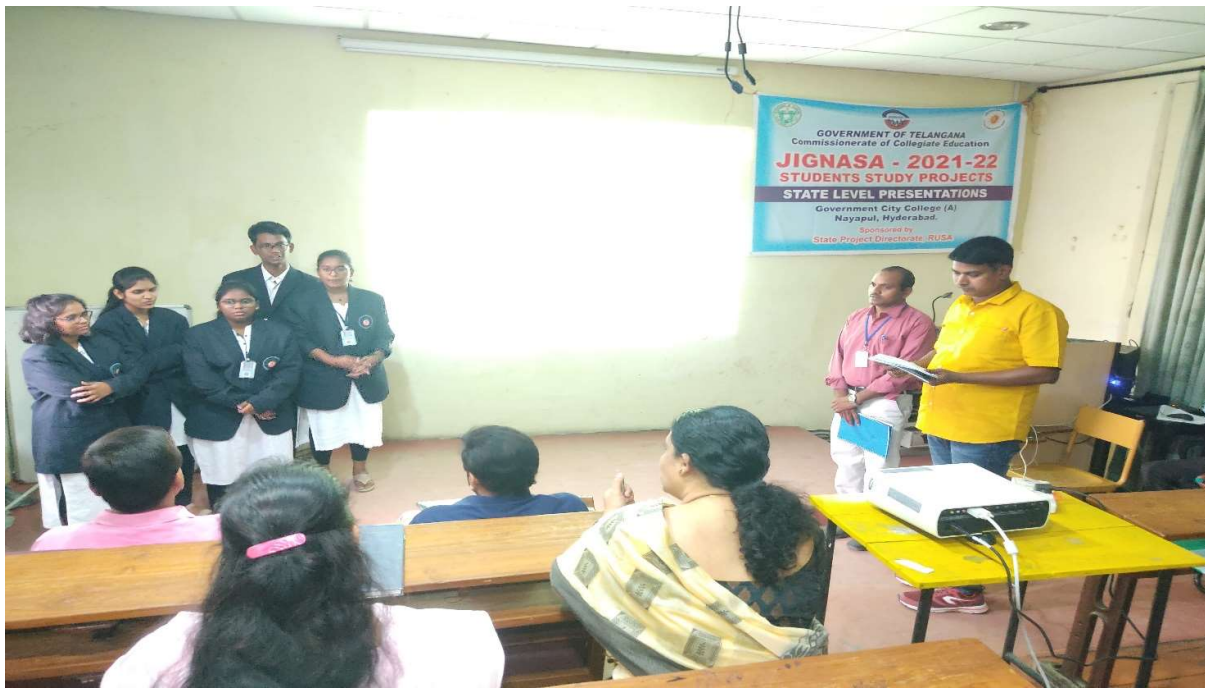
MOU signed between BJR Government Degree College, Vittalwadi, Narayanaguda and Govt. Degree College, Khairatabad to promote Research & Academic matters in the Dept. of Biotechnology.

Field trip to Govt. City College (A), Nayapul



Visited Dept of Biotechnology, at Govt. City College (A), Nayapul, Hyderabad on 30.04.2022. Smt. P. Pushpalatha explained about the operation of PCR, Geldocumentation system, Refrigerated centrifuge, UV-Vis Spectrophotometer and other sophisticated equipments.

State level Jignasa Biotechnology Project Presentation



Biotechnology Jignasa project selected for state level presentation. J. Arundathi, B. Shiva Charan, K. Saivarsha, B. Bhandavi and G. Varshita presented on the topic “Insilico analysis of efficacy of Remdesiver, Chloroquine, Hydroxy chloroquine and 2DG on Covid 19” on 30.04.2022

Debate on Stem cells 19-05-2022



Debate conducted on stem cell and their applications. Divided students into A, B, C and D groups. Group A performed well. Group A is the winner

Activity Report of Department of Biotechnology 2022-23

Orientation Programme for first year B.Sc Life Sciences students Date: 10.10.2022

Brief Report of the Activity

Orientation programme conducted for first year B.Sc. Life Sciences admitted students to introduce about the college, departments, NCC, NSS, Sports, library, TSKC, etc. Also given information about the academic aspects such as semester system, examinations and valuation, grading criteria. Dr. B. Rajendra Kumar, Principal of the college addressed about the discipline, code of conduct and facilities available in the college.





