

REPORT OF
GSBTM SPONSORED TWELVE DAYS UG-CBC
CRASH WORKSHOP

**For preparation of National Level Competitive Exams in Life Sciences for
admission to PG Courses**

1st – 12th February, 2023 (12 Days)

Jointly organized by



Government Science College, Vankal

Ta: Mangrol, Dist: Surat

and

Gujarat State Biotechnology Mission [GSBTM], Gandhinagar

Department of Science & Technology, Government of Gujarat

ABOUT COLLEGE

Located in the tribal region of South Gujarat, Government Science College Vankal is one of the premier public funded colleges in the state of Gujarat. The College was established by the Department of Education, Government of Gujarat in the year 2012 to provide and promote quality education to the youth coming from underprivileged tribal communities.

The college is affiliated to Veer Narmad South Gujarat University, Surat. Since its inception, the college has been playing a pivotal role in bringing about a marked change in the erstwhile underdeveloped tribal region by enrolling around a 1000 students every academic year. Besides regular academics

a number of training and skill development programs are regularly organized to enhance the competency of students.

The college has state of the art infrastructure and basic research facilities to promote all-round development of students. At present, the college boasts of its academic excellence with highly capable and dedicated faculties well versed and established in their respective disciplines and selected through GPSC.



OVERVIEW OF WORKSHOP

Higher education (post-graduation) from an institution of national repute is a dream for all undergraduate students. However, due to limited number of seats in postgraduate courses, most of the premium institutes of research and education in the field of biology, have stringent selection norms designed to access and evaluate the subject expertise, eloquence dexterity and the grit of the students. Due to lack of enough subject knowledge and preparation for competitive exams, very few students from our state get admitted to premier institutes for post-graduation degrees. Realizing the need for imparting proper awareness regarding importance of competitive exams in life sciences and to prepare students for the same, GSBTM had started funding twelve day long intensive “CRASH WORKSHOP” at selected UG-CBC centers. The main aim of N-BT-CBC is to train students to be able to clear National Level Competitive examinations like IIT-JAM, GAT-B, CUCET, JGEEBILS etc. and start “Transcripting their Brighter Bio Future” career in biotechnology and allied areas.

N-BT-CBCs are operated by co-ordinators and deputy co-ordinators, who are faculties in these institutions and they help in coaxing the undergraduate students for preparing and appearing in the National Competitive Exams.

The Crash workshop provides 120 hours of competitive exam preparation training to final year B.Sc students for cracking national level competitive exams in the field of biotechnology and allied sciences by means of expert lectures, rigours practice tests, study material and interaction with subject experts. The workshop is free for the student participants and is wholly funded by GSBTM. The students are provided accommodation (sharing basis) and refreshments during the workshop.

The present workshop was the maiden workshop been organized by Under Graduate Capacity Building Cell (UG-CBC) of Government Science College, Vankal after getting selected as UG-CBC member in December 2022.

OBJECTIVE OF THE WORKSHOP

- To spread awareness among students about different national level competitive exams (life sciences) in which undergraduate students can appear to secure seats in post-graduation programs in premier institutes
- Introduce the student with essential and critical elements of competitive entrance exams.
- Do develop subject knowledge and analytical abilities in students
- Provide exam oriented concepts in their subject area.

COMMITTEES FOR THE CRASH WORKSHOP:

To smooth conduction of the crash workshop the college has frame worked a committee along with all administrative, teaching & non-teaching staff members.

Organizing Committee member:

Patron	Dr. Parthiv K. Chaudhari Principal, Government Science College, Vankal
Coordinator	Dr. Anil Kumar Singh Assistant Professor (Microbiology), Government Science College, Vankal
Deputy Coordinator	Dr. Rajesh C. Senma Head, Department of Zoology, Government Science College, Vankal

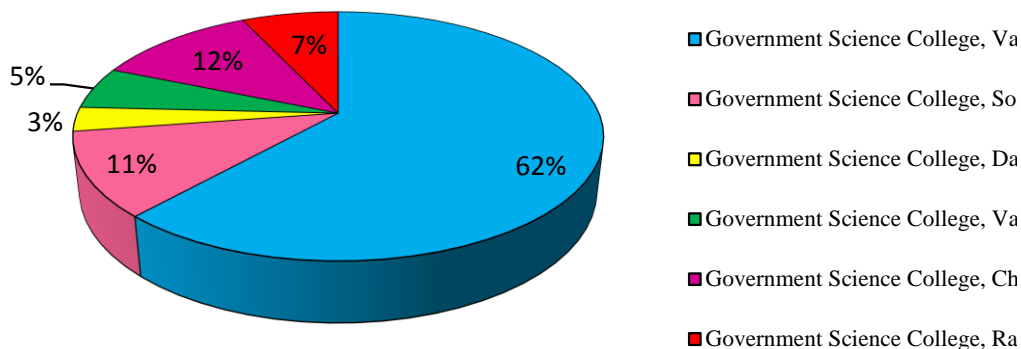
Steering Committee member:

Dr. Raxa Patel	Mr. Mayuresh Mishra
Dr. Meghna Adhvaryu	Dr. Hemal Vankar
Dr. Nishant Junnerkar	Mr. Vanraj Kagda
Ms. Viraj Chaudhari	Dr. Mayur Morja
Dr. Pushpa Shah	Mr. Hardik Tadvi
Mr. Kumar Gamit	Dr. Kunjal Patel

STATISTICAL HIGHLIGHTS OF THE WORKSHOP:

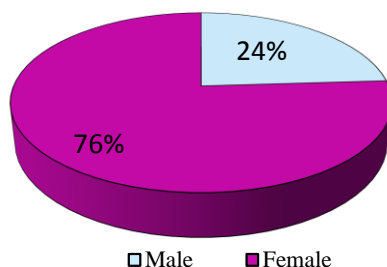
- **Total number of registered participants: 129**
- **Total number of colleges to which participants belong: 06**
 - Government Science College, Vankal: 78
 - Government Science College, Chikhli: 15
 - Government Science College, Songadh: 14
 - Government Science College, Valod: 07
 - Government Science College, Daman: 04
 - Government Science College, Pardi: 01
 - Birsa Munda Tribal University, Rajpipla: 09

College wise distribution of student participants



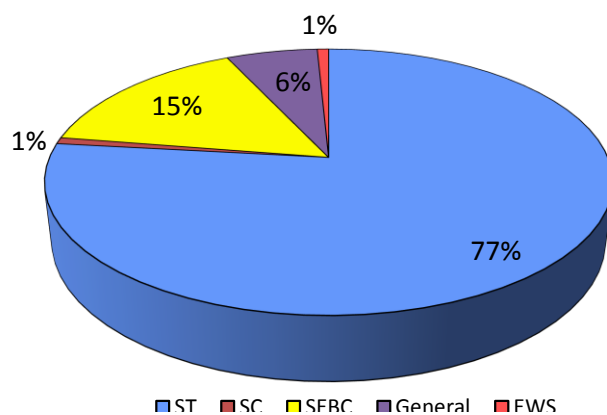
- **Gender wise distribution of participants:**
Male participants: 31; Female participants: 98

Gender wise distribution of student participants



- **Category wise distribution of participants:**
Gen: 08; SEBC: 20; EWS: 01; SC: 01 and ST: 99

Category wise distribution of student participants



- **Total duration of the lectures during the workshop: 115**
- **Total number of lectures (on different topics) delivered: 63**
- **Total number of resource persons: 39**
- **Total number of external (invited) resource persons: 25**
- **Total number of internal resource persons: 14**
- **Total duration of lectures delivered by invited resource persons: 66**
- **Total duration of lectures delivered by internal resource persons: 50**

COURSE CONTENT OF THE WORKSHOP

Course content for the crash workshop was decided based on the syllabus of GAT-B exam and the following topics were covered in the 12 day workshop.

