

PG AND RESEARCH DEPARTMENT OF BIOTECHNOLOGY**STUDENT ACTIVITIES (2020-21)**

S. No	DATE	TITLE OF THE WORKSHOP/SEMINARS/TRAINING	BENEFICIARIES
1	20-07-2020	Quiz on world Mosquito Day 2020	203
2	27-07-2021	Intercollegiate competition during the occasion of “Remembering People’s president on Dr. A.P. J. Abdul kalam’s death Anniversary”	25
3	28-07-2021	Intercollegiate competition on DBT STAR Scheme sponsored “World Nature Conservation Day” for college students	20
4	12-09-2020	Quiz on World First Aid Day 2020	211
5	16-09-2020	Quiz on “International Ozone Day”	1138
6	5-10-2020	E - Quiz on “World habitat Day” 2020	80
7	28-09-2020 to 30-09-2020	Model presentation	180
8	10-10-2020	Student development Programme- Discover the Teacher in You	60
9	30-11-2020 to 01-12-2020	Two-Days Hands on Training Workshop on “Sequencing Tools and Phylogenetic Analysis	61
10	2-12-2020 to 03-12-2020	Online Workshop Programme on “Techniques in Microbiology and Downstream processing	60
11	05-12-2020	Online seminar on “Soil Conservation”	73
12	07-12-2020	Online Workshop Programme on “Human Karyotyping”	55
13	02-02-2021	Virtual seminar on “An overview of Crisper Technology”	139
14	26-02-2021	Commemoration of National Science Day-2021	300

The Department organized an ‘Intercollegiate competition during the occasion of Remembering People’s president on Dr. A.P. J. Abdul kalam’s death Anniversary’ “under the DBT STAR Scheme for school students held on 27th July 2020. Dr. G. Rajalakshmi, Associate Professor and Head of the Department of Biotechnology along with faculty members of the department involved to conduct the programme. The events such as, Tamil and English elocution, Nation building and E-painting was organised. With 25 responses recorded across Tamilnadu, the first three places for the respective events as well as participants were acknowledged with certificate of merit and participation respectively.

Hindusthan
College of Arts and Science
(Autonomous)
Nava India, Coimbatore - 641 028

DBT STAR College Scheme Sponsored

Department of Biotechnology Govt. of India

Discovering the Budding Scientist (School Students)

Identifying the Excellence and Honoring the Young Talents

27th Jul 2020
Remembering the Legend -
Dr. APJ's Memorial Day

Organized by
PG and Research Department of Biotechnology

e-Painting

- Theme: Science and Technology in Nation Building
- Color Painting
- Convert to JPG/ JPEG
- File Size must be <10MB

Elocution
(Tamil/ English)

- Theme: Science and Technology in Nation Building
- Duration: 5 Minutes
- File Size must be <100MB

How to Submit?

- Registration Link: shorturl.at/lenCt4
- E-Mail id: hicabtevents@gmail.com
- For Queries Mobile No: 9003715721; 9003917440

Guidelines

- Registrations are invited from School Students
- Group I - 6th to 8th Grade
- Group II - 9th to 12th Grade
- Last Date for Submission is 25th July 2020
- No Plagiarism

Dr. G. Rajalakshmi
Prof & Head of Biotechnology
Convener

Dr. Mohammed RafiqKhan
Associate Prof of Biotechnology
Organizing Secretary

Dr. P. Senthikumar
Associate Prof of Biotechnology
Coordinator

The Department organized an ‘Intercollegiate competition on the occasion of DBT STAR Scheme sponsored “World Nature Conservation Day” for college students held on 28th July 2020. Dr. G. Rajalakshmi, Associate Professor and Head of the Department of Biotechnology along with faculty members of the department involved to conduct the programme. Mrs. G. Brindha, Assistant Professor, as a coordinator of the programme prepared with set of events and its corresponding rules suitable for college students. The events such as, E-poster, painting, Short film (2 min) was organised. With 20 responses recorded across the nation, the first three places for the respective events as well as participants were acknowledged with certificate of merit and participation respectively.

