BHASKARACHARYA COLLEGE OF APPLIED SCIENCES
(UNIVERSITY OF DELHI)
Sector-2, Phase-I, Dwarka, New Delhi – 110075

COLLEGE DATA (2014-2015) to be submitted to Department of Biotechnology (DBT) To be considered under Star College Scheme

GENERAL INFORMATION ABOUT THE COLLEGE

1. **Name of the College:**
   BHASKARACHARYA COLLEGE OF APPLIED SCIENCES
   University of Delhi
   Sector-2, Phase-I, Dwarka, New Delhi – 110075
   Phone : 011-25087597

2. **Status (Govt./ Govt. Aided/ Autonomous/Pvt)**
   100% Funded by Government of NCT Delhi

3. **Women's College or Co-educational**
   Co-educational

4. **Urban/Rural**
   Urban

5. **No. of departments supported**

   Four Departments supported under this scheme are as follows:
   (i) Department of Biochemistry
   (ii) Department of Biomedical Science
   (iii) Department of Food Technology
   (iv) Department of Microbiology

6. **NAAC Ranking + Year**
   In the process of applying

Dr. UMA CHAUDHRY **Dr. BALARAM PANI**

Coordinator, Star College Scheme **PRINCIPAL**

EXTRAMURAL PROJECT FUNDINGS

7. Details of extramural funding received in the last 3 years (UGC, DBT, DST; duration, period and amount)

Name of the Supervisor	Year	Funding Agency / Topic	Total Grant received	Major Heads	Financial allocation	Actual Utilization
Dr. MEENAKSHI GARG & Dr. SHIVANI G. VARMANI	2012-2015	**UGC** Effects of Religious Fasting on Weight Loss in Indian Overweight and Obese Adult	Rs **5,05,000**	Equipment	Rs 25,000	Rs 23,688
				Travel	Rs 75,000	Rs 38,606
				Hiring	Rs 2,62,500	Rs 2,47,795
				Overhead	Rs 67,500	Rs 67,500
				Contingency	Rs 75,000	Rs 74,019
Dr. UMA CHAUDHRY	2011-2014	**UGC** Characterization of Pkn1 and IncA proteins as potential vaccine candidates of Chlamydia trachomatis	Rs **11,31,278**	Equipment	Rs 3,00,000	Rs 3,00,000
				Contingency	Rs 30,000	Rs 30,000
				Chemicals & Glassware	Rs 1,00,000	Rs 1,00,000
				Overhead	Rs 41,800	Rs 41,800
				Project Fellow	Rs 6,59,478	Rs 6,59,478

INTERDEPARTMENTAL PROJECTS RECEIVED FROM UNNIVERSITY OF DELHI AS DU INNOVATION PROJECTS DURING THE LAST THREE YEARS:

Project Code	Name of the Project	Project Investigators	Departments	Total Grant Received
DU INNOVATION PROJECTS 2015-16				
BCAS 302	Development of an intelligent, eco-friendly multilayer package and nutritious snack from Fruits and Vegetable seeds and peels.	***Dr. Meenakshi*** Garg Dr. Susmita Dey Sadhu Dr. Vandana Batra	***Food Technology*** Polymer Science Physics	Rs 6,00,000/-

BCAS 303	Development of Novel Eco-Friendly Printable Packaging Films for Industrial Applications.	***Ms. Ratyakshi*** Dr. Siddharth Sirohi Dr. Krishna Datt	***Biomedical Science*** Polymer Science	Rs 5,00,000/-
BCAS 304	To understand the role of maternal factors in childhood obesity and promote metabolic fitness	***Dr. Purnima Anand*** ***Dr. Neha Bansal*** Dr. Avneesh Mittal	***Microbiology*** Electronics	Rs. 5,50,000/-
BCAS 305	To explore the potential of biosimilars as cost effective therapeutic products	***Dr. Uma Chaudhry*** Dr. Balaram Pani Dr. Ranjeet S. Thakur	***Biomedical Science*** Chemistry Library	Rs. 6,00,000/-
BCAS 306	Clean Electricity Generation from waste water samples collected from Delhi-NCR using Microbial Fuel Cell Technology-A Green Energy Initiative.	***Dr.Ruchi G. Marwah*** Dr. Pawan Kumar, Dr. Inderbir Kaur	***Microbiology*** Instrumentation Electronics	Rs 5,00,000/-
BCAS 307	Agro Waste based Green Nano-Composite: Development and Applications.	***Dr. Rizwana*** Dr. S.K Shukla Dr. Anand Bharadvaja	***Food Technology*** Polymer Science Physics	Rs 5,00,000/-
BCAS 308	Exploring the Involvement of Mechanotransduction Network in Inter-individual Differences through Ayurgenomics Approach	***Dr. Uma Dhawan*** ***Dr. Pawas Goswami*** Dr. N. S. Abbas	***Biomedical Science*** ***Microbiology*** Biology	Rs. 6,00,000/-
BCAS 309	Identification of Genetic Factors for Coronary Artery Disease and Its Association with other Atherogenic Risk Factors in Young Indians.	***Dr. Neha Singh*** Dr. Neeru Sharma Ms. Arti Dua	***Biomedical Science*** Mathematics Computer Science	Rs. 6,00,000/-
BCAS 310	Development of wireless sensor for detection and real-time monitoring of Microorganisms.	***Dr. Shalini Sehgal*** Dr. Jitender Kumar Dr. Amit Kumar	***Food Technology*** Electronics	Rs 4,25,000/-
BCAS 312	Development of cookies with biodegradable packaging material for diabetics.	***Dr. Eram S. Rao*** Dr. Manjeet Singh Dr. Prem Lata Meena	***Food Technology*** Polymer Science	Rs 5,50,000/-
DU INNOVATION PROJECTS 2013-15				
BCAS 201	Low-cost electricity generation using Bio-Photovoltaic Technology	***Dr. Ruchi Gulati Marwah*** Dr. Geeta Mongia, Dr. Inderbir Kaur,	***Microbiology*** Electronics	Rs. 5,50,000/-