CONTENT OF WORKSHOP

Cell and Molecular Biology

- 1 Cell cycle and its regulation
- 2 Cancer biology
- 3 Apoptosis and cell death
- 4 Cellular Communication and Signaling
- 5 Inheritance biology
- 6 Central dogma (DNA replication, Transcription and Translation)
- 7 Post translational modifications
- 8 Cytoskeleton
- 9 Protein sorting and trafficking
- 10 Molecular Techniques (PCR, Sequencing techniques: DNA and Protein, Molecular markers)
- 11 Recombinant DNA technology

Microbiology

- 12 Bacterial genetics
- 13 Mutation and mutagenic agents
- 14 DNA damage and repair
- 15 Fermentation technology

Analytical and biophysical techniques

- 16 Electrophoresis: AGE and PAGE

22. Endocrinology

23. Reproductive biology and sex determination

24. Embryology and developmental biology

25. Immunology basics and advanced techniques

Physical Sciences

26. Electricity and Magnetism

27. Current and electricity

28. Work energy and power

29. Nuclear physics

30. Semiconductors

31. Thermodynamics

Chemistry

32. Chemistry for competitive exams

33. Periodic properties

34. Named reaction in chemistry

35. Spectroscopy and Grignard reactions

17 Chromatography and protein purification 18 Centrifugation 19 Spectroscopy and spectrometry 20 FTIR, NMR, X-ray diffraction etc.	Mathematics 36. Mathematics for competitive exams
<p style="text-align: center;">Plant sciences and plant biotechnology</p> 21 Photosynthesis 22 Photophosphorylation 23 Photorespiration 24 Transport of nutrients in plants 25 Transpiration and guttation 26 Reproduction in plants 27 Plant Biotechnology and transgenics 28 Plant hormones 29 Sensory Photobiology <p style="text-align: center;">Animal sciences</p> 30 Animal classification 31 Animal physiology (Circulatory, respiratory, excretory, nervous and endocrine system)	<p style="text-align: center;">Other lectures</p> Intellectual Bharat: The Science in Sanskrit Positive attitude Communication skills Importance of competitive exams Upcoming competitive exams for graduates in life sciences

WORKSHOP SCHEDULE

On all the days the workshop timing was from 8.00 a.m to 7.15 p.m (except for the last day). The time table for all the days and the lecture schedules are provided in the table 1.

INVITED RESOURCE PERSONS:

Experienced resource persons were invited from different department of the host college as well as from different institution of Gujarat. Table 2 provides the list of resource persons invited for the crash workshop.

Table 1: Time table of the workshop

Time/Date	01-02-2023	02-02-2023	03-02-2023	04-02-2023	05-02-2023	06-02-2023	07-02-2023	08-02-2023	09-02-2023	10-02-2023	11-02-2023	12-02-2023
7.30 am to 8.00 am	BREAKFAST AND PRAYER											
8.00 am to 9.00 am	Registration and Breakfast	Phototactic movements	Circulatory System	Thermodynamics	MILLY* Session	MILLY* Session	MILLY* Session	MILLY* Session	Endocrine System - II	DNA damage and Repair	DNA Sequencing	Bioinformatics
	Dr. Anil Singh	Dr. Ravi Ranjan	Dr. Rajesh Senma	Dr. Hemal Vankar	Dr. Anil Singh	Dr. Anil Singh	Dr. Anil Singh	Dr. Anil Singh	Dr. Rajesh Senma	Dr. Anil Singh	Dr. Prashant Pant	Dr. Nutan
9.00 am to 10.00 am	Inaugration	DNA Replication	Circulatory System	Photosynthesis and Photophosphorylation	Advanced Analytical Techniques	Cancer Biology	Cell Signalling	rDNA Technology	Intellectual Bharat	Hybridoma Technology	Mutation and Mutagenic agents	Bioinformatics
		Dr. Nishant Junnerkar	Dr. Rajesh Senma	Dr. Deepesh Bhatt	Dr. Mukund Thakur	Dr. Aparna Singh	Dr. Aparna Singh	Dr. Gopal Jee	Dr. Mangalvardhan	Dr. Ritesh	Dr. Urjita	Dr. Nutan
10.00 am to 10.15 am	BREAK											
10.15 am to 11.15 am	Inaugral talk-Importance of competitive Exams	DNA Replication	Periodic Properties	Photosynthesis and Photophosphorylation	Advanced Analytical Techniques	Cancer Biology	Cell Signalling	rDNA Technology	Transport of nutrients in plants	Elisa	Mutation and Mutagenic agents	Bioinformatics
	Dr. Gaurav Shah	Dr. Nishant Junnerkar	Dr. Kumar Gamit	Dr. Deepesh Bhatt	Dr. Mukund Thakur	Dr. Aparna Singh	Dr. Aparna Singh	Dr. Gopal Jee	Dr. Siddhapara	Dr. Ritesh	Dr. Urjita	Dr. Nutan
11.15 am to 12.15 pm	Biotechnology: A way to prosperity and growth	Transcription - I	Antibiotics and their mode of action	Inheritance Biology	Advanced Analytical Techniques	PCR and Its Types	Cell Signalling	rDNA Technology	Photorespiration	Basics of Immunology	Bacterial genetics	Molecular Markers
	Dr. Gaurav Shah	Dr. Nishant Junnerkar	Dr. Anil Singh	Dr. Bhavin Bhatt	Dr. Mukund Thakur	Dr. Aasutosh Kumar	Dr. Aparna Singh	Dr. Gopal Jee	Dr. Siddhapara	Dr. Raktim	Dr. Pinakin	Dr. Prashant Pant
12.15 pm to 1.15 pm	Cell cycle and its regulation	Animal Classification - I	Antibiotics and their mode of action	Inheritance Biology	Cytoskeleton	PCR and Its Types	Reaction Mechanism	Embryology	Reproductive Biology	Basics of Immunology	Bacterial genetics	Molecular Markers
	Dr. Ravi Ranjan	Dr. Rajesh Senma	Dr. Anil Singh	Dr. Bhavin Bhatt	Dr. Arif Khan	Dr. Aasutosh Kumar	Mayur Morja	Dr. A.H. Dholakiya	Dr. Krupal Patel	Dr. Raktim	Dr. Pinakin	Dr. Prashant Pant
1.15 pm to 2.00 pm	LUNCH BREAK											
2.00 pm to 3.00 pm	Cell cycle and its regulation	Animal Classification - I	Respiratory System	Fermentation Technology	Protein trafficking and Sorting	Electricity and Magnetism	Endocrine System	Embryology	Reproductive Biology	Basics of Immunology	Bacterial genetics	Upcoming competitive Exams and Information
	Dr. Ravi Ranjan	Dr. Rajesh Senma	Dr. Pushpa Shah	Dr. Darshan Marjadi	Dr. Arif Khan	Mr. Atriya Ghetiya	Dr. Rajesh Senma	Dr. A.H. Dholakiya	Dr. Krupal Patel	Dr. Raktim	Dr. Pinakin	Dr. Anil Singh
3.00 pm to 4.00 pm	Cell cycle and its regulation	Excretory System	Translation	Fermentation Technology	Protein trafficking and Sorting	Chemistry for competitive exams	Nuclear Physics	Work, Energy and Power	Muscle contraction	Plant Biotechnology Transgenics	DNA Sequencing -II	Velidictory Session
	Dr. Ravi Ranjan	Dr. Pushpa Shah	Dr. Nishant Junnerkar	Dr. Darshan Marjadi	Dr. Arif Khan	Dr. Kaushik Kundaliya	Dr. Aakash Hingu	Ms. Arti Chaudhari	Dr. Yagnesh Padvi	Dr. Anish Sharma	Dr. Prashant Pant	
4.00 pm to 4.15 pm	TEA BREAK											
4.15 pm to 5.15 pm	Chromatography and protein purification	Electrophoresis	Translation	Regulation of Gene Expression	Mathematics for competitive exams	Chemistry for competitive exams	Reproduction in plants	Microbial Diseases	Nerve conduction	Plant Biotechnology Transgenics	Protein Sequencing	Velidictory Session
	Dr. Anil Singh	Dr. Anil Singh	Dr. Nishant Junnerkar	Dr. Anil Singh	Dr. Vanraj Kagda	Dr. Kaushik Kundaliya	Dr. Meghna Advaryu	Dr. Viraj Chaudhari	Dr. Yagnesh Padvi	Dr. Anish Sharma	Dr. Prashant Pant	
5.15 pm to 6.15 pm	Chromatography and protein purification	Electrophoresis	Translational Modifications	Regulation of Gene Expression	Mathematics in Exams	Apoptosis	Reproduction in plants	Microbial Diseases	Current and Electricity	Semiconductors	Bioinformatics -I	
	Dr. Anil Singh	Dr. Anil Singh	Dr. Nishant Junnerkar	Dr. Anil Singh	Dr. Vanraj Kagda	Dr. Aparna Singh	Dr. Meghna Advaryu	Dr. Viraj Chaudhari	Ms. Arti Chaudhari	Dr. Kunjal Patel	Dr. Nutan Prakash	
6.15 pm to 7.15 pm	Chromatography and protein purification	Electrophoresis	Q and A Session	Q and A Session	Animal Behaviour	Positive attitude	Spectroscopy and Grignard Reaction	Ara and Trp Operon	Soft Skills	DNA Repair	Bioinformatics -I	
	Dr. Anil Singh	Dr. Anil Singh	Dr. Anil Singh	Dr. Anil Singh	Dr. Rajesh Senma	Dr. Mayuresh Mishra	Mr. Hardik Tadvi	Dr. Anil Singh	Dr. Mayuresh Mishra	Dr. Anil Singh	Dr. Nutan Prakash	
	DINNER											