GPS Map Camera



Hyderabad, Telangana, India

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Telangana 500004, India

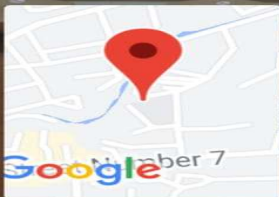
Lat 17.410463°

Long 78.458233°

10/10/22 11:07 AM GMT +05:30



GPS Map Camera



Hyderabad, Telangana, India

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Telangana 500004, India

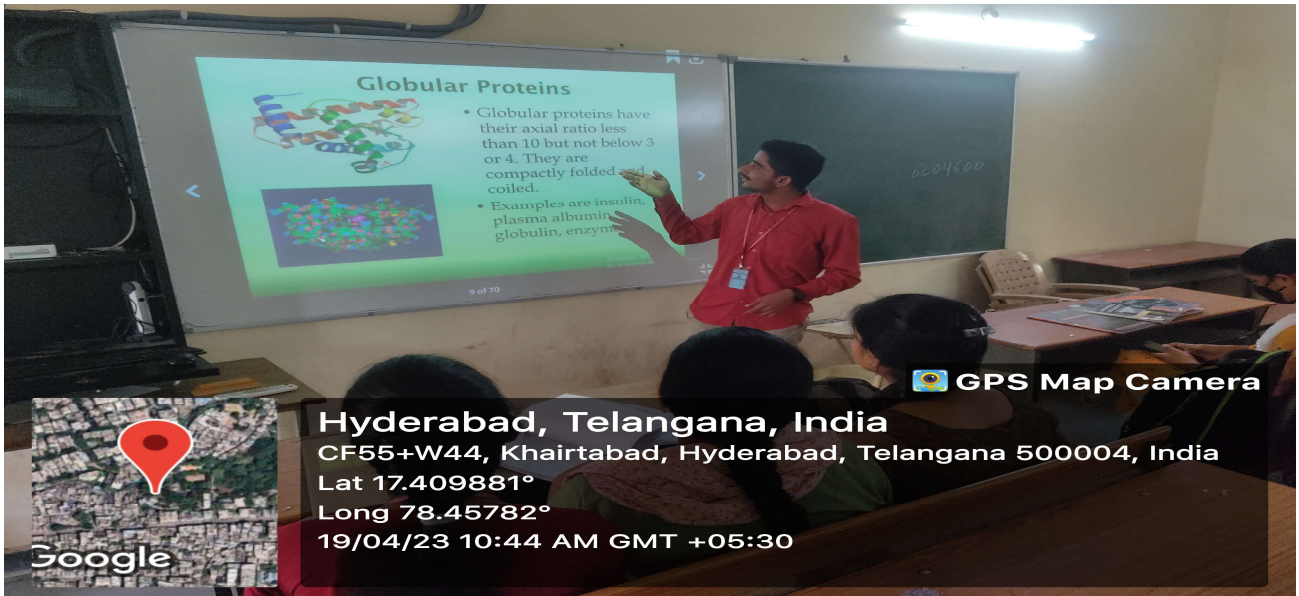
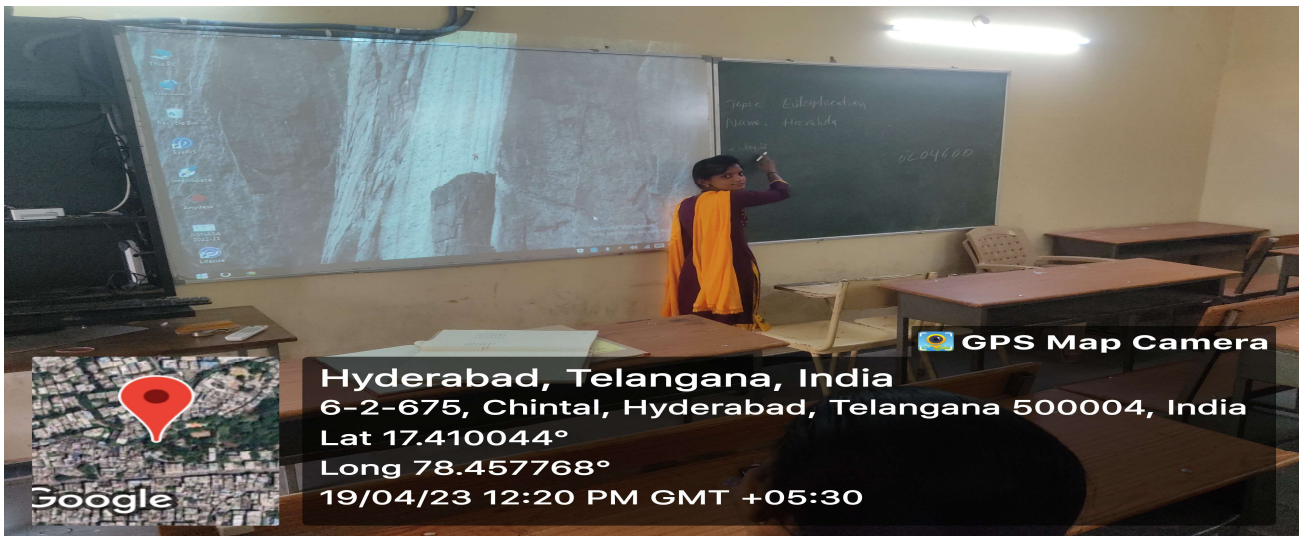
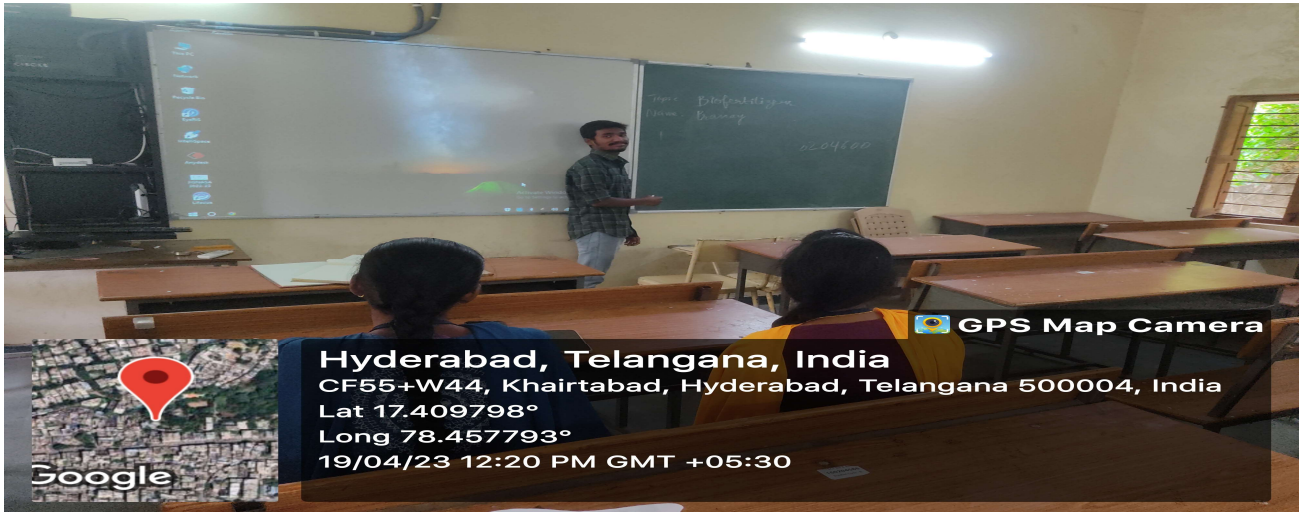
Lat 17.410462°

