

List of DBT sponsored Projects (2021-2022)

DBT STAR College Scheme offers UG students and faculty an opportunity to excel in scientific research. The program emphasizes on the holistic improvement of science education at the undergraduate level. This scheme was sanctioned in 2017. One of the main components of this scheme was to promote interdisciplinary research activities for undergraduate students. In the last four years, UG students are engaged in several research projects. This year, 57 interdisciplinary projects were conducted:

S. No.	Title of the Project	Mentor/s	Detail of Student/s with courses
1	To investigate the conditions which promote lysogeny in temperate mycobacteriophages	Prof. Urmi Bajpai (Biomedical Science)	Anirudh Kumar Srishti Singh B.Sc. (H) Biomedical Science, II Year
2	To check whether virus/phages undergo lysogeny based on Virus-Virus interaction only		Mehak Sharma B.Sc. (H) Biomedical Science, II Year
3	Purification and characterization of lysins from mycobacteriophages.		Pulkit Singh B.Sc. (H) Zoology, II Year
4	Bacteriophage encoded lysins: Nature's Enzybiotics (Enzyme as antibiotics)		Shivam B.Sc. (H) Biomedical Science, II Year
5	Tumor Suppressor Genes v/s Body Mass & Longevity	Dr Sunita Jetly Dr Ritu Khosla (Biomedical Science)	Yash Goel Sharika Mattoo B.Sc. (H) Biomedical Science, II Year

6	Synthesis of various Nanoparticles by using extracts from medicinal plants, their characterization and assessment of antimicrobial properties	Prof. Gagan Dhawan Dr Satendra Singh (Biomedical Science) Prof. Seema Gupta (Chemistry)	Suravi, Riya, Alshad, Gaurav, Hiya, Tabish, Kalyani, Nidhi, Harshelle, Tanushree, Deeparati, Harinandna, Krishna and Kapil B.Sc. (H) Biomedical Science and B.Sc. (H) Chemistry, II Year
7	Genetic predisposition to Hepatocellular carcinoma and possible prognosis and treatment strategies	Dr Archna Pandey Dr Ritu Khosla (Biomedical Science)	Bisakha Das Pritika Kwatra B.Sc. (H) Biomedical Science, III Year
8	Utilization of lignocellulosic waste in cultivation of Pleurotus djambor var. roseus (Pink oyster mushroom) and recovery of enzymes from spent mushroom substrate.	Dr Anupama Shukla Dr Anita Narang (Botany)	Riya Dayal Lalit Pal Maniket Chauhan Kanchan Pratham Singh Chauhan Shreya Singh B.Sc. (H) Botany, II Year
9	Collection, isolation, characterization and cultivation of different mushrooms	Dr Anupama Shukla Dr Anita Narang Dr Sumit Sahni Dr Manoj Kumar Singh (Botany)	Vridhi Singh Shubhanshu Krishna Mohd. Afham Kanchan Seema Akanksha B.Sc. (H) Botany, III Year

10	Mitigating Air pollution through Phylloremediation	Prof. Charu Khosla Gupta (Botany)	Jay Kumar Sirmoria Sruthi S. Kumar Aishwarya Kumar Chaturvedi B.Sc. (H) Botany, II Year
11	Climate Change and Plant-pollinator relationship		Mridula Rani Mayank Yadav B.Sc. (H) Botany, II Year
12	Study of effect of air pollutants on soil microbiome	Prof. Charu Khosla Gupta Dr Yash Mangla (Botany)	Nikhil Sharma Sahil Chauhan B.Sc. (Prog.) Life Science, II Year
13	ROS regulation during stages of seed germination owing to temperature stress in Sunflower seedling	Dr Geetika Kalra Dr Anita Thakur (Botany)	Arunima Dey Devanshi Saini Deepanshu Kumar Vibha Shukla B.Sc. (Prog.) Life Science, II Year
14	Cultivation of Pleurotuseryngii (King oyster mushroom) on lignocellulosic waste and characterization of enzymes from spent mushroom substrate	Dr Anupama Shukla DrSumitSahni (Botany)	MrMohd. Afham B.Sc. (H) Botany, II Year
15	Cultivation of Pleurotuseryngii (King oyster mushroom) on lignocellulosic waste and characterization of enzymes from spent mushroom substrate	Dr SumitSahni Dr Manoj Kumar Singh (Botany)	MsVridhi Singh B.Sc. (H) Botany, II Year