Table 2: Details of all the resource persons, their affiliation, contact details and topics delivered during the crash workshop

Sr. No	Name of resource person	Designation	Institute	Contact Details	Topic taken	Date	Time
1.	Dr. Gaurav Shah	Associate Professor and Director	Department of Biotechnology, VNSGU	Mob: 9825135299 Email: gauravshah@vnsu.ac.in	Importance of competitive exams	01/02/2023	09.00 – 10.00 am
					Biotechnology: A way to prosperity and growth	01/02/2023	10.15 – 12.15 pm
2.	Dr. Ravi Ranjan Ravi	Tutor	COE, Aakash (Ahmedabad)	Mob: 9016427948 Email: ravibchu1@gmail.com	Cell cycle and its regulation	01/02/2023	12.15 – 1.15 and 2.00 – 4.00 pm
					Photobiology	02/02/2023	8.00 – 9.00 am
3.	Dr. Nishant Junnarkar	Assistant Professor and Head	Department of Microbiology, GSC Vankal	Mob: 9428607398, 9106836695 Email: nsjunnarkar@gmail.com	DNA replication	02/02/2023	9.00 -11.15 am
					Transcription - I	02/02/2023	11.15 – 12.15 pm
					Transcription -II	03/02/2023	10.15 – 11.15 am
					Translation	03/02/2023	11.15 – 12.15 pm
4.	Dr. Pushpa S. Shah	Assistant Professor	Department of Zoology, GSC Vankal	Mob: 9624274764 Email: shahpushpa89@gmail.com	Excretory system	02/02/2023	3.00 – 4.00 pm
					Respiratory system	03/02/2023	2.00 – 3.00 pm
5.	Kumar Gamit	Assistant Professor	Department of Chemistry, GSC Vankal	Mob: 9265953358 Email: kumargamit06@gmail.com	Periodic table of Elements	03/02/2023	4:15 - 5:15 pm
6.	Dr. Hemal Vankar	Assistant Professor	Department of Physics, GSC Vankal	Mob: 8460865805 Email: hemal5drm@gmail.com	Thermodynamis	04/02/2023	8.00 – 9.00 am
7.	Dr. Deepesh Bhatt	Assistant Professor	Department of Physics, SRKI, Sarvajanik University, Surat	Mob: 7621018425 Email: deepesh.bhatt@srki.ac.in	Photosynthesis and phosphorylation	04/02/2023	9.00 – 11.15 am
8.	Dr. Bhavin Bhatt	Assistant Professor	Department of Physics,SRKI, Sarvajanik University, Surat	Mob: 9825105890 Email: bhavin.bhatt@srki.ac.in	Inheritance biology	04/02/2023	11.15 am – 1.15 pm
9.	Dr. Darshan Marjadi	Assistant Professor	Department of Physics,SRKI, Sarvajanik University, Surat	Mob: 9978855499 Email: darshan.marjadi@srki.ac.in	Fermentation Technology	04/02/2023	2.00 – 4.00 pm

10.	Dr. Mukund Thakur		ARIBAS ,New Vallabh VidhyanagarCharotar, CVM University	Mob: 9426936556 Email: mukundthakur@aribas.edu.in	Advanced Analytical Techniques	05/02/2023	9.00 – 12.15 pm
11.	Dr. Arif Khan		ARIBAS ,New Vallabh VidhyanagarCharotar, CVM University	Mob: 9924924209 Email: arifkhan@aribas.edu.in	Cytoskeleton & Protein Sorting	05/02/2023	12.15 – 1.15 pm 2.00 – 4.00 Pm
12.	Dr. Vanraj Kagda	Assistant Professor	Department of Mathematics, GSC Vankal	Mob: 9601997269 Email: vdkagada@gmail.com	Mathematics for competitive exam	05/02/2023	4.15 – 6.15 pm
13.	Dr. Aparna Singh	Assistant Professor	Department of Microbiology, TCAS Adipur (Kutch)	Mob: 7984945541 Email: aparnaakolkar@gmail.com	Cancer biology	06/02/2023	9.00 – 11.15 am
					Apoptosis	06/02/2023	5.15 – 6.15 pm
					Signal Transduction	07/02/2023	9.00 – 12.15 pm
14.	Dr. Ashutosh Kumar	Associated Professor & Head	Department of Biotechnology, School of Sciences, PPSU,	Mob: 9873235351 Email: ashutosh.kumar@ppsua.ac.in	PCR & its types	06/02/2023	11.15 – 1.15 pm
15.	Mr. Atriya Ghetyia	Assistant Professor	Department of Physics, GSC Ahwa	Mob: 9558298025 Email: atriyaighetyia@gmail.com	Electricity & Magnetism	06/02/2023	2.00 – 3.00 pm
16.	Dr. Kaushik kundaliya	Assistant Professor	Department of Chemistry, Govt. Arts & Science College, Bavla	Mob: 9033802766 Email: kaushik.kundaliya51@gmail.com	Chemistry for competitive exam	06/02/2023	3.00 – 5.15 pm
17.	Dr. Mayur Morja	Assistant Professor	Department of Chemistry, GSC Vankal	Mob: 8347676171 Email: Mayurmorja88@gmail.com	Reaction in Chemistry	07/02/2023	12.15 – 1.15 pm
18.	Mr. Akash M. Hingu	Assistant Professor	Govt. Arts, commerce & Science College, Umarpada	Mob: 9979505710 Email: hinguakash@gmail.com	Nuclear Physics	07/02/2023	2.00 – 3.00 pm
19.	Dr. Meghna Adhvaryu	Assistant Professor & Head	Department of Botony, GSC Vankal	Mob: 9825964651 Email: meghna.adhvaryu@gmail.com	Reproduction in Plants	07/02/2023	3.00 – 5.15 pm
20.	Mr. Hardik Tadvi	Assistant Professor	Department of Chemistry, GSC Vankal	Mob: 7567276036 Email: hardiktadvi1998@gmail.com	Spectroscopy & Grignard Reaction	07/02/2023	5.15 – 6.15 pm
21.	Mr. Mayuresh Mishra	Assistant Professor	Department of English, GSC Vankal	Mob: 8218252292 Email: mayureshgscvenenglish2018@gmail.com	Positive Attitude	06/02/2023	6.15 – 7.15 pm
					Communication Skills	09/02/2023	6.15 – 7.15 pm
22.	Dr. Gopal Jee Gopal	Assistant	CGBIBT, UKA Tarsadia	Mob: 9558880617	Introduction to	08/02/2023	9.00 am – 12.15

