

# Centre for Research

## Maitreyi College, University of Delhi

### SUMMER INTERNSHIP PROGRAMME, 2021-22

As part of SIP 2021-22, 22 projects were carried out from May 25, 2022 to July 25, 2022. A total of 32 faculty members and 87 students were involved in these projects. The theme for SIP 2021-22 was 'The expanding frontiers of knowledge'. External experts from different Universities such as Christ University, Bangalore, University of Delhi, University of Lucknow etc. evaluated all the project reports. Based on the evaluation, selected projects were presented, in parallel sessions, on 28<sup>th</sup> September, 2022 in Avlokan before external jury members from Jawaharlal Nehru University, and University of Delhi.

#### Projects carried out under SIP 2021-22

S. No.	Code	Title of Project	Department	Mentor/s	Mentees
1	SIP21-22/01	Efficacy of Seed Priming Technology on Promotion of Seed Germination and Plant Growth Under Abiotic Stress in <i>Vigna radiata</i> and <i>Oryza sativa</i>	Botany	Dr. Rama Sisodia, Dr. Shweta Sharma	Vedanti Garg, Ishani Mallick, Sonia Chauhan, Naiya Chauhan B. Sc. (P) Life Science II year,
2	SIP21-22/02	Qualitative and quantitative analysis of plant pigment anthocyanins from selected flowering plants and their stabilization using organic molecules	Botany	Dr. Monika Heikrujam, Dr. Mansi Gogna, Dr. Rama Sisodia	Kaveri Choudhary, Riya Uniyal, Yaiveinai Ngade, Kajal Senger, B.Sc. Life Science II year
3	SIP21-22/27	Fabricated natural hydrogels and their potential for agricultural applications	Chemistry, Botany	Dr. Kiran Soni, Dr. Swarndeeep Kaur Sethi, Dr. Gita Batra Narula, Dr. Pooja Baweja	Nancy Ghai, Anita Kumari, Kanishka, Isha Bedwal, Prachi, Uma Rani, B.Sc. (H) Chemistry II year

					Manu Gahlot, Tanushka, B. Sc. (H) Botany I year
4	SIP21 -22/03	Exploring the role of structurally engineered nano-sized sustainable materials for remediation of contaminated water samples”	<b>Chemistry</b>	Dr. Swarndeep Kaur Sethi, Dr. Gita Batra Narula, Dr. Kiran Soni	Bagmita Biswas, Gitika Sharma, Isha Chopra, Pragy Narain, Priyanka, Taniya kaushik, B.Sc. Life Science III year
5	SIP21 -22/04	Influencer Marketing: an effective marketing tool for the Indian GenZ market	<b>Commerce</b>	Ms. Kritika Khurana, Dr. Jyotsna	Priyamvada Rajpal, Aakanksha Agarwal, Radhikka Bajpai, Pranjal Sihag B.A. (H) Economics I year
6	SIP21 -22/05	Sentiment Analysis Of Indian Tweets During Covid-19	<b>Computer Science</b>	Dr. Manju Bhardwaj, Dr. Shikha Badhani	Priya Mishra, Maulika Sharma B. Sc. Physical Science (Computer Science) II year
7	SIP21 -22/06	Credibility Analysis of Information on Social Media Platforms using Machine Learning	<b>Computer Science</b>	Dr. Veena Ghuriani	Ms. Shivangi Bhatia, Ms. Shruti Khurana, B.A. (Prog.) III year
8	SIP21 -22/07	Trend of Online Degree Courses in India: Challenges, Issues and Opportunities	<b>Computer Science</b>	Ms. Rupali Ahuja	Devika Ahlawat, Janhavi Khandelwal, Lavanya Bhat B.A. (Prog.) (Computer Applications + Economics) I year
9	SIP21 -22/08	Cybercrime in India: An Analysis of Crime against Women in ever Expanding Digital Space	<b>Computer Science</b>	Ms. Rupali Ahuja, Dr. Shweta Sankhwar	Tanya Choubey, Priyanshi, Tanusha Jain, Muskan Verma B.Sc. Physical Science (Computer Science) III year
10	SIP21 -22/09	Analysis of Toxic Social Media Text using Deep Learning Techniques	<b>Computer Science</b>	Dr. Shweta Sankhwar, Ms. Tripti Agarwal	Tanya Chaudhary, Shruti Sharma B.Sc. Physical Science (Computer Science) III year