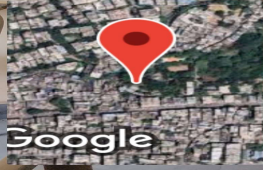
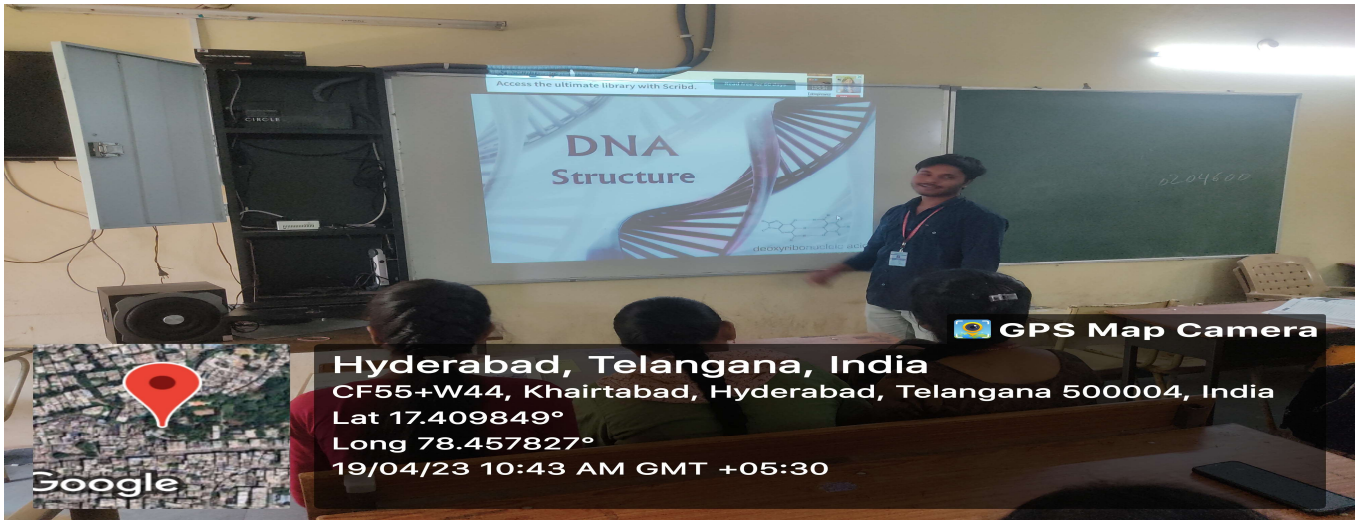
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Student seminars