		Professor	University, Bardoli	Email: gopaljigopal@rediffmail.com	Recombinant DNA technology		pm
23.	Dr. A.H. Dholakia	Assistant Professor & Head	Department of Zoology, Sir P.T. Sarvajani College of Science, Surat	Mob: 9825460110 Email: ahdholakia@gmail.com	Embryology	08/02/2023	12.15 – 1.15 pm 2.00 – 3.00 pm
24.	Arti Chaudhari	Visiting faculty	Department of Physics, GSC Vankal	Mob: 7874393137 Email: arti2512@gmail.com	Work, Energy, Power	08/02/2023	3.00 – 5.15 pm
					Current Electricity	09/02/2023	5.15 – 6.15 pm
25.	Viraj Chaudhari	Assistant Professor	Department of Microbiology, GSC Vankal	Mob: 9924402319 Email: virajchaudhari2@gmail.com	Microbial Diseases	08/02/2023	5.15 – 6.15 pm 6.15 – 7.15 pm
26.	Mangalvardhandan Sadhu	Assistant Professor	Department of Sanskrit, Govt. Arts & Science College, Limbayat	Mob: 7264970889 Email: sadhumangalvardhandas@gmail.com	Intellectual Bharat	09/02/2023	9.00 – 10.00 am
27.	Dr. Sanjay Siddhpara	Assistant Professor	Department of Botany, GSC Songadh	Mob: 9275027350 Email: spsiddhpara@gmail.com	Plant physiology	09/02/2023	10.15 am – 12.15 pm
28.	Dr. Krupal Patel	Assistant Professor	Department of Zoology, Govt. Arts & Science College, Limbayat	Mob: 88661661190 Email: kkpatel1611@gmail.com	Reproduction Biology	09/02/2023	12.15 – 1.15 pm 2.00 – 3.00 pm
29.	Mr. Yagnesh Padvi	Assistant Professor	Department of Zoology, GSC, Songadh	Mob: 8469409484 Email:	Muscle & Nerve Physiology	09/02/2023	3.00 – 5.15 pm
30.	Dr. Ritesh Tandel	Assistant	Department of Microbiology,	Mob: 8320074675	Monoclonal	10/02/2023	9.00 – 11.15

		Professor	TCAS, Adipor(Kutch)	Email: rtshtandel@gmail.com	Antibody: Production & Application		am
31.	Dr. Raktim Mukherjee	Associate Professor & Head	Department of Shree P.M. Patel Institute of PG Studies & Research in Science.	Mob: 9825119355 Email: raktimmukherjee2003@gmail.com	Basics of Immunology	10/02/2023	11.15 – 1.15 pm 2.00 – 3.00 pm
32.	Dr. Anish Sharma	Associate Professor & Principal	School of Sciences, P.P. Savani University, Kosamba (Surat)	Mob: 8278810055 Email: anish.sharma@ppsua.ac.in	Plant Transduction	10/02/2023	3.00 – 5.15 pm
33.	Dr. Kunjal Patel	Assistant Professor	Department of Physics, GSC, Vankal	Mob: 8460798275 Email: kunjal_92@gmail.com	Semi- conductors	10/02/2023	5.15 – 6.15 pm
34.	Dr. Prashant Pant	Head & Assistant Professor	Department of Botany, GSC Daman	Mob: 9899472143 Email: prashantpant15@gmail.com	DNA Sequencing	11/02/2023	8.00 – 9.00 am
					Blotting techniques	11/02/2023	3.00 – 5.15 pm
					Molecular Markers	12/02/2023	11.15 am – 1.15 pm
35.	Dr. Urjita Sheth	Head & Assistant Professor	Department of Biotechnology, Vanita Vishram Womens University, Surat	Mob: 9825333721 Email: urjita.sheth@vwwusurat.ac.in	Mutation & Mutation Agents	11/02/2023	9.00 – 11.15 am
					Chromosomal abnormalities		
36.	Dr. Pinakin Dhandhukia	Head & Assistant Professor	Department of Microbiology, Vanita Vishram Womens University, Surat	Mob: 9426833673 Email: pinakin.dhandhukia@vwwusurat.ac	Bacterial Genetics	11/02/2023	11.15 – 3.00 pm
37.	Dr. Nutan Prakash Vishwakarma	Associated Professor	Department of Biotechnology, Atmiya University, Rajkot	Mob: 7990589183 Email: pranutan@gmail.com	Bioinformatics - 1	11/02/2023	5.15 – 7.15 pm
					Bioinformatics - 2	12/02/2023	11.15 – 1.15 pm
38.	Dr. Anil Kumar Singh	Assistant Professor	Department of Microbiology, GSC Vankal	Mob: 7990205836 Email: anilkumar.singh@gujgov.edu.in, aksingh.msu@gmail.com	Chromatography and protein purification	01/02/2023	4.15 – 7.15 pm
					Electrophoresis	02/02/2023	4.15 – 7.15 pm

					Antibiotics and their mode of action & Q and A Session	03/02/2023	11.15 - 01.15 pm & 6.15 – 7.15 pm
					Regulation of Gene Expression & Q and A Session	04/02/2023	4.15 – 7.15 pm
					MILLY* Session	05/02/2023	8.00 – 9.00 am
					MILLY* Session	06/02/2023	8.00 – 9.00 am
					MILLY* Session	07/02/2023	8.00 – 9.00 am
					MILLY* Session & Ara and Trp Operon	08/02/2023	8.00 – 9.00 am & 6.15 – 7.15 pm
					DNA damage and Repair	10/02/2023	8.00 – 9.00 am & 6.15 – 7.15 pm
					Upcoming competitive Exams and Information sharing	12/02/2023	2.00 – 3.00 pm
39.	Dr. Rajesh Senma	Head & Assistant Professor	Department of Microbiology, GSC Vankal	Contact no: 9426540570 Email: rajeshs25501@gmail.com	Animal Classification - I	02/02/2023	12.15 -1.15 pm & 2.00 – 3.00 pm
					Circulatory System	03/02/2023	8.00-10.00 am
					Animal Behaviour	05/02/2023	6.15 – 7.15 pm
					Endocrine System	07/02/2023	2.00 - 3.00 pm
					Endocrine System - II	09/02/2023	8.00 - 9.00 am