Brochure of Remembering People’s president on Dr. A.P. J. Abdul kalam’s death Anniversary’ 2020

HINDUSTHAN
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PG AND RESEARCH DEPARTMENT OF
BIOTECHNOLOGY

Cordially invites you all for
DBT STAR College Sponsored E-Contest
on
WORLD NATURE CONSERVATION DAY
28th JULY 2020

Best e-Poster/ Painting & Short Film
will be Awarded

The Department organized the “**DBT STAR College Scheme Sponsored E-Poster Presentation** “for the I UG, II UG, III UG students on **28th-30th September 2020**

III UG -Winners

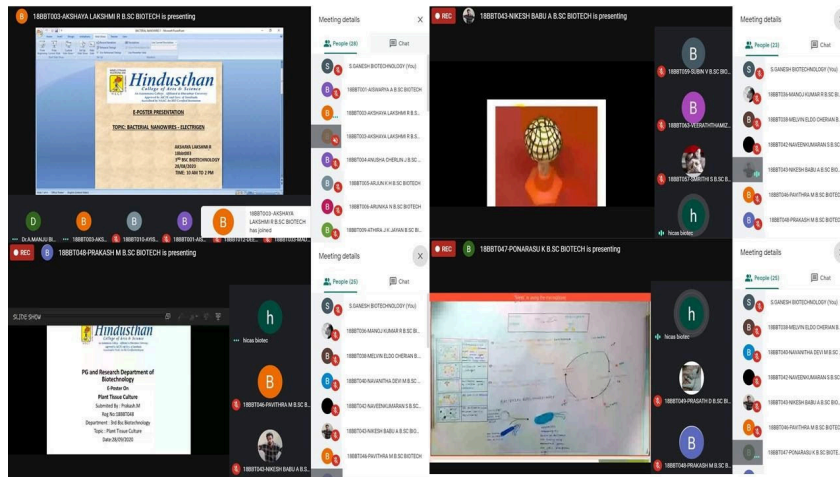
S.No	Reg. No	Name	Title	Marks obtained (30 marks)	Place
1	18BBT003	Akshaya Lakshmi. R	Bacterial nanowires-electrigens	28	First
2	18BBT010	Ayisha begam. A	Bionic eye		
3	18BBT023	Gowtham krishnan. S	Egg incubator		
4	18BBT011	Celine mariya. B	Thyroid stimulating hormone	27	Second
5	18BBT013	Dhayalan M	Air lift loop reactor		
6	18BBT028	S.Janani	Paramecium model		
7	18BBT029	L.S.Jayasubitsha	Dna fingerprinting		
8	18BBT033	Madhan. G	Science of stem cells		
9	18BBT006	Arunika.N	Biofuels	26	Third

I UG- Winners

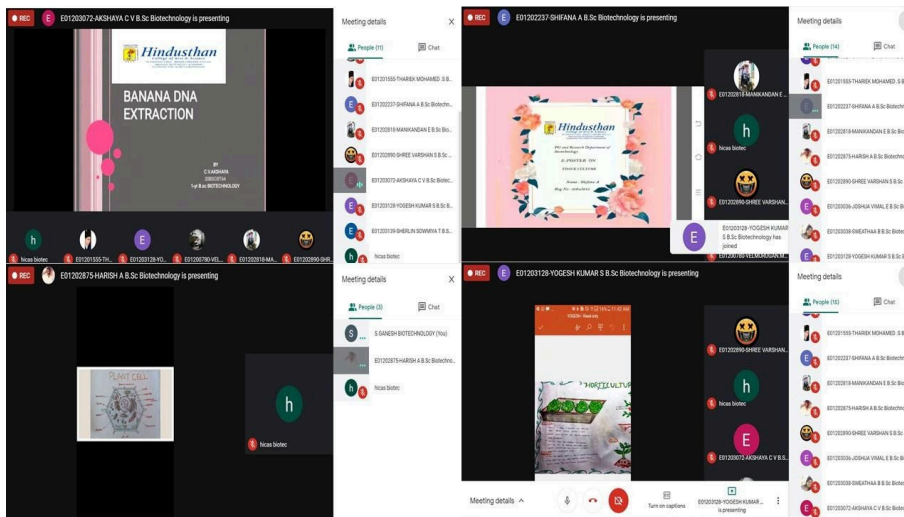
S.no	Reg. No	Name	Title	Marks obtained (30 marks)	Position
1.	20BSCBT33	Shahana nasrin. P	Brain-eating amoeba	25	First
2.	20BSCBT28	Sachin raja. S	Taxonomy	23	Second
3.	20BSCBT08	Farhana. V. M	Autism spectrum disorder	23	
4.	20BSCBT61	Sandhiya. J	Latic acid bacteria	23	
5.	20BSCBT02	Ameer deen. A	Mitosis	21	Third
6.	20BSCBT25	Ponnar sangar. J	The principle of ecology	21	
7.	20BSCBT41	Swathy lakshmi. R	Nipah virus	21	