					Ruchika, Aaditri Saraswat, B.Sc. Physical Science (Computer Science) I year
11	SIP21-22/10	Impact Of Artificial Intelligence On The Indian Economy And A Case Study Of China	<b>Economics</b>	Dr. Saroj Rani	Aarushi Shankar, Riju Garg, B.A. (H) Economics II year
12	SIP21-22/14	Blockchain in Research	<b>Mathematics</b>	Ms. Rajni Gupta, Dr. Khushboo Bussi	Srishti Uniyal, Kritika Kanojia, Sakshi Punia, Saloni Tiwari B.Sc. (H) Mathematics II year
13	SIP21-22/15	An Analysis with Mathematical Approach - Major reasons behind the Crisis of Yes Bank from the Indian Stock Market	<b>Mathematics</b>	Ms. Nikita Mittal, Ms. Monika Meena	Antra Sharma, Ananya Paliwal, B.A. (H) Economics II year
14	SIP21-22/16	Optimization of Solar Power for Automatic Control using Sensors	<b>Physics</b>	Dr. Parul Yadav, Dr. Mansi Dhingra, Dr. Neha Gupta	Viashali Bagauli, Simrat Kaur, Bhawna, Ria Goel B.Sc. (Hons) Physics II year  Anshita Sharma, Jeau Mishra B.Sc. (H) Physics I year
15	SIP21-22/17	Battery Capacity: Measurement and Analysis	<b>Physics</b>	Dr. Ritu Dhingra, Dr. Prajwalit Shikha	Aastha Agarwal, Urvashi Sangrola, Preeti, Pranshi Mathur, B.Sc. (H) Physics II Year
16	SIP21-22/18	To design and build a portable Gaussmeter	<b>Physics</b>	Dr. Apoorva Verma, Dr. Ritu Dhingra	Amanjot, Shiva Raj, Soumya Bajpai, Ananya Course, B.Sc. Physics (H) I year
17	SIP21-22/19	Electromagnetics of SERS Tailored with SPR using Anisotropic Nanoparticle System near	<b>Physics</b>	Dr. Neelam Singh	Dhruvi Agrawal, Mansi Tewatia, B.Sc. (H) Physics II year

		a cancer molecule: A First Principle Account			
<b>18</b>	SIP21 -22/20	Quantum computing: Principles, Applications and Developing of Quantum Tools	<b>Physics</b>	Dr. Parul Yadav, Dr. Shalini lumb Talwar, Dr. Mansi Dhingra	Sharanya Renjit, Vaishali Sharma, Purnima Wadhwa Sweta Singh, Monika Suthar, Rishika Mittal B.Sc. (H) Physics II year
<b>19</b>	SIP21 -22/21	Growth and Characterization of Piezoelectric Single Crystals and Study of its Electrical Properties	<b>Physics</b>	Dr. Prajwalit Shikha, Dr. Sumit	Avnika Tyagi, Bhawna Verma, Kirti Bhagia, Megha Bhardwaj, Shreya Chaturvedi, Nimisha Sagar B.Sc. (H) Physics II year
<b>20</b>	SIP21 -22/22	Study the impact of the Polycystic Ovarian Syndrome (PCOS) on quality of life of affected women in India	<b>Sociology</b>	Dr. Aruna Grover	Ria Rao, Kunika Tyagi, B.A. (H) Sociology II year
<b>21</b>	SIP21 -22/24	Consistent occurrence of loss of hair due to SARS-CoV-2 infection and after vaccination	<b>Zoology</b>	Dr. Luni, Dr. Tejendra Kumar	Ayushi Wadhwa, Gayatri Pani, Ms. Vanshika Attrish, Ms. Tisha Aggarwal, B.Sc. (Prog.) Life Sciences II year
<b>22</b>	SIP21 -22/25	Exploring knowledge, attitude and practice of contraception among women: A novel approach towards attaining reproductive health	<b>Zoology</b>	Dr. Meena Yadav, Dr. Brototi Roy	Pallavi Pandey, Purva Aggarwal, Anshu Rana, Shruti Kaushik, B.Sc. (H) Zoology, III year