GSBTM SPONSORED 12 DAY UG-CBC CRASH WORKSHOP

1st - 12th February, 2023 (12 days)

Day 1: Date 01/02/2023

The workshop commenced with registration and kit distribution to the registered candidates. Registration was followed by breakfast and tea. The inaugural session started at 9.00 a.m with lightening of lamp and praying to the almighty. Dr. Gaurav Shah, Director, Department of Biotechnology, Veer Narmad South Gujarat University, Surat was invited as the chief guest of the inaugural function. Dr. Gaurav was accompanied by Dr. Parthiv Chaudhari, Principal, Government Science College, Vankal, Dr. Prashant Pant, HoD, Department of Botany, Government Science College, Daman and Dr. Makwana, Department of Zoology, Birsa Munda Tribal University, Rajpipla. Principal of the host college, Dr. Parthiv Chaudhari formally welcomed all the student participants and Dr. Anil Kumar Singh, Coordinator of the workshop briefed the participants about sponsoring agency GSBTM, the purpose and modus operandi of the crash workshop. Each day was divided into four sessions. Session 1: 8.00 am to 10 a.m; Session 2: Session 2: 10.15 am to 1.15 pm; Session 3: 2.00 pm to 4.00 pm and Session 4: 4.15 pm to 7.15 pm. In between sessions there were two tea breaks (10.00 am to 10.15 am and 4.00 pm to 4.15 pm) and a lunch break (1.15 pm - 2.00 pm)



Registration and Inauguration Session (8.00 – 9.00 am)

The inauguration session was followed by the first lecture on “Importance of competitive exams” by Dr. Gaurav Shah. During his lecture he emphasized on the need and importance of competitive exams and why one should try hard to crack such exams. With his lecture he laid a foundation for future lectures of the workshop. The formal lecture sessions started after this introductory lecture highlighting the importance of competitive exams and why and how students should approach it.



Name of speaker: Dr. Gaurav Shah
 Director, Department of Biotechnology, Veer Narmad South Gujarat University, Surat

Title of Talk:

1. Importance of competitive exams (9.00 – 10.00 am)
2. Biotechnology: A way to prosperity and growth (10.15 – 12.15 pm)



Name of speaker: Dr. Ravi Ranjan Ravi
 Tutor, Center of Excellence, Aakash (Ahmedabad)

Title of Talk:

1. Cell cycle and its regulation (12.15 – 1.15 pm and 2.00 – 3.00 pm)



Name of speaker: Dr. Anil Kumar Singh
Assistant Professor and Coordinator UG-CBC, Government Science College, Vankal

Title of Talk:
1. Chromatography and Protein purification (04.15 – 07.15 pm)

Day 2: Date: 02/02/2023

The second day of the workshop started with breakfast and prayer. The day had total 10 lectures on diverse topics ranging from plant physiology to animal classification to basic analytical techniques.

Session 1	
<p>Speaker: Dr. Ravi Ranjan Ravi Topic: Photobiology (8.00 am – 9.00 am)</p>	<p>Speaker: Dr. Nishant Junnerkar Topic: DNA replication (9.00 to 10.00 am)</p>
Session 2	
<p>Speaker: Dr. Nishant Junnerkar Topic: DNA replication and Transcription (10.15 am to 12.15 pm)</p>	<p>Speaker: Dr. Rajesh Senma Topic: Animal classification (12.15 to 1.15 pm)</p>



Session 3

Speaker: Dr. Rajesh Senma
Topic: Animal classification (2.00 to 3.00 pm)

Speaker: Dr. Pushpa Shah
Topic: Excretory System (3.00 to 4.00 pm)



Session 4




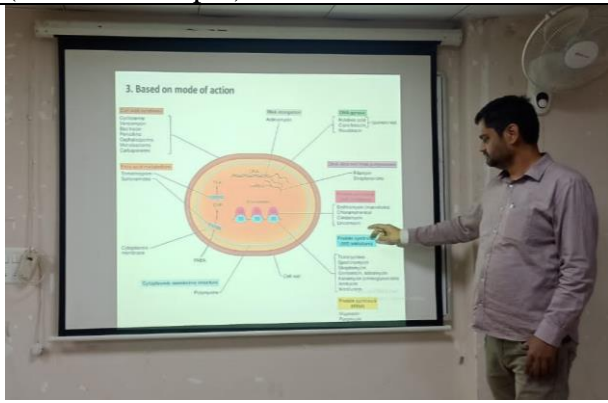
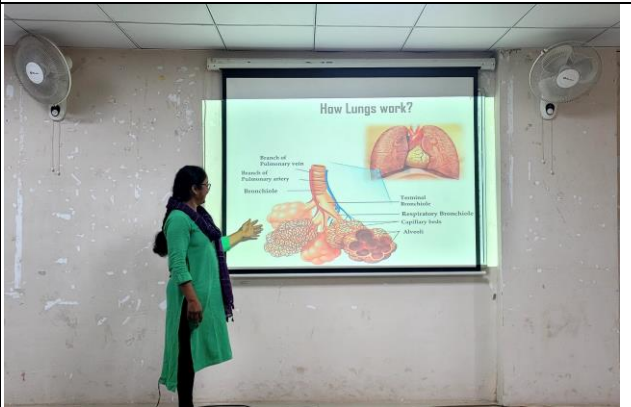

Speaker: Dr. Anil Kumar Singh
Topic: Electrophoresis (4.15 to 7.15 pm)





Day 3: Date: 03/02/2023

The third day of the workshop started with breakfast and prayer as per schedule. There were ten lectures during the entire day. The topics covered during the day were a mixed blend from different disciplines



including microbiology, animal physiology, molecular biology and chemistry. The lecture was very informative and important from competitive point of view.

Session 1	
Speaker: Dr. Rajesh Senma Topic: Circulatory System (8.00 am – 10.00 am)	
	
Session 2	
Speaker: Dr. Kumar Gamit Topic: Periodic properties (10.15 am to 11.15 pm)	Speaker: Dr. Anil Kumar Singh Topic: Antibiotics and their mode of action (11.15 to 1.15 pm)
	
Session 3	
Speaker: Dr. Pushpa Shah Topic: Respiratory System (2.00 to 3.00 pm)	Speaker: Dr. Nishant Junnarkar Topic: Translation (3.00 – 5.15 pm)
	

Session 4	
Speaker: Dr. Nishat Junnarkar Topic: Post translational modifications (5.15 - 6.15 pm)	Speaker: Dr. Anil Kumar Singh Topic: Question answer session
	

Day 4: Date: 04/02/2023

Following breakfast and prayers, the first technical session started with a lecture on “Thermodynamics” by Dr. Hemal Vankar, Assistant Professor, Government Science College, Vankal. This lecture was followed by six lectures delivered by three different faculties from Shree Ramkrishna Institute, Sarvajnik University, Surat, on different topics. The pictorial details of the entire day are as follows

Session 1	
Speaker: Dr. Hemal Vankar Topic: Thermodynamics	Speaker: Dr. Deepesh Bhatt Topic: Photosynthesis and Photophosphorylation (10.15 am to 11.15 pm)
	
Session 2	
Speaker: Dr. Deepesh Bhatt Topic: Photosynthesis and	Speaker: Dr. Bhavin Bhatt Topic: Inheritance Biology (11.15 to 1.15 pm)

Photophosphorylation (10.15 am to 11.15 pm)



Session 3

Speaker: Dr. Darshan Marjadi
Topic: Fermentation Technology (2.00 to 4.00 pm)