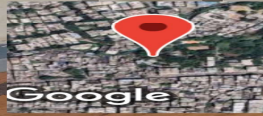
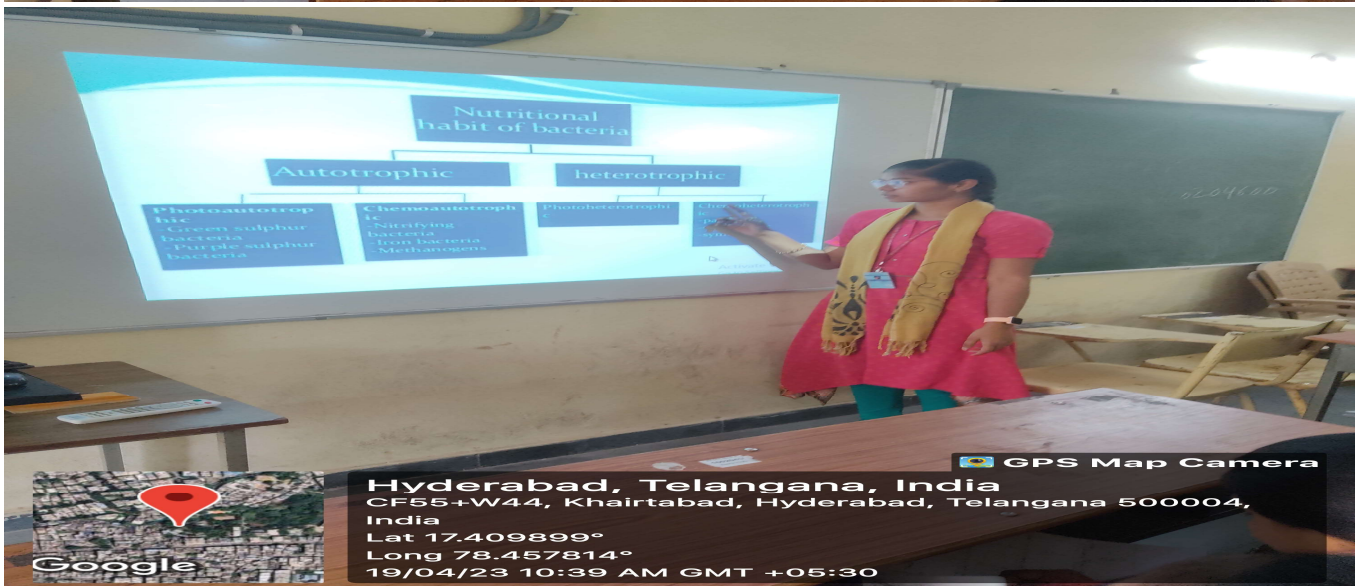
Dt. 19.04.2023