	– a Green Energy Initiative			
BCAS 202	Agro Waste Material Management: From Waste to Wealth	***Dr. Rizwana*** Dr. S. K. Shukla, Dr. Anand Bharadvaja,	***Food Technology*** Polymer Science Physics	Rs 5,50,000/-
BCAS 203	Public Awareness and Evaluation of Probiotics sold in Delhi	***Dr. Shalini Sehgal, Dr. Tejpal Dhewa, Dr. Neha Bansal***	***Food Technology Microbiology***	Rs 5,00,000/-
BCAS 204	Screening and Enrichment of Polymer degrading micro-organisms and their application in Environmental Engineering	***Dr. Vijay Kumar Nalla,*** Dr. Siddharth Sirohi, Dr. Krishna Dutt,	***Microbiology*** Polymer Science	Rs. 5,00,000/-
BCAS 205	To prepare edible packaged low cost healthy snack from fruit and vegetable waste and its effect on healthy respondents	***Dr.Meenakshi Garg, Dr.Shivani G. Varmani,*** Dr.Susmita Dey Sadhu	***Food Technology Biomedical Science Polymer*** Science	Rs 5,00,000/-
BCAS 207	Understanding the Burden of Vitamin B12 and Folate Deficiency in Young Indians	***Dr. Purnima Anand, Dr. Parvinder Kaur*** Ms. Arti Batra,	***Microbiology Biomedical Science*** Computer Science	Rs. 7,50,000/-
BCAS 208	Lifestyle Interventions in Stress Management: A study among Delhi Youth	***Dr.Eram S. Rao,*** Dr. Madhulika Bajpai, Dr. Ragini Jindal	***Food Technology*** Human Communication Mathematics	Rs 3,50,000/-
BCAS 209	Genetic curation of ataxia phenomes for establishment of predictive and rapid diagnostic paradigm	***Dr. Uma Dhawan, Dr. Pawas Goswami*** Mr. Bhavya Deep	***Biomedical Science Microbiology*** Computer Science	Rs. 5,50,000/-

QUANTITATIVE DATA (Before and after the Star College Scheme)