II UG-Winners

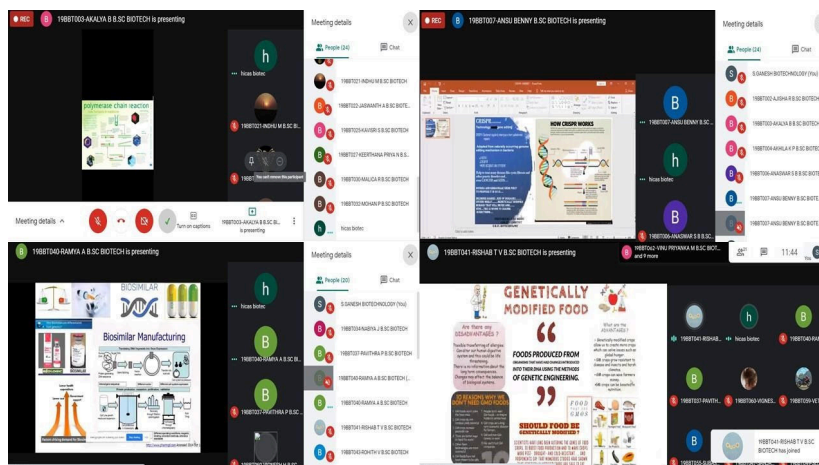
S.No	Reg.No	Name	Title	Marks obtained (30 marks)	Position
1	19BBT047	Sanjana r	Stem cell & Regeneration therapy	26	First
2	19BBT027	Keerthana priya. N	Ideonella Sakaiensis		
3	19BBT030	Malica. R	Biotechnology in Medicine		
4	19BBT007	Ansu benny	Crisper	25	Second
5	19BBT010	Bama. L	Future of Biotechnology in Agriculture		
6	19BBT055	Subash Kannan. R	Hydroponics		
7	19BBT062	Vinu Priyanka. M	DNA Cloning & r-DNA	23	Third
8	19BBT043	Rohith. V	Molecular Virology		
9	19BBT025	Kavisri. S	Cell Banking		



Glimpses of poster presentation (28.09.2020 / IIIUG)



Glimpses of poster presentation (29.09.2020 / IUG)



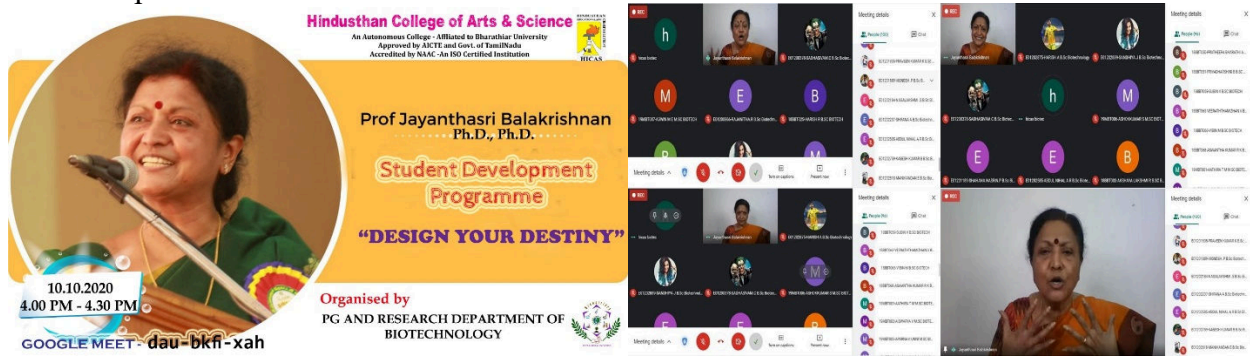
Glimpses of poster presentation (30.09.2020 / II UG)

The Department jointly with Department of Microbiology organized the “Student Development Programme” on 10th October 2020.