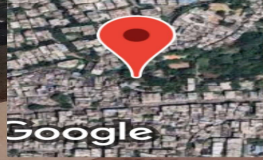
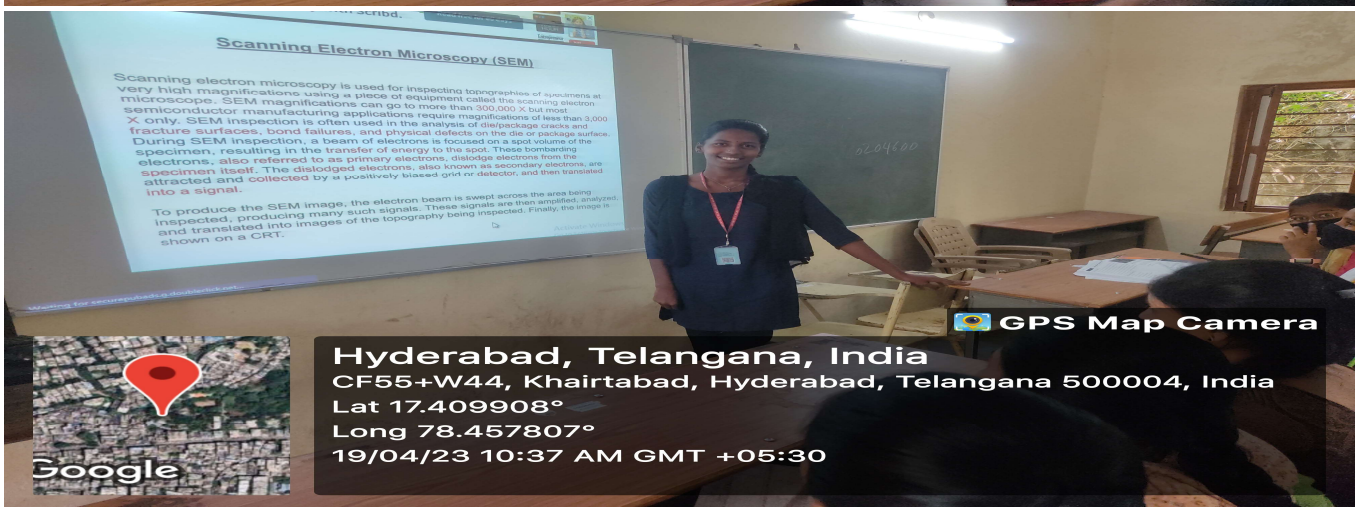
Hyderabad, Telangana, India
CF55+W44, Khairtabad, Hyderabad, Telangana 500004, India
Lat 17.409849°
Long 78.457827°
19/04/23 10:43 AM GMT +05:30

GPS Map Camera



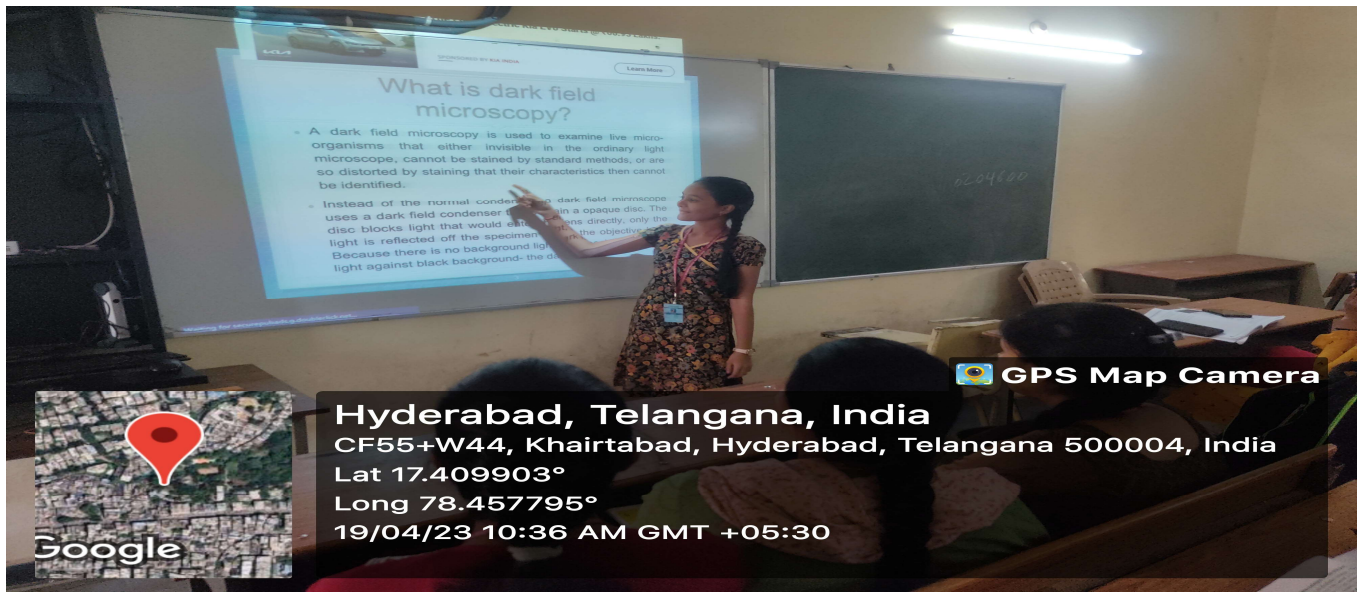
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19/04/23 10:39 AM GMT +05:30