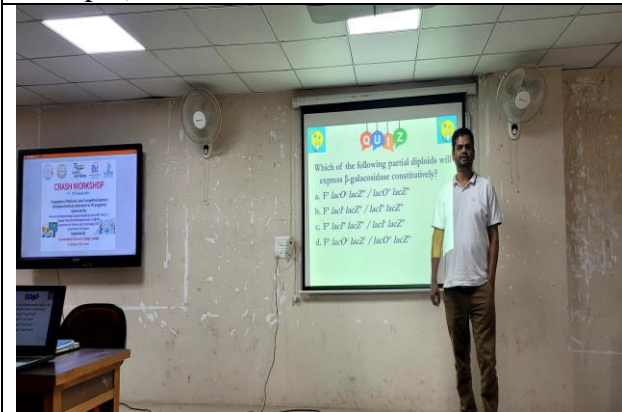
Speaker: Dr. Anil Kumar Singh
Topic: Regulation of gene expression (4.15 – 5.15 pm)



Session 4

Speaker: Dr. Anil Kumar Singh
Topic: Regulation of gene expression (5.15 - 6.15 pm)

Speaker: Dr. Anil Kumar Singh
Topic: Question answer session



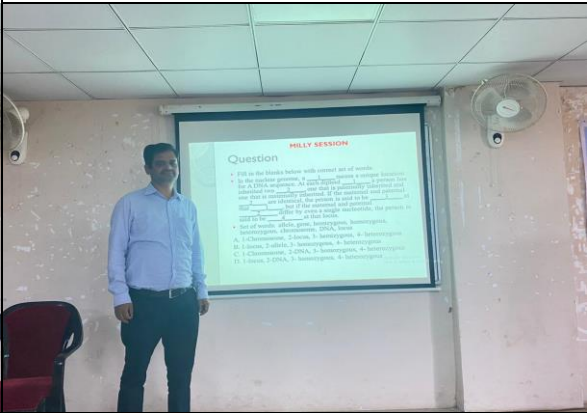

Day 5: Date: 05/02/2023

The fifth day started with a revision lecture by Dr. Anil Singh, in which he discussed a few topics covered till yesterday and the questions which are asked from those topics. He discussed logic and concepts behind several analytical questions asked in past exams and encouraged students to understand concepts behind topics being covered and then apply the knowledge to solve analytical questions.

The second lecture in the morning session was by Dr. Mukund Thakur from ARIBAS, Charottar University, on Advanced analytical techniques. He discussed techniques like FCS, FACS, FRAP and Mass Spectroscopy. At the end of the session, he also discussed previous year questions related to topics and made student aware about the question pattern from the topic.

Dr. Mukund's lecture was followed by lecture on two important topics from cell biology i.e cytoskeleton and protein sorting and trafficking by Dr. Arif Khan from the same institute. Dr. Khan discussed important aspects of assigned topics and the ways to remember the key concepts.

The last session of the day had two flavors, mathematics and zoology. Mr. Vanraj from GSC Vankal discussed important concepts of mathematics asked in competitive exams like IIT JAM and Dr. Rajesh Senma delivered a talk on "animal behavior"

Session 1	
Speaker: Dr. Anil Kumar Singh Topic: MILLY Session (8.00 – 9.00 am)	Speaker: Dr. Mukund Thakur Topic: Advanced analytical Techniques (9.00 am - 10.00 am)
	
Session 2	
Speaker: Dr. Mukund Thakur Topic: Advanced analytical Techniques (10.15 am - 12.10 am)	Speaker: Dr. Arif Khan Topic: Cytoskeleton (12.15 - 1.15 pm)



Session 3

Speaker: Dr. Arif Khan

Topic: Protein sorting and sorting (2.00 - 4.00 pm)



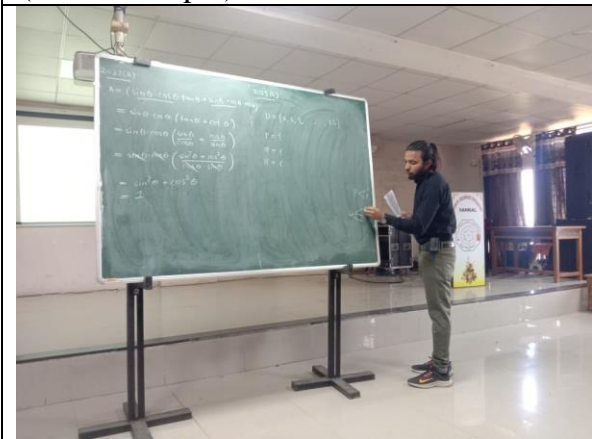
Session 4

Speaker: Dr. Vanraj Kagda

Topic: Mathematics for competitive exams
(4.15 – 6.15 pm)





Speaker: Dr. Rajesh Senma

Topic: Animal behavior (6.15 – 7.15 pm)



Day 6: Date: 06/02/2023

The morning session was started with the breakfast and prayer. The first session was MILLY session coordinated by Dr. Anil Kumar Singh. In this session many important topics covered in the workshop till date were discussed. Doubts and clarification with regard to topics covered so far were done. Many questions asked in past year competitive exams were also discussed. After this discussion session the first lectures session was taken by Dr. Aparna Singh on Cancer biology. Her lecture was followed by other lectures scheduled in the day. In total 08 hours of subject teaching, one hour of discussion and one hour of motivational lecture was achieved in the day. The subject lectures were on topics from biology, physics and chemistry while the last lecture of the day was a motivational talk on “Positive Attitude” by Mr. Mayuresh Mishra, Head, Department of English, of the host college.

Session 1	
Speaker: Dr. Anil Kumar Singh Topic: MILLY Session (8.00 – 9.00 am)	Speaker: Dr. Aparna Singh Topic: Cell signalling (9.00 am - 10.00 am)
	
Session 2	
Speaker: Dr. Aparna Singh Topic: Cell signaling (10.15 am - 11.15 am)	Speaker: Dr. Ashutosh Kumar Topic: PCR and its types (11.15 - 1.15 pm)
	

Session 3

Speaker: Dr. Atriy Ghetiya
Topic: Electricity and magnetism (2.00 - 3.00 pm)



Speaker: Dr. Kaushik Kundaliya
Topic: Chemistry for competitive exams (3.00 - 4.00 pm)



Session 4

Speaker: Dr. Kaushik Kundaliya
Topic: Chemistry for competitive exams (4.15 - 5.15 pm)



Speaker: Dr. Aparna Singh
Topic: Apoptosis (5.15 – 6.15 pm)







Speaker: Dr. Mayuresh Mishra

Topic: Positive Attitude



Day 7: Date: 07/02/2023

The technical session of the seventh day started with MILLY Session and a small mock test. The session was handled by Dr. Anil Singh. Dr. Singh's session was followed by two continuous talks on "Cell signaling" by Dr. Aparna Singh. During her talk she explained the different types of signaling pathways in cells, importance of cell signaling and players involved. She also discussed previous years questions from the topic. Her lecture was followed by lecture from chemistry on "reaction mechanisms" by Dr. Mayur Morja of the host institute. Next lecture in the series was delivered by Dr. Rajesh Senma on "Endocrine system". During his lecture he discussed about different types of hormones and the glands that secrete them, their physiological role etc. Dr. Senma's lecture was followed by a lecture on "Nuclear Physics" by Dr. Aakash Hingu. Later Dr. Meghna Adhvaryu, Head of Botany department of GSC Vankal delivered a talk on "Reproduction in Plants". Dr. Meghna's talk was followed by a talk on "Spectroscopy and Grignard reactions" by Mr. Hardik Tadvi.