Resource person: Prof. Jayanthasri Balakrishnan,
Topic: Design your Destiny

Key points discussed in the program:

- Enlightened the students on the importance of online-education during pandemic and how to achieve the destiny was clearly mentioned.
- The education value and future outcomes were discussed.
- Encouraged the students of Biotechnology about the advancements in medical field also; Especially collaboration work with other departments to invent the new ideas was emphasized.
- Discussed about exams, achievements, dreams and destiny was explained.
- How to approach exam with positive attitude, how to explore dreams and real success was explained.



Glimpses of Student Development Programme

The Department in association with Centre for Bioscience and Nanoscience Research, Coimbatore, organized the **Online Workshop Programme on “Human Karyotyping” 07.12.2020.**

Resource person: Dr. R. Raguathan

Topic: Human Karyotyping

Key points discussed in the program:

- A brief introduction about karyotyping, preparation of chromosomes for karyotyping and Genetics was discussed.
- Study of chromosome banding pattern in Human, Animal and Plants were differentiated with suitable examples.
- Single nucleotide polymorphism and its importance were explained.
- Hands-on experience on chromosome banding was demonstrated virtually.



Brochure of Online Workshop Programme on “Human Karyotyping”

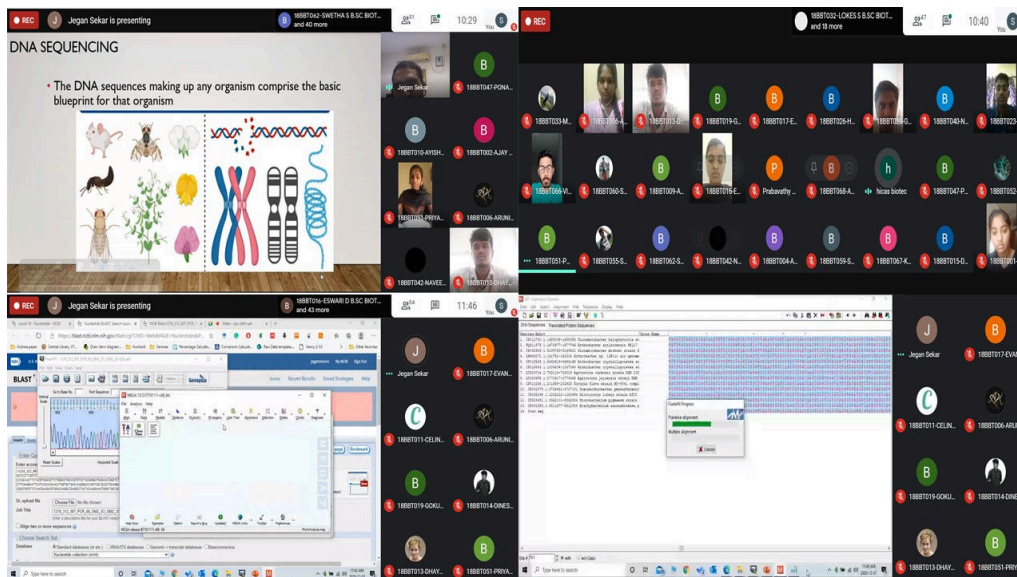
The Department organized the **Two-Days Hands on Training Workshop on “Sequencing Tools and Phylogenetic Analysis” 30.11.2020 to 01.12.2020.**

Resource person: Dr. Jegan Sekar, Scientist, Microbiology Lab, M. S. Swaminathan Research Foundation, Chennai.