16	Utilization of Lignocellulosic waste in cultivation of Pleurotusostreatus (Blue Oyster Mushroom) and recovery of enzymes from spent mushroom substrate	Dr SumitSahni (Botany)	MrMrityunjoy Chakraborty MrShubhanshu Krishna B.Sc. (H) Botany, II Year
17	Synthesis of Fe ₃ O ₄ nanoparticles through sonication and its effects	Prof. Sunita Hooda Prof.Geetu Gambhir (Chemistry)	Puneet Chauhan AkshitJauhri Soven K. Samal B.Sc. (Prog.) Life Science, I Year
18	Investigative study of groundnut husk for the adsorptive removal of dyes from aqueous solution.		Geni Yao Eniya Tapo B.Sc. (Prog.) Life Science, III Year
19	Adsorption of organic dye by magnetized Graphene oxide, Ground nut husk, Guar gum from Aqueous Solution.		Yashank Chauhan Akshat Bhanu Dharmani B.Sc. (Prog.) Life Science, III Year
20	Synthesis of nanoparticles of Polyvinyl Alcohol by CO-Precipitation method		Kapil Sharma Khushi Vishwakarma Vishwa Deepak Srivastava B.Sc. (Prog.) Life Science, I Year
21	Synthesis of magnetic nanoparticles and UV-Visible analysis	Prof. SunitaHooda Prof.GeetuGambhir (Chemistry)	Abhijit Roy Bipasa Arya B.Sc. (Prog.) Life Science, I Year

22	Synthesis and Biological Activity of Chalcones	Prof. Rashmi Thukral (Chemistry)	Aashi Yukta Aditi Heena B.Sc. (Prog.) Life Science, II Year
23	Extraction of essential oils by Green methods	Dr Manisha Jain (Chemistry)	Anjali B.Sc.(H)Chemistry, II Year
24	Computational Studies on some Inorganic Compounds Using Avogadro and Gaussian Softwares	Dr Manisha Jain Dr NeetiMisra (Chemistry)	Aditi Kandari Somya Singh B.Sc. (H) Chemistry, II Year
25	Review on synthesis of Heterocyclic compounds and extraction of medicinal plants	Prof. Pankaj Khanna Dr Neeti Mishra Dr Kavita Mittal (Chemistry)	Jai Gautam B.Sc. (Prog.) Physical Science, II Year Shweta B.Sc. (H) Chemistry, II Year
26	Use of catalysts for synthesis of biologically active heterocyclic compounds	Dr Kavita Mittal (Chemistry)	Shweta B.Sc.(H)Chemistry, II Year
27	Magnetite Graphene Oxide/Chitin Nanocomposites as Ion Sensors from Aqueous Systems: A DFT Study	Dr Pragati Malik (Chemistry)	Arnav Bhatt SachinRao B.Sc. (Prog.) Life Science, II Year

28	Analyzing the effect of crime in India over Female foreign tourists	Prof. SharanjitKaur (Computer Science)	Suruchi Verma TishyaThukral B.Sc. (H) Computer Science, III Year
29	Exploring machine learning models for ransomware data		Nirmal Mor Sushant B.Sc. (Prog.) Physical Science(Computer Science), III Year
30	Implementing four virtual labs (computer Science computer simulations) https://www.vlab.andcollege.du.ac.in/	Prof. SharanjitKaur Dr Gunjan Rani Dr Nishu Singh Dr Vandita (Computer Science)	Nilesh Pandey Amitesh Ananya Shukla Siya Agarwal Harsh Bamotra Shahnawaz khan Sakshi Garg Aliya Vivek Sankhyan Pankaj Sahu Palak Sharma B.Sc. (H) Computer Science, II Year
31	Disaster management to combat Covid-19	Dr Harita Ahuja, Dr Sunita Narang (ComputerScience)	Sant Anandita Abhishek B.Sc. (H) Computer Science, III Year