Session 1	
Speaker: Dr. Anil Kumar Singh Topic: MILLY Session (8.00 – 9.00 am)	Speaker: Dr. Aparna Singh Topic: Cell Signaling (9.00 am - 10.00 am)
	
Session 2	
Speaker: Dr. Aparna Singh Topic: Cell signaling (10.15 am - 12.15 am)	Speaker: Dr. Mayur Morja Topic: Reaction Mechanisms (12.15 - 1.15 pm)
	

Session 3	
Speaker: Dr. Rajesh Senma Topic: Endocrine system (2.00 - 3.00 pm)	Speaker: Dr. Aakash Hingu Topic: Nuclear physics (3.00 - 4.00 pm)
	
Session 4	
Speaker: Dr. Meghna Adhvaryu Topic: Reproduction in plants (4.15 - 6.15 pm)	Speaker: Mr. Hardik Tadvi Topic: Spectroscopy and Grignard reactions (6.15 – 7.15 pm)
	

Day 8: Date: 08/02/2023

Eighth day of the workshop started at sharp 8.00 am with the MILLY session by Dr. Anil Singh, discussing important lessons learnt yesterday and clearing any doubts related to topics covered the previous day. The next lecture was delivered by Dr. Gopal Jee Gopal from Uka Tarsadiya University on “Recombinant DNA Technology”. Later, Dr. A.H. Dholakiya delivered a talk on “Embryology” covering basics to advancements in the field of embryology. Dr. Dholakiya’s lecture was followed by lecture on “work, energy and power” by Ms. Arti of the host institute. Later, Ms. Viraj Chaudhari from microbiology department of the host institute delivered a talk on “microbial diseases”. The last lecture of the day was by Dr. Anil Singh on “Trp and Ara operons”

Session 1

Speaker: Dr. Anil Kumar Singh
Topic: MILLY Session (8.00 – 9.00 am)



Speaker: Dr. Gopal Jee Gopal
Topic: RDT (9.00 am - 10.00 am)

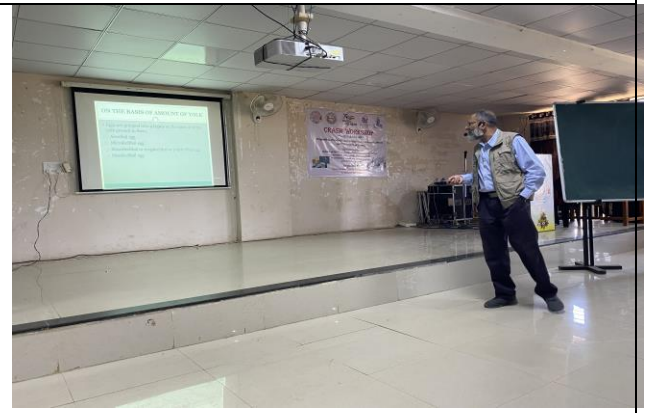


Session 2

Speaker: Dr. Gopal Jee Gopal
Topic: RDT (10.15 am - 12.15 am)



Speaker: Dr. A.H. Dholakiya
Topic: Embryology (12.15 - 1.15 pm)





Session 3

Speaker: Dr. A.H. Dholakiya
Topic: Embryology (2.00 - 3.00 pm)



Speaker: Mrs. Arti Chaudhari
Topic: Work, Energy and Power (3.00 - 4.00 pm)



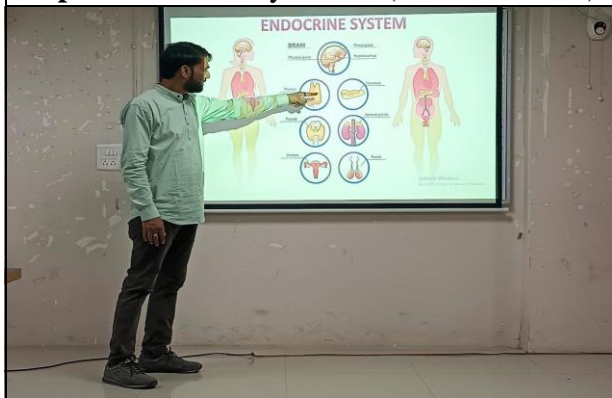
Session 4	
Speaker: Mrs. Viraj Chaudhari Topic: Microbial Diseases (4.15 - 6.15 pm)	Speaker: Dr. Anil Kumar Singh Topic: Ara and Trp Operon (6.15 – 7.15 pm)
	

Day 9: Date: 09/02/2023

The ninth day of the workshop covered lectures from the field of animal and plant physiology, physics and some motivational talks. The day started with lecture on “Endocrine system” by Dr. Rajesh Senma during which he continued and finished the topic that he had started the previous day. The next talk was on Intellectual Bharat by Dr. Mangalvardhandas Sadhu an acharya in Sanskrit. He discussed the science in our mother language Sanskrit. His lecture was very interesting and informative. His lecture was followed by lecture on “Plant Physiology” by Mr. Sanjay Siddhapara, from GSC Songadh. During his lecture he discussed the transport of water and nutrients in plants, transpiration and opening and closing of stomata. Mr. Shddhapara’s lecture was followed by lecture on “Reproductive Biology” by Dr. Krupal Patel from GSC Limbayat. Later in the day Dr. Yagnesh Padvi form GSC Songadh discussed the “Mechanism of muscle contraction and nerve conduction” with the participants. Dr. Padvi’s lecture was followed by a talk on “current and electricity” by Ms. Arti Chaudhari of the host institute. The last lecture of the day was delivered by Mr. Mayuresh Mishra form the English department of the host institute on “Soft Skills”. His lecture was very refreshing and useful for the students.

**Day 9
Session 1**

Speaker: Dr. Rajesh Senma
Topic: Endocrine system-II (8.00 – 9.00 am)



Speaker: Dr. Magalvardhandas Sadhu
Topic: Intellectual Bharat (9.00 am - 10.00 am)

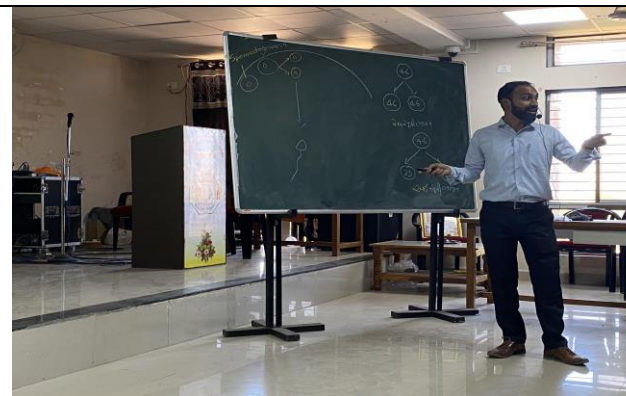


Session 2

Speaker: Mr. Sanjay Siddhapara
Topic: Plant physiology (10.15 am - 12.15 am)



Speaker: Dr. Krupal Patel
Topic: Reproductive Biology (12.15 - 1.15 pm)






Session 3

Speaker: Dr. Krupal Patel
Topic: Reproductive Biology (12.15 - 1.15 pm)





Speaker: Mr. Yagnesh Padvi
Topic: Muscle physiology (3.00 - 4.00 pm)



Session 4		
Speaker: Mr. Yagnesh Padvi Topic: Nerve physiology (4.15 - 6.15 pm)	Speaker: Arti Chaudhari Topic: Current and Electricity (6.15 – 7.15 pm)	Speaker: Mr. Mayuresh Mishra Topic: Soft skills (6.15 – 7.15 pm)
		

Day 10: Date: 10/02/2023

The tenth day of the workshop had lectures encompassing microbiology, immunology, biotechnology and semiconductors. The day started at 8.00 am with a lecture on DNA damage and repair by Dr. Anil Singh. His lecture was followed by lecture on immunological techniques viz. Hybridoma technology and ELISA by Dr. Ritesh Tandel from TCAS, Adipur. Later Dr. Raktim Mukherjee from P.D Patel Institute gave students a fixed thali of immunology covering the basic and important concepts in immunology. Dr. Raktim's lecture was followed by lecture on Plant Biotechnology by Dr. Anish Sharma of PP Savani University. Dr. Sharma discussed the plant tissue culture and plant transformation techniques in details. Later in the evening a lecture on semiconductors was delivered by Dr. Kunjal Patel of the host institute. During the last lecture Dr. Anil Singh covered the topic on DNA damage and repair that he had started in the morning.