Topic: Sequencing Tools and Phylogenetic Analysis

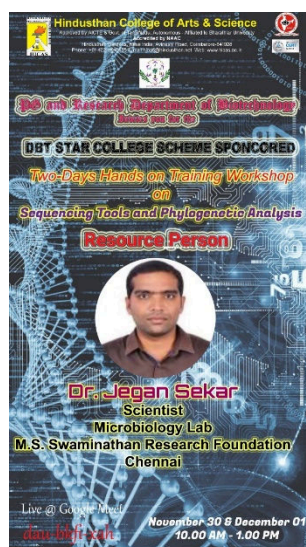
Key points discussed in the program:

- ❖ In the theory section, Introduction to DNA isolation, characterization, sequencing, types of alignment, phylogeny, webservers, sequence collection and usage of software were discussed.
- ❖ In the hands-on Training Program, the students were assigned as a group and provided Software and sequences for practice also how to retrieve the sequence and BLAST analysis was well explained.
- ❖ The evolutionary relationship and Phylogenetic analysis of the retrieved sequences were demonstrated through online webservers.
- ❖ MEGA 7.0.21 software was provided to the students and guided to translate the sequence and pairwise alignments were done.
- ❖ The results were demonstrated and Interpretation was given at the end of the session about sequence alignment, matching, mismatching.



Glimpses in Hands on Training Workshop

Invitation



The Department in association with Centre for Bioscience and Nanoscience Research, Coimbatore, organized the **Online Workshop Programme on “Techniques in Microbiology and downstream processing”** 02.12.2020 to 03.12.2020.

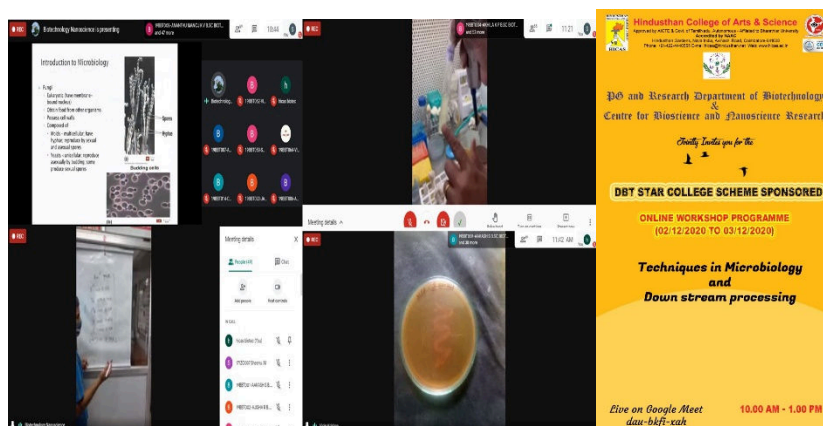
Resource person: Dr. R. Raguathan

Topic: Techniques in Microbiology and Downstream processing

Key points discussed in the program:

- ❖ In the theory part, a brief introduction about Microbiology, sterilization techniques, Control of growth and media preparation was discussed.
- ❖ Media preparation, serial dilution, a plating method, incubation, staining method and growth curve was demonstrated.

- ❖ The measurement of cell dimension was explained using micrometry, also explained about generation time and Microbial enzyme production.
- ❖ The importance of medical microbiology and Antibiotic sensitivity tests were discussed.
- ❖ Utilization of downstream processing using fermented products, salt precipitation, dialysis, purification by column chromatography and UV-VIS spectrometry were demonstrated.



Glimpses in Online Workshop Programme

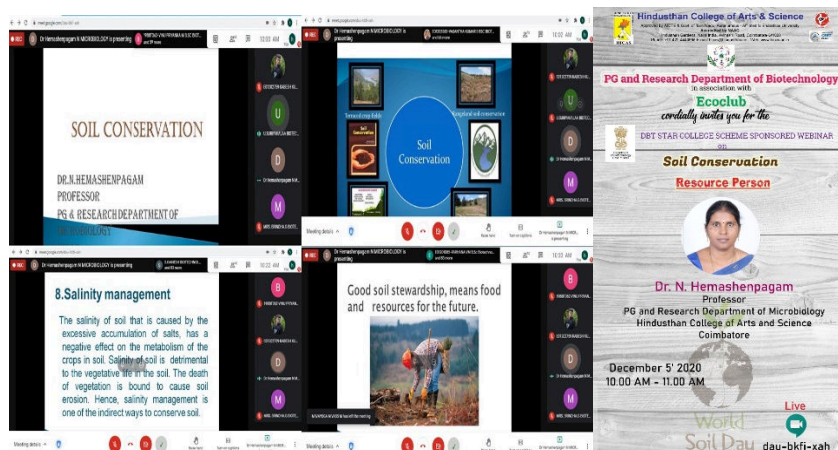
The Department and its association brand Ecoclub organized the **Webinar for World Soil Day on “Soil Conservation” 05.12.2020.**

Resource person: Dr. N. Hemashenpagam, Professor, PG and Research Department of Microbiology, HICAS.