GPS Map Camera



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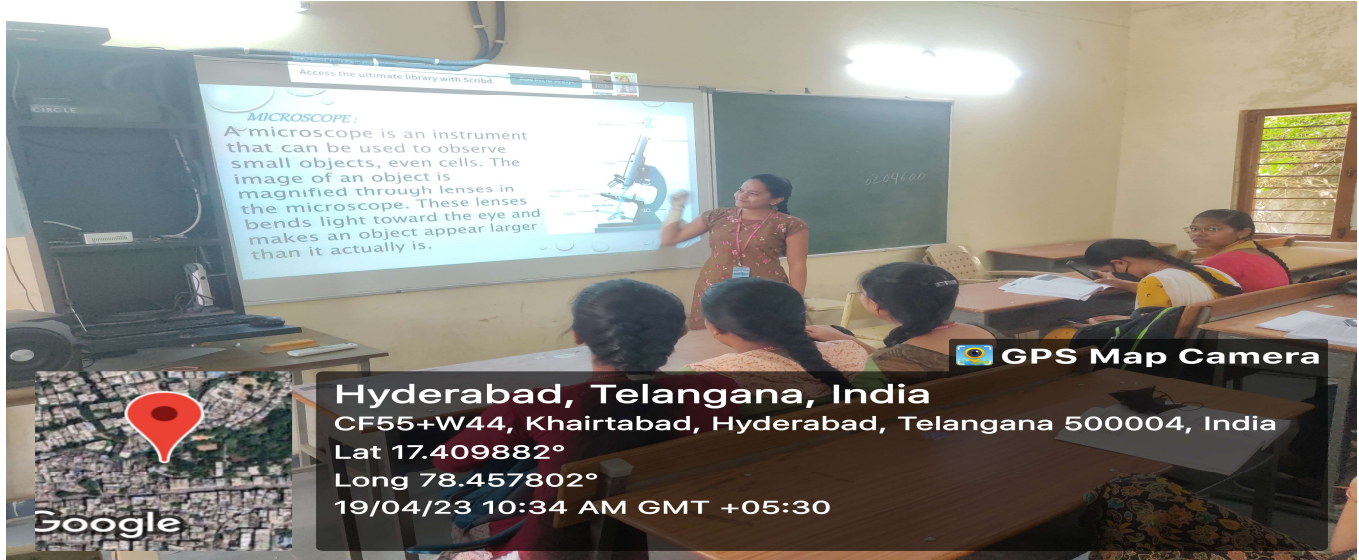
GPS Map Camera