Session 1	
Speaker: Dr. Anil Kumar Singh Topic: DNA damage and repair (8.00 – 9.00 am)	Speaker: Dr. Ritesh Tandel Topic: Hybridoma technique (9.00 am - 10.00 am)
	

Session 2

Speaker: Dr. Ritesh Tandel
Topic: ELISA (10.15 am - 11.15 am)



Speaker: Dr. Raktim Mukherjee
Topic: Basics of Immunology (11.15 - 1.15 pm)



Session 3

Speaker: Dr. Raktim Mukherjee
Topic: Basics of Immunology (2.00 – 3.00 pm)



Speaker: Dr. Anish Sharma
Topic: Plant Biotechnology (3.00 - 4.00 pm)



Session 4

Speaker: Dr. Anish Sharma
Topic: Plant Biotechnology (4.15 - 5.15 pm)



Speaker: Dr. Kunjal Patel
Topic: Semiconductors (6.15 – 7.15 pm)





Speaker: Dr. Anil Kumar Singh
Topic: DNA damage and Repair (6.15 – 7.15 pm)



Day 11: Date: 11/02/2023

As per routine, the technical session of eleventh day of the workshop started at 8.00 am. Total five speakers from other institutes delivered lectures on varied topics during the day. Dr. Prashant Path started the day with a lecture on DNA sequencing. During which he covered first generation sequencing techniques: Maxam and Gilbert and Sangers sequencing techniques. His lecture was followed by a lecture on Mutation and mutagenic agents by Dr. Urjita Sheth from Vanita Vishram Women's University, Surat. Her lecture was followed by a lecture on Bacterial genetics by Dr. Pinakin Dhandhukiya from the same institute. The next lecture in the series was by again by Dr. Prashant Pant on DNA sequencing in which he covered the next generation sequencing techniques. The last lecture of the day was by Dr. Nutan Prakash on Basics of Bioinformatics. During his lecture the discussed about the scope and application of bioinformatics. He also talked about different databases, its types and the different terms used in bioinformatics.

Session 1	
Speaker: Dr. Prashant Pant Topic: DNA Sequencing (8.00 – 9.00 am)	Speaker: Dr. Urjita Sheth Topic: Mutation and mutagenic agents (9.00 am - 10.00 am)
	
Session 2	
Speaker: Dr. Urjita Sheth Topic: Mutation and mutagenic agents (10.15 am - 11.15 am)	Speaker: Dr. Pinakin Dhandhukiya Topic: Bacterial genetics (11.15 - 1.15 pm)



Session 3

Speaker: Dr. Pinakin Dhandhukiya
Topic: Bacterial genetics (2.00 – 3.00 pm)

Speaker: Dr. Prashant Pant
Topic: Next generation sequencing (3.00 - 4.00 pm)



Session 4

Speaker: Dr. Prashant Pant
Topic: Protein sequencing (4.15 - 5.15 pm)

Speaker: Dr. Nutan Prakash
Topic: Bioinformatics (5.15 – 7.15 pm)



Day 12: Date: 12/02/2023

Twelfth and the last day of the workshop had total six lectures on topics ranging from bioinformatics to molecular markers. The day started with lecture by Dr. Nutan Prakash on Bioinformatics. He continued




Report: GSBTM Sponsored Twelve day UG-CBC Crash Workshop

his lecture from where he had left yesterday. He covered all the important basic aspects of bioinformatics including databases, its types, database mining techniques, primer designing etc.

Dr. Prakash’s lecture was followed by a lecture on “Molecular markers” by Dr. Prashant Pant. During his lecture he covered all important markers used in biotechnology and also discussed techniques used for marker analysis and their use and importance.

The last technical session lecture was by Dr. Anil Kumar Singh. During his lecture he discussed about “upcoming competitive exams and scopes they offer”. During his lecture Dr. Singh informed the participants about the various upcoming competitive exams in which they can appear after attending this workshop. He also discussed about scopes these competitive exams offers to aspirants.

Dr. Singh’s lecture was followed by lunch break and later by valedictory session.

Day 12	
Session 1	
Speaker: Dr. Nutan Prakash	
Topic: Bioinformatics (8.00 – 10.00 am)	
	
Session 2	
Speaker: Dr. Nutan Prakash	Speaker: Dr. Prashant Pant
Topic: Bioinformatics (10.15 am - 11.15 am)	Topic: Molecular Markers (11.15 - 1.15 pm)
	

Session 3

Speaker: Dr. Anil Kumar Singh

Topic: Upcoming competitive exams (2.00 – 3.00 pm)



Valedictory Session (3.00 pm onwards)

Valedictory Function

The final session of the twelfth day was the valedictory session. The session was anchored by Dr. Anil Kumar Singh, Coordinator of UG-CBC, GSC Vankal. Dr. Parthiv Chaudhari, Principal of GSC, Vankal served as the chief guest for the valedictory function. Dr. Rajesh Senma (deputy coordinator, UG-CBC-GSC Vankal), Dr. Prashant Pant (HoD, Botany department, GSC Daman), Dr. Nutan Prakash (HoD, Biotechnology department, Atmiya Univeristy), HoD of all departments of GSC Vankal and faculties of GSC Vankal graced the valedictory function by their presence.

Formal welcome of guest and dignitaries during the valedictory function





Dr. Anil Singh, briefed the dignitaries about the main highlights of the workshop and appreciated and thanked all the resource persons for their service and valuable inputs in the workshop. He also thanked all the student participants for their time, patient listening, support and cooperation during the workshop and congratulated them for successfully completing it.

Student participants from different institutes shared their feedback and suggestions about the workshop. Everyone praised and thanked the sponsoring agency, Gujarat State Biotechnology Mission (GSBTM), for sponsoring the event and providing all necessary support and guidance.

Feedback session by student participants



The valedictory function ended with a vote of thanks proposed by Dr. Rajesh Senma. The function was followed by the distribution of study material and certificates to student participants. Finally, everyone

assembled for the last one time for a group photograph, to capture the memories of the event and cherish it for long itme. With the vote of thanks to GSBTM and all the contributors, coordinator announced the closure of program with national anthem.

Distribution of study material and certificates to student participants



GROUP PHOTOGRAPH WITH ALL STUDENTS PARTICIPANTS AND DIGNETRIES PRESENT AT THE VALDICTROY FUNCTION OF THE FIRST GSBTM SPONSORED UG-CBC-CRASH WORKSHOP AT GSC VANKAL



Refreshment Time: Some photos during the refreshments



REFRESHMENT TIME



THANKS TO GSBTM