Topic: Soil Conservation

Key points discussed in the program:

- ❖ The importance of soil formation, soil fertility conservation, damage and erosion were briefly explained.
- ❖ Conservation of soil erosion given examples of organic farming, restore wetlands, Proper conservation policies, etc.,
- ❖ Plant cropping system and nutrient contents of soil could be improved by biofertilizer and natural resources.
- ❖ Salinity is a major issue in agricultural land, which reduce the yield of the crops, the management of salinity is an indirect way to conserve the soil
- ❖ The value of the soil in crop production was highlighted and maintaining the soil quality was emphasized.



Glimpses in Soil Conservation

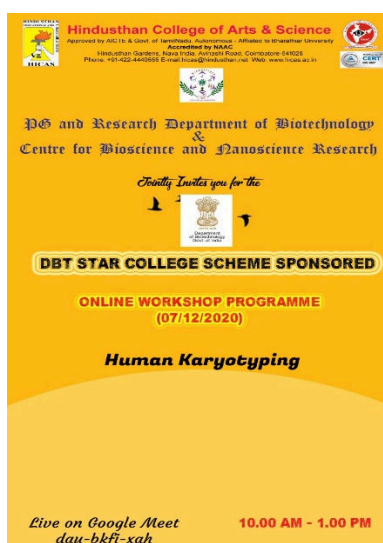
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Key points discussed in the program:

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- ❖ Study of chromosome banding pattern in Human, Animal and Plants were differentiated with suitable examples.
- ❖ Single nucleotide polymorphism and its importance were explained.
- ❖ Hands-on experience on chromosome banding was demonstrated virtually.



Brochure of Online Workshop Programme on “Human Karyotyping

The Department in association with Dr. N.G.P Arts and Science College, Coimbatore, jointly organized the “**DBT Star College Scheme – Virtual Seminar**” on **02.02.2021**.

Resource person:

Dr. Harikrishnan, research Associate, Plant Molecular Biology, M.S. Swaminathan Research Foundation, Taramani, Chennai.

Topic: An overview of Crisper Technology

Key points discussed in the program:

- ❖ A detailed note on genetic engineering with year were highlighted.
- ❖ Differentiation and importance of Genome editing tool such as SSNs, ZFNs, TALENs and CRISPER / Cas9 was discussed
- ❖ Genome editing using site specific Nucleases of Protein based and RNA based editing were highlighted with different software.
- ❖ Genetic transformation of gene from gene selection to plant analysis using CRISPER was demonstrated.

Total number of participants: 139



Brochure of DBT Star College Scheme – Virtual Seminar

The Department commemorated the “**National Science Day**” as a National – level meet on **26.02.2021** under **DBT STAR College Scheme**. Various Competitions were held to show-cast the talents of the students such as Pencil sketching, Quiz, Just-a-Minute, Agar Art, Facial painting, Hand painting, Soap-carving and poster presentation. Around 300 participants from 10 different schools and 6 Colleges participated in this event. The winners of the competitions were awarded with a cash prize, medal and certificate.

Following events conducted / prizes distributed

S. No	Events / Competitions	Name / Institutions	Place
1	Pencil-sketching	G. Nithish kumar, Hindusthan Matric School	First