32	Data Analysis and Visualization of Rainfall and floods in India		Deepanshu Megha Karki Shruti Jain B.Sc. (H) Computer Science, III Year
33	College Resource and Space Utilization App	Mr Mahesh Kumar (Computer Science)	Jyotika Sharma Rishabh Sharma Tanisha Sharma B.Sc.(H) Computer Science, II Year
34	Issues, Challenges, and Growth of e-Learning during Covid-19 pandemic	MsNishu Singh Mr Mahesh Kumar (Computer Science)	Tanu G Anam Khan Jyotika Sharma Tanisha Sharma B.Sc.(H) Computer Science, II Year
35	Visualizing your data of music app	Ms Gunjan Rani Mr Mahesh Kumar (Computer Science)	Somesh Abhishek Akancca B.Sc. (Prog.) Physical Science(Chemistry), II Year
36	Alumni Database Handling	MsGunjan Rani (Computer Science)	Harsh Bamotra Pratham Sharma B.Sc.(H)Computer Science, II Year Palak Sharma B.Sc. (Prog.) Physical Science(Chemistry), II

			Year
37	Faculty Database Handling		Shahnwaz Khan Pankaj Sahu Garvit Dubey B.Sc.(H) Computer Science, II Year
38	Text to Speech Converter		Vivek Sharma Aliya Sakshi Garg B.Sc. (Prog.) Physical Science(Chemistry), II Year
39	V-Labs		Nilesh Pandey Sahiba Siya Agarwal B.Sc.(H) Computer Science, II Year
40	Library Book Reminder		Vivek Sharma Aliya Sakshi Garg B.Sc. (Prog.) Physical Science (Chemistry), II Year
41	Designing of a first order Low-pass and High-pass filter using op-amp (Virtual Lab Development)	Dr Ravneet Kaur Ms Gauri Ghai (Electronics)	Ankush Rana B.Sc. (H) Electronics, II Year Vishal Gupta B.Sc. (H) Electronics, I

			Year
42	Study of the I-V characteristics of the Common Base configuration of BJT and obtain r_i , r_o , α . (Virtual Lab Development)	Dr Ravneet Kaur Ms Gauri Ghai (Electronics)	Anubhav Singh Alok Singh B.Sc. (H) Electronics, II Year
43	To design JK Master Slave using elementary gates (Virtual Lab Development)		Akash Jha B.Sc. (H) Electronics, II Year Muskan Kumar Sharma B.Sc. (H) Electronics, I Year
44	To verify Malus law		Swati Shukla B.Sc. (H) Electronics, II Year Sneha B.Sc. (H) Electronics, I Year
45	To determine the value of Boltzmann constant by study the forward characteristics of diode.		Naman Prasad B.Sc. (H) Electronics, II Year
46	Monte Carlo Estimation and Simulation of Pi using the 3D geometry Octahedron	Dr Sanjeeta Rani Dr Manisha Verma (Physics)	Ayush Mishra B. Sc. (H) Physics, II Year
47	Monte Carlo Estimation and Simulation of Pi using the 3D geometry Icosahedron		Vaibhav Thapliyal B. Sc. (H) Physics, II Year