8. No. of applicants vs No. of seats in each department

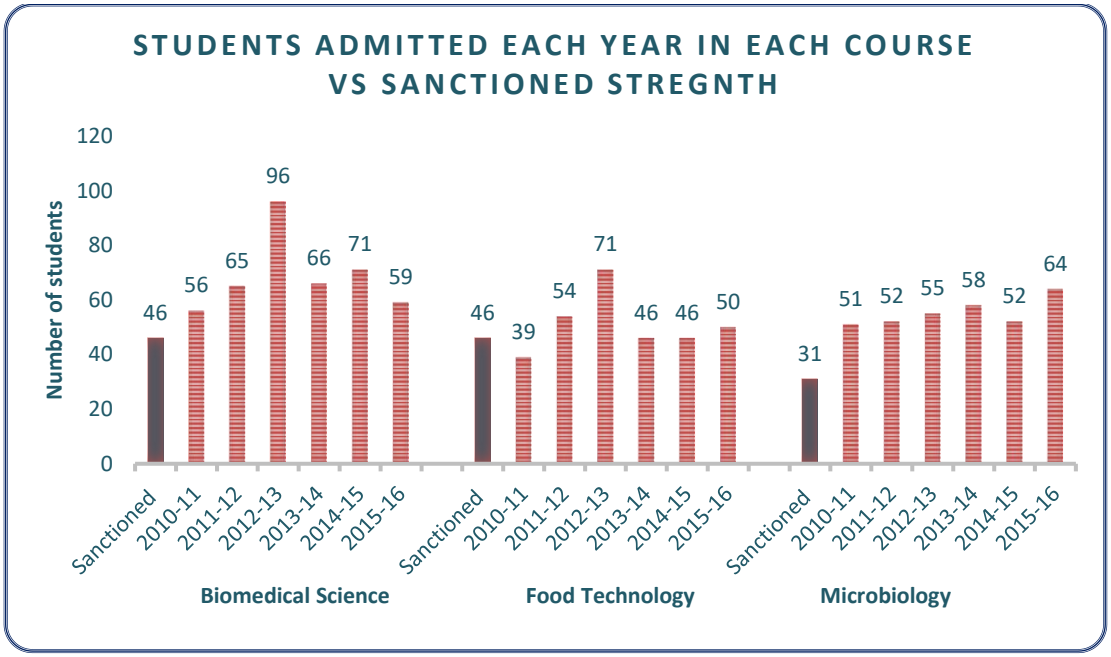
The college is governed by University of Delhi Rules and Regulations for admission. University has a system of centralized admission and therefore we do not have information for how many students had applied for a course of our college.

Number of seats in each of the participating departments is as follows:

Department of Biomedical Science = 46
Department of Food Technology = 46
Department of Microbiology = 32
Department of Biochemistry is an Allied Department

9. Number of students admitted year wise in different courses supported under the Star College Scheme

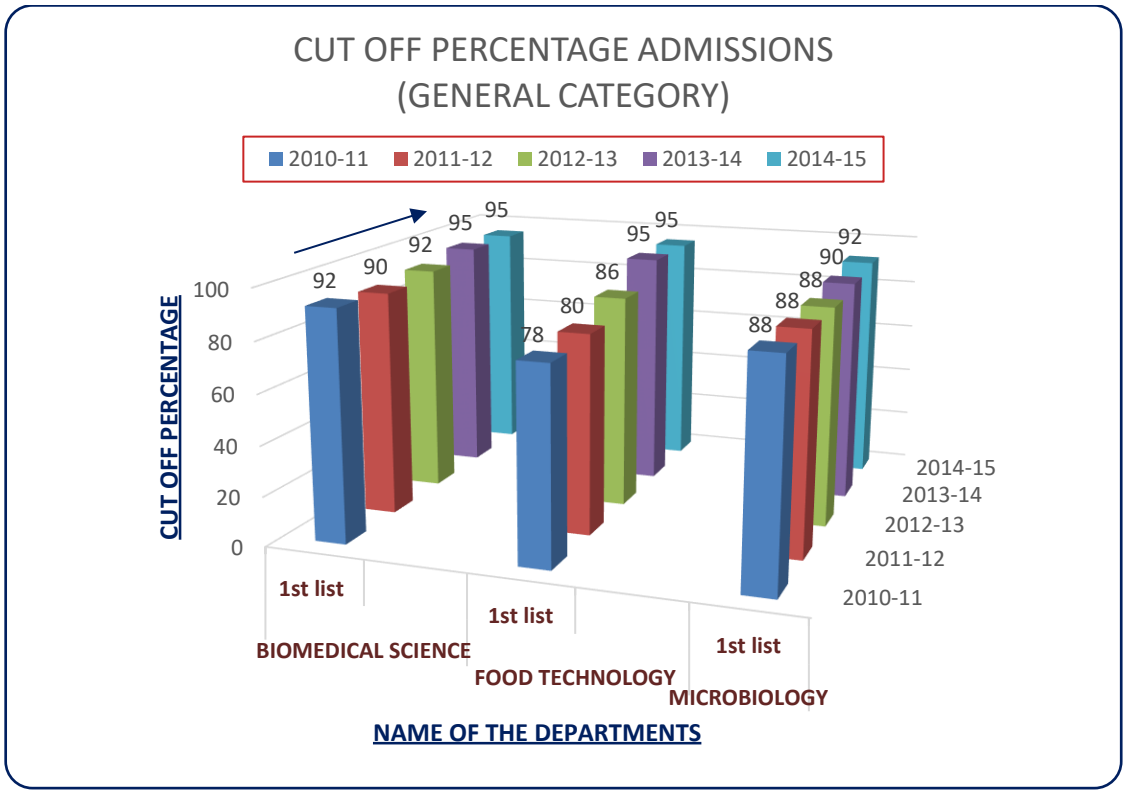
Year / Department	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Biomedical Science	56	65	96	66	71	59
Food Technology	39	54	71	46	46	50
Microbiology	51	52	55	58	52	64