		M. Naveen, Hindusthan Matric School	Second
		R. Ragul, Hindusthan Matric School	Third
2	Quiz	Jayabharath, VISCOM, HICAS	
		K. Akileshwaran and B. Abivashini, Dr. N.G.P. Arts and Science College	First
		Anil & Kabilan / Naveen & Kiran, Hindusthan Matric School	Second
		Vishal & Pramesh, Hindusthan Matric School	Third
3	Just-a-Minute	Vishal, Hindusthan Matric School	First
		M. Dharani, Dr. N.G.P. Arts and Science College	Second
		Akshya, HICAS	Third
4	Agar-Art	Ragul Jayaram, VISCOM, HICAS	First
5	Facial painting (Face-Art)	N. Arundathy & S. Brindha, IT, HICAS	First
6	Hand-painting (Hand-Art)	Bharathraj & Ashwiny Priya, Dr. N.G.P. Arts and Science College	First
7	Soap-carving (Soap-Art)	P. Muthukumar, IT, HICAS	First
8	Poster presentation	Gowtham Krishnan, HICAS	First
		Smirthi	Second
		Keerthana priya	Third



Glimpses of Commemoration National Science Day-2021



Commemoration of National Science Day-2021 published in "The Covai Mail" on 28.02.2021

ABOUT THE COLLEGE
Hindustan College of Arts & Science, 75, Adambakkam Cross Road, Adambakkam, Chennai-600 020 and is affiliated to the Tamil Nadu Legislative Council. The college provides a wide range of courses in the field of Arts, Science, Commerce and Management Studies. The college has a long tradition of excellence in education and research. It has a strong emphasis on providing quality education to its students and is committed to the development of its faculty and infrastructure. The college has a wide range of facilities, including a library, a computer center, a sports ground, and a canteen. It also has a strong tradition of social service and community work.

ABOUT THE NATIONAL SCIENCE DAY
The National Science Day is celebrated every year on February 28. It is a day to honor the scientists who have made significant contributions to the field of science. The day is celebrated in various ways, including lectures, seminars, and exhibitions. The National Science Day is a great opportunity for students to learn about the latest developments in science and to meet with leading scientists. It is also a day to celebrate the achievements of Indian scientists and to inspire young people to pursue careers in science.

WHO CAN PARTICIPATE?
Students of all colleges and universities in Tamil Nadu are eligible to participate in the competition. The competition is open to students of all levels, from school to postgraduate. The competition is a great opportunity for students to showcase their knowledge and skills in science. It is also a chance for students to win prizes and to be recognized for their achievements. The competition is held annually and is one of the most prestigious events in the field of science in India.

ORGANIZING COMMITTEE
The organizing committee for the National Science Day competition is headed by the Vice-Chancellor of the college. The committee consists of faculty members and students who are passionate about science and education. The committee is responsible for the selection of participants, the organization of the competition, and the awarding of prizes. The committee also works to promote the competition and to encourage students to participate. The organizing committee is committed to providing a high-quality competition and to ensuring that all participants have a positive experience.

PROGRAMME SCHEDULE
The programme schedule for the National Science Day competition is as follows:
09.30 AM to 10.00 AM: Registration
10.00 AM to 10.30 AM: Inauguration
10.30 AM to 11.00 AM: Competitions
11.00 AM to 11.30 AM: Tea Break
11.30 AM to 12.00 Noon: Welcome Address by Dr. G. Rajakrishnan, Professor and Head
12.00 PM: About the Programme
12.10 PM: Keynote Address by Dr. K. Ramaswami, Vice-Chancellor, Hindustan College of Arts & Science
12.15 PM: Presidential Address by Dr. A. Srinivasan, Vice-Chancellor, Hindustan College of Arts & Science
12.20 PM: Introduction of Chief Guest
12.25 PM: Inauguration
01.00 PM: Valedictory and Certificate Distribution
National Anthem

LEVELS OF COMPETITIONS AVAILABLE

Level	Participants	Prize Money
Individual	Rs. 1500/-	Rs. 1000/-
Team	Rs. 1000/-	Rs. 500/-
Group	Rs. 500/-	Rs. 250/-

4 Certificates will be issued to all participants.

ORGANIZING COMMITTEE

Chairman: Dr. K. Ramaswami, Vice-Chancellor
Chief Executive Officer: Dr. G. Rajakrishnan, Professor and Head
Managing Trustee: Dr. S. G. Aravindan, Assistant Professor
Co-ordinators: Dr. P. Sathish Prabhu, Associate Professor and Secretary
Dr. B. Prasad, Assistant Professor
Dr. P. Karthikeyan, Assistant Professor
Dr. A. Raju, Assistant Professor

Brochure