48	To determine Young's modulus, Modulus of rigidity and Poisson's ratio for the material of a wire by Searle's method with the help of Vlab.	Dr Sanjeeta Rani Dr V. Bhaskar Raj Dr Satya Prakash Dr Neelakshi Borah (Physics)	Neha Khanra Nisha Khanra B.Sc. (H) Physics, I Year
49	Automated and upgraded machine as replacement of noncontact thermometer used for COVID-19 detection for entry in public spaces such as metro stations, parks etc.	Prof. Arijit Chowdhuri Dr V. Bhasker Raj (Physics)	Pratham Malik B.Sc. (Prog.) Physical Science (Electronics), II Year Niharika Upadhyay B.Sc. (H) Biomedical Science, III Year
50	Environmental and gas sensing applications of Quartz Crystal Microbalance (QCM)		Kalpajit Roy Pralhad Sharma Varnika Aggarwal B.Sc. (H) Physics, II Year
51	Investigating the factors influencing generation and effects of Eddy currents	Prof. Seema Makhija (Zoology) Prof. Arijit Chowdhuri (Physics)	Rati Chaturvedi B.Sc. (H) Zoology, I Year
52	Gas Leakage Detector using Arduino and GSM Module with SMS Alert and Sound Alarm	Dr V Bhasker Raj (Physics)	Prashant Verma B.Sc. (H) Physics, II Year
53	Mutations in SARS-COV 2	Prof. Sarita Kumar (Zoology)	Anshika Sharma B.Sc. (H) Zoology, I Year
54	Effect of Chitin Synthesis Inhibitors on the growth and biochemical parameters		Gunjan Grover B.Sc. (H) Zoology, II

	of insect pests of agricultural importance		Year Anaam Asif Moin Charu Jaiswal Khushi Aggarwal Khushi Vashishtha Twishi Mishra Kanishka Bothra Divya Yadav Shruti Kumari Singh Preeti Singh Sanskriti B.Sc. (H) Zoology, I Year
55	Biological Importance of heterocyclic Compound	Prof. Ravi Toteja Prof. SeemaMakhija (Zoology) Dr Pooja Bhagat (Chemistry)	Swati Maheshwari Ujjwal Kumar Gupta Radhika Garg B.Sc. (H) Zoology, II Year
56	Bioindicators to assess the soil quality of ANDC College	Prof. Ravi Toteja Prof. SeemaMakhija Dr Rahul Dev (Zoology) Dr Pooja Bhagat (Chemistry)	Meghana Bisht Tanya Chopra Ayushi Gupta B.Sc. (H) Chemistry, II Year

57	Creation of animation and simulator for Virtual Laboratory of Zoology practicals	Prof. Ravi Toteja Prof. Seema Makhija Dr Rahul Dev (Zoology)	Avnija Tyagi Ritika Chandel Sejal Arora B.Sc. (H) Zoology, III Year HarshitaBasab B.Sc. (H) Zoology, I Year
----	--	---	--

2020-21

S. No.	Title of the Project	Mentor/s	Detail of Student/s with courses
1	Phage Hunting: Collection, isolation and purification of Mycobacteriophages from soil, water and sewage	Prof. Urmi Bajpai (Biomedical Science)	Pulkit Singh B.Sc. (H) Zoology, II Yr
2	Survey to assess the Effect of COVID-19, an infectious disease on the mental health of the students.	Dr Sunita Jetly (Biomedical Science)	Siddharth Mehdiratta Alisha Ansari Muskan Gupta B.Sc. (H) Biomedical Science, II Yr
3	Survey on extent of Awareness amongst the students of Delhi/NCR in regards to Pandemic COVID-19.	Dr Sunita Jetly (Biomedical Science)	Siddharth Mehdiratta Alisha Ansari Muskan Gupta B.Sc. (H) Biomedical Science, II Yr
4	Survey to evaluate the intensity of psychological impact in terms of anxiety, stress and depression on the mental well-being of students due to the lockdown	Dr Sunita Jetly (Biomedical Science)	Siddharth Mehdiratta Alisha Ansari Muskan Gupta B.Sc. (H) Biomedical Science, II Yr
5.	Survey to study the preventive measures adopted by the students to	Dr Sunita Jetly (Biomedical Science)	Siddharth Mehdiratta Alisha Ansari