 GPS Map Camera



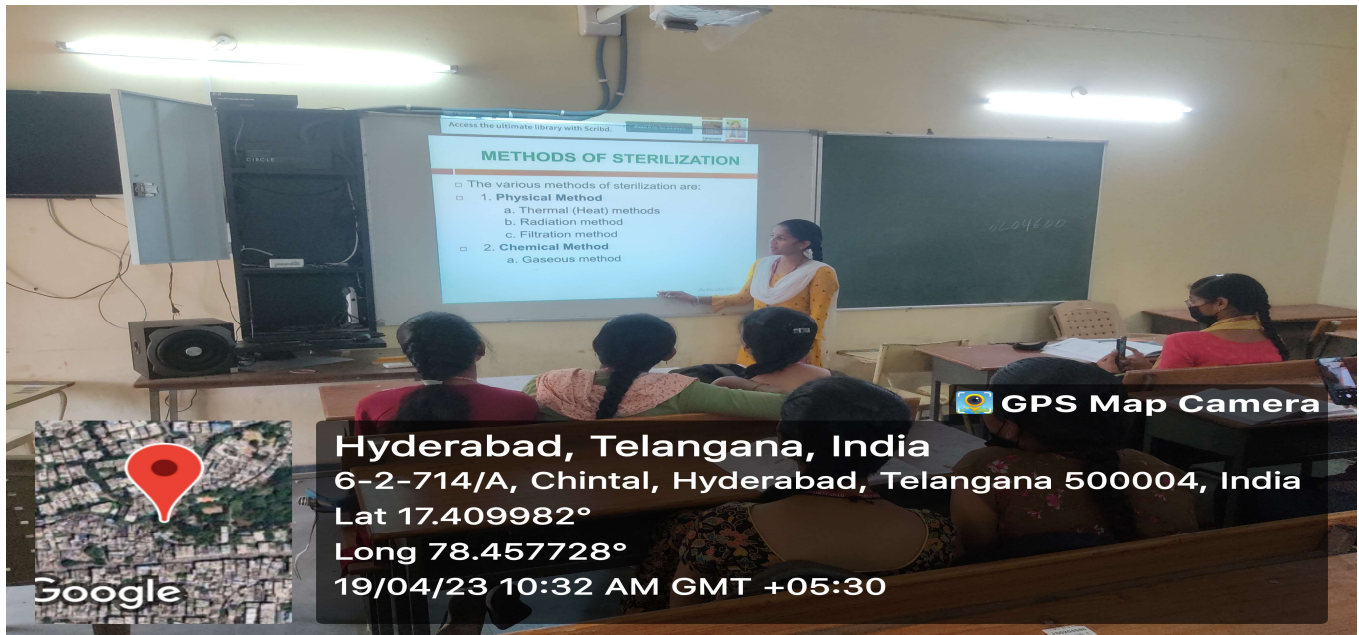
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CF55+W44, Khairtabad, Hyderabad, Telangana 500004, India
Lat 17.409903°
Long 78.457795°
19/04/23 10:36 AM GMT +05:30




 GPS Map Camera



Hyderabad, Telangana, India
CF55+W44, Khairtabad, Hyderabad, Telangana 500004, India
Lat 17.409882°
Long 78.457802°
19/04/23 10:34 AM GMT +05:30



 GPS Map Camera



Hyderabad, Telangana, India
6-2-714/A, Chintal, Hyderabad, Telangana 500004, India
Lat 17.409982°
Long 78.457728°
19/04/23 10:32 AM GMT +05:30

Students presented seminar on various topics assigned to them.

Educational tour to Department of Biotechnology

Osmania University, Hyderabad.

Date of the program: 25.04.2023

Program : Educational tour

Place: Department of Biotechnology, Osmania Univeristy

Number of students attended : 52

Objectives of the programme:

- To Create awareness about the recent trends in the research
- To encourage the students towards the research
- To enlighten about the techniques and equipment used in the research

Report:

Department of Biotechnology and other science departments announced their open day to visit the respective laboratories and research activities.

The Department of Biotechnology, Botany, and Zoology of our college, planned to visit the Osmania University on open day i.e on 25.04.2023. More than 50 students attended the educational tour. Ph. D scholars explained about the recent trends in the science like CRISPER Cas 9 technology and unforgotten scientists of Biotechnology in detail. Students visited the molecular pathogenesis lab, probiotics lab, cell culture lab, Marine Biotechnology lab, anaerobic cultivation lab in the Biotechnology department. Research scholars explained about their research work and equipments detail with procedures and applications. Students of Biotechnology Department learnt about the lyophilisation technique, HPLC methodology, FPLC procedure, Electroporation, cold centrifugation, Probiotic bacteria preparation, cellulose synthesis from waste, Agarose gel electrophoresis, SDS-PAGE, chromatography techniques via practical demonstration by the research scholars. Students also visited the Department of Biotechnology and Centre for Plant Molecular Biology.



Students and faculty with Dr. Hameeda and Dr. Sandeepa



Explanation by the research scholars