	combat the onset of COVID-19		Muskan Gupta B.Sc. (H) Biomedical Science, II Yr
6	To isolate and collect the DNA from onion.	Dr Pooja Bhagat Dr Rashmi Thukral Dr Pankaj Khanna (Chemistry)	Pragya B.Sc. (H) Chemistry, II Yr
7	To determine the pI of the amino acid	Dr Pooja Bhagat (Chemistry)	Bhavesh Siroha & Purti B.Sc. (H) Chemistry, II Yr
8	To determine the melting point of the organic compound	Dr Kavita Mittal (Chemistry)	Harshita B.Sc. (H) Chemistry, II Yr
9	Result Analysis	Dr Sharanjit Kaur Ms Vandita Grover (Computer Science)	Aditya Goyal Devesh Yadav Jasveer Singh Yadav Sushant Sharma B.Sc. Physical Science with Computer Science, II Yr
10	Examination Planner	Dr Sharanjit Kaur (Computer Science)	Abhinav Singh Ashwin Kumar Chirag Garg Harsh Upreti S Sai Sacheen Vibhu Singh B.Sc. (H) Computer Science III Yr
11	Simulation of midpoint line	Dr Harita Ahuja	Anshika Varshney

	algorithm using Python Tools	(Computer Science)	Prakriti Gupta Tanya Gupta B.Sc. (H) Computer Science III Yr
12	Twitter sentiment analysis during Covid-19 outbreak in India	Ms Vandita Grover (Computer Science)	Mukesh Kumar B.Sc. (H) Computer Science, II Yr
13	Stock market analysis during COVID-19 outbreak	Ms Vandita Grover (Computer Science)	Chirag Garg S Sai Sacheen B.Sc. (H) Computer Science, III Yr
14	Gesture recognizing smart system using Flex Sensors	Dr Ravneet Kaur (Electronics)	Pushkar Baranwal B.Sc.(H) Electronics, III Yr
15	Virtual Lab for Electronics: To design a 3-dimensional virtual laboratory to carry out experiments of circuit theory and semiconductor devices lab	Dr Ravneet Kaur Dr Monika Bhattacharya (Electronics)	Ashutosh Mani Tripathi B.Sc.(H) Electronics, III Yr
16	To investigate the use of an op-amp as an integrator	Dr Arijit Chowdhuri Dr V Bhaskar Raj Dr Sanjay Kumar Dr Rohtash Singh (Physics)	37 students of B.Sc. (H) Physics, II Yr
17	To investigate the use of an op-amp as a differentiator	Dr Arijit Chowdhuri Dr V Bhaskar Raj Dr Sanjay Kumar Dr Rohtash Singh (Physics)	37 students of B.Sc. (H) Physics, II Yr
18	To design an inverting amplifier using op-amp (741) for dc voltage	Dr Arijit Chowdhuri,	37 students of B.Sc. (H) Physics, II Yr

	of given gain	Dr V Bhaskar Raj Dr Sanjay Kumar Dr Rohtash Singh (Physics)	
19	To design a Wien bridge oscillator for given frequency using an op-amp	Dr Arijit Chowdhuri Dr V Bhaskar Raj Dr Sanjay Kumar Dr Rohtash Singh (Physics)	37 students of B.Sc. (H) Physics, II Yr
20	To design inverting amplifier using Op-amp (741) & study its frequency response and to design non-inverting amplifier using Op-amp (741) & study its frequency response	Dr Arijit Chowdhuri Dr V Bhaskar Raj Dr Sanjay Kumar Dr Rohtash Singh (Physics)	37 students of B.Sc. (H) Physics, II Yr

List of DBT sponsored Projects (2019-2020)

S. No.	Project	Mentors	Students
1	Use of Quadruplex Binding Ligands Against Prion Diseases	Dr Archana Pandey and Mr Prashant Pradhan (Biomedical Science)	Purva, Abhijit Nayak and Ashwin Udey B.Sc. (H) Biomedical Sciences-III year
2	An Estimation of Ambient Air Pollution by Measuring Content of Chlorophyll	Dr Charu Khosla Gupta (Botany) Dr Arijit Chowdhuri (Physics)	Nitish Kalson and Heena Nizam B.Sc. Life Sciences-II Year
3	Using Surface Plasmon Resonance (SPR) Technique (Optical) for Estimation of Chlorophyll	Dr Arijit Chowdhuri (Physics) Dr Charu Khosla Gupta and Dr Yash Mangla (Botany)	Akash Gupta and Anshuman Tripathi B.Sc. (H) Physics-III year
4	Water Pollution – Estimation of Contamination in Local Environment	Dr Charu Khosla Gupta (Botany) Dr Arijit Chowdhuri	Payal Singh and Ankita Negi B.Sc. Life Sciences-II Year

		(Physics)	
5	Heavy Metal Adsorption and Microbial Study of Functionalized Chitin with EDTA	Dr Sunita Hooda and Dr Geetu Gambhir (Chemistry) Dr Sarita Kumar (Zoology)	Rajanshi, Mustabin, Abhijeet, Dharmender, Esha and Khushi B.Sc. Life Sciences-II year Tanuja Sharma B.Sc. (H) Chemistry -I year Senjuti Sengupta, Partho Proteem Das, Akshit Chauhan and Akshat B. Dharmani B.Sc. (H) Zoology (Pass Out)
6	Tool for On-line Choice-based Question Answer System for Student Evaluations	Dr Chandra Kanta Samal, Mrs Shiva Saini and Ms Gunjan Singh (Computer Science)	Purushottam, Aman Raj, Vikas Pandey, Naved Ali, Utkarsh Saxena and Himanshu B.Sc. (H) Computer Science-III year
7	Gesture Recognizing Smart System	Dr Ravneet Kaur and Ms Gauri Ghai (Electronics)	Pushkar Baranwal, Ashutosh Mani and Tripathi Phulender B.Sc. (H) Electronics-II year
8	Wifi-Controlled Robot	Dr Ravneet Kaur and Ms Gauri Ghai (Electronics)	Abhishek Puri Mohit and Supyal Suraj Singh B.Sc. (H) Electronics-II year
9	Automatic Titrator	Dr Ravneet Kaur and Dr Monika Bhattacharya (Electronics)	Aman Tyagi, Yash Varshney and Abhishek Udiya B.Sc. (H) Electronics-II year
10	Smart Dustbin (Sensobin)	Dr Ravneet Kaur and Dr Monika Bhattacharya (Electronics)	Rahul Chawla, Aditya Raj Singh and Amit Rana B.Sc. (H) Electronics-III year
11	Solar Piezoelectric Charger	Dr Ravneet Kaur and Dr Monika Bhattacharya (Electronics)	Abhishek Bhadana and Avinash Kumar Lal B.Sc. (H) Electronics-III year
12	Using the Arduino for the Experimental Determination of a Friction Coefficient by Movement on an Inclined Plane	Dr Amit Garg (Electronics)	Avinash Kumar Lal B.Sc. (H) Electronics-III year Tripti Varshney B.Sc. (H) Physics-II year
13	Laser Based Footfall Counter	Dr Amit Garg (Electronics)	Prahlad Prajapat B.Sc. (H) Electronics-III year Jaya

			B.Sc. Physical Science with Computer Science- III year
14	Li-Fi- Sound Transmission using LED lights	Dr Amit Garg (Electronics)	Devesh Yadav B.Sc. (H) Electronics-II year
15	Smart Mirror	Dr Amit Garg (Electronics)	Prince Sharma and Aqil Ali B.Sc. (H) Electronics-III year
16	Smartphone to Digital Microscope	Dr Amit Garg (Electronics)	Bisakha Das B.Sc. (H) Biomedical Science-I year
17	Voice Controlling Car	Dr Amit Garg (Electronics)	Abhishek B.Sc. (H) Electronics-II year
18	Using Surface Plasmon Resonance (SPR) Technique (Optical) for Trace Level Sensing Applications	Dr Arijit Chowdhuri and Dr V. Bhasker Raj (Physics)	Anshuman Tripathi and Yogesh Shukla B.Sc. (H) Physics-III year
19	Using Quartz Crystal Microbalance (QCM) Technique for Trace Level Sensing Applications	Dr Arijit Chowdhuri and Dr V. Bhasker Raj (Physics)	Siddharth Das B.Sc. Physical Sciences with Electronics-III year
20	Using Arduino Microcontroller for Ambient Air Pollution Measurement Applications	Dr Arijit Chowdhuri and Dr V. Bhasker Raj (Physics)	Adarsh Prasad B.Sc. Physical Sciences with Electronics-III year
21	Alterations in Biochemical and Molecular Profile of Insects on Exposure to Xenobiotics	Dr Sarita Kumar (Zoology)	Vatsal Bhargava, Parikshit Sahrotra, Harshita Sharma and Sunidhi Aneja B.Sc. (H) Zoology-II year
22	Identification of Cysteine-rich Domains in <i>Tetmemena</i> sp. Using Systematic Bioinformatics Tools	Dr Seema Makhija Dr Ravi Toteja (Zoology)	Ankush and Khushboo B.Sc. Life Science-II year
23	Physicochemical and Biological Analysis of Leachate from Okhla Landfill	Dr Seema Makhija and Dr Ravi Toteja (Zoology) Dr Pooja Bhagat (Chemistry)	Pranjal Sharma and Deepika Joshi B.Sc. (H) Zoology-III year

List of DBT Projects (2018-2019)

S.No.	Mentors	Title of Project	Students
1	Survey of plants for presence of trypsin modulators	Dr Rashmi Sharma (Botany) Dr Manisha Jain (Chemistry)	Vikramjeet Singh, Amit Kumar, Diksha Tiwari, Chetna, Alok Yadav B.Sc. (H) Botany II Year
2	Isolation, identification and characterisation of fungal isolates for their lignocellulolytic potential	Dr Anupama Shukla and Dr Manoj K Singh (Botany)	Manohar Bisht, Shubhangini B.Sc. (H) Botany III Year Bhaskar Jyoti, Yash Gupta, Vivek Das B.Sc. (H) Botany II Year
3	Application of magnetic chitin composites for the removal of toxic metals and organic dyes from industrial effluents	Dr Sunita Hooda and Dr Geetu Gambhir (Chemistry) Dr Sarita Kumar (Zoology)	Ravina Yadav, Heena Malik, Aniket, Mariyam, Monika, Akarsh Pandey Tanya Sharma, Senjuti Sengupta, Partho Proteem Das, Akshit Chauhan
4	Plant electro stimulation and data acquisition	Dr. Ravneet Kaur (Electronics) Dr. Udaibir Singh (Electronics) Dr. Anita Narang (Botony) Ms. Gauri Ghai (Electronics)	Rachit Agrawal, Sumit Vashista B.Sc. (H) Electronics III Year Rohit Saini B.Sc. (H) Electronics II Year Devender Soni, Gagan B.Sc. (H) Electronics I Year Pooja, Nishika, Shivangi Charvee, Anjali B.Sc. (H) Botany II Year
5	Assistive Gadgets for Visually Impaired Students a)Light to Sound Convertor / Optocoupler b)Color Detector	Dr. Ravneet Kaur (Electronics) Ms. Gauri Ghai (Electronics)	Abhishek Raiwani, Adarsh Maurya B.Sc. (H) Electronics III Year
6	Mine Detection Drone	Dr. Ravneet Kaur (Electronics) Ms. Gauri Ghai (Electronics)	Chiradeep Das, Ritesh Raj B.Sc. (H) Electronics II Year
7	Development of nanostructured thin films	Dr. Amit Garg (Electronics)	10 Students (5 from B.Sc. (H) Electronics and 5 from B.Sc. (H) Physics)
8	Paradigm shift in material science-2D materials: familiarity, synthesis and application	Dr. Amit Garg (Electronics)	5 Students B.Sc. (H) Electronics
9	Smart Dustbin (Sensobin)	Dr. Ravneet Kaur (Electronics)	Rahul Chawla, Aditya Raj Singh, Amit Ran

		Dr. Monika Bhattacharya (Electronics)	B.Sc. (H) Electronics II Year
10	Designing a working PROSTHETIC LEG using advanced Arduino® applications	Dr Arijit Chowdhuri (Physics)	Adarsh Prasad B.Sc. Physical Science (Electronics) – III Year
11	Using optical technique of surface plasmon resonance (SPR) for detection	Arijit Chowdhuri and V. Bhasker Raj (Physics) Charu Khosla Gupta (Botany)	Chaitanya Raj, Yogesh Shukla and Anshuman Tripathi B. Sc. (H) Physics – III Year
12	Environmental Monitoring	Arijit Chowdhuri (Physics) Charu Khosla Gupta (Botany)	Manohar Singh Bisht and Medha Jha B.Sc. (H) Botany – III Year
13	Quartz crystal microbalance and environmental science	Arijit Chowdhuri (Physics), and V. Bhasker Raj (Physics)	Akash Gupta and Siddharth Das B. Sc. (H) Physics – III Year B. Sc. Physical Science (Electronics) – III Year
14	Effect of Heavy Metals and Ethidium Bromide on DNA.	Ravi Toteja and Seema Makhija (Zoology) Arijit Chowdhuri (Physics)	Senjuti Sengupta B. Sc. (H) Zoology – II Year
15	Micro-controller for Environmental applications	Arijit Chowdhuri and V. Bhasker Raj (Physics)	Sushil Kumar Singh B.Sc. (H) Physics – III Year
16	Market research on commercial Gas sensors and Electronic Nose in India and abroad	Dr. Arijit Chowdhuri (Physics) Dr. Sandeep Kumar Goel (Commerce)	Shubham and Chirag Agarwal B. Com. (H) – III Year
17	Studies on the alteration in the oviposition potential and fertility of insects exposed to various insecticides	Dr. Sarita Kumar (Zoology)	Sakshi Saraswat- B.Sc (H) Zoology II Year Ayushi Ratauri- - B.Sc (H) Zoology II Year Sunil-- B.Sc (H) Zoology IV Sem Pushpanjali Das-- B.Sc (H) Zoology II Year Shilpi Singh- B.Sc (H) Zoology II Year Kajal Goyal- B.Sc (H) Zoology II Year
18	Micro biological analysis of leachate collected from Okhla dumping site, Delhi	Seema Makhija Ravi Toteja (Zoology) Pooja Bhagat (Chemistry)	Anmol-B.Sc(H) Zoology II year Deepika- B.Sc(H) Zoology II Year Pranjal Sharma- B.Sc(H) Zoology II Year
19	Analysis of water quality for Aquaculture: Dissolved oxygen, ammonia, nitrite, nitrate, pH, conductivity, turbidity, etc.	Dr. Sweety Shrimali Dr. Cherita, Dr Seema Makhija and Dr Ravi Toteja (Zoology)	Sadaf- B.Sc Life Science II Year Priyanka Yadav- B.Sc Life Science II Year Sumran- B.Sc Life Science II Year Radhika- B.Sc Life Science II Year

			Mohit Singh- B.Sc Life Science II Year Shyam Manohar- B.Sc Life Science II Year
--	--	--	--