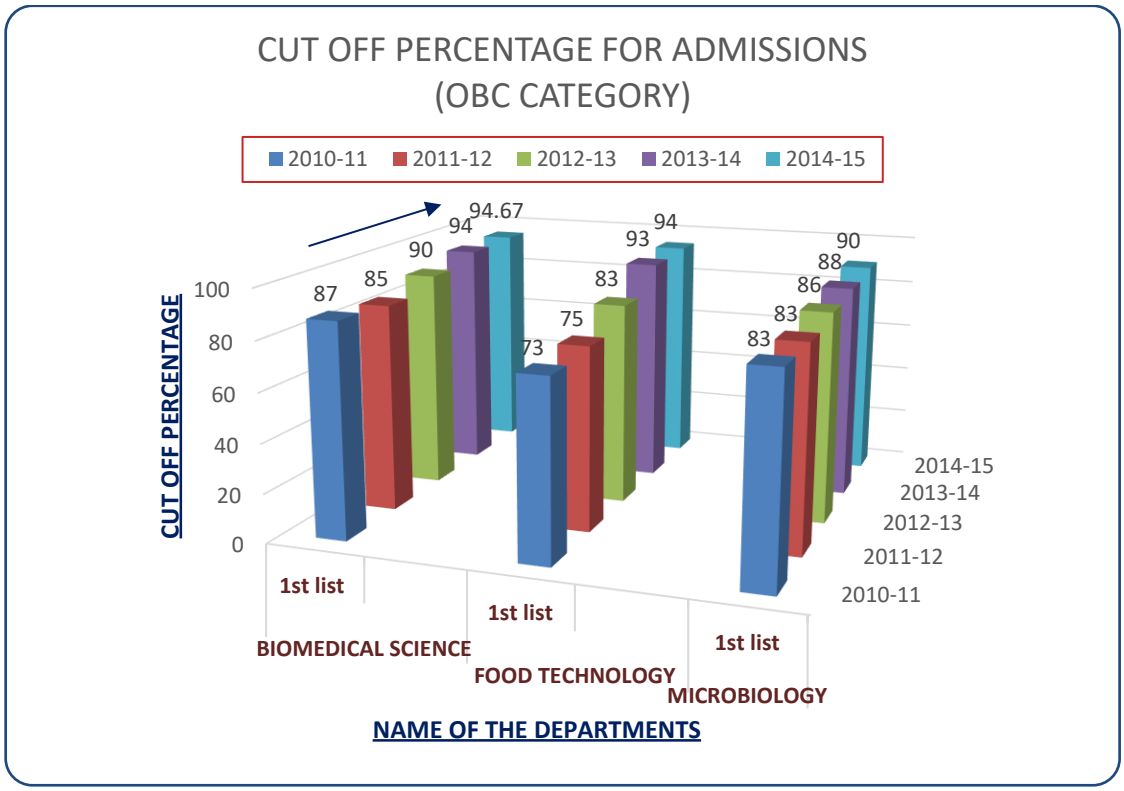


10. Change in the cut off percentage/admission

Year Department	Cut-off list number	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
GENERAL CATEGORY							
Biomedical Science	1st list	92	90	92	95	95	95
	Last list	65	74	75	91	90	94
Food Technology	1st list	78	80	86	95	95	95
	Last list	71	67	77	88	88	91.33
Microbiology	1st list	88	88	88	90	92	91
	Last list	80	80.66	80.33	87	88	91
SC CATEGORY							
Biomedical Science	1st list	Prior to 2013-14 admission in this category were done at University of Delhi level			92	94	92
	Last list				68	74	78
Food Technology	1st list				92	93	93
	Last list				79	74	77
Microbiology	1st list				87	87	86
	Last list				70.66	75.66	78
ST CATEGORY							
Biomedical Science	1st list	Prior to 2013-14 admission in this category were done at University of Delhi level			92	92	91
	Last list				55	68	71
Food Technology	1st list				92	90	90
	Last list				60	58	69
Microbiology	1st list				87	85	85
	Last list				60	78.66	59
OBC CATEGORY							
Biomedical Science	1st list	87	85	90	94	94.67	94
	Last list	65	68	60	77	81	85
Food Technology	1st list	73	75	83	93	94	94
	Last list	64	57	64	83	83	84
Microbiology	1st list	83	83	86	88	90	89
	Last list	72	64	69.66	73.66	84	86
PwD CATEGORY							
Biomedical Science	1st list	Prior to 2013-14 admission in this category were done at University of Delhi level			92	92	91
	Last list				55	68	70
Food Technology	1st list				90	93	92
	Last list				82	58	69
Microbiology	1st list				87	85	84
	Last list				83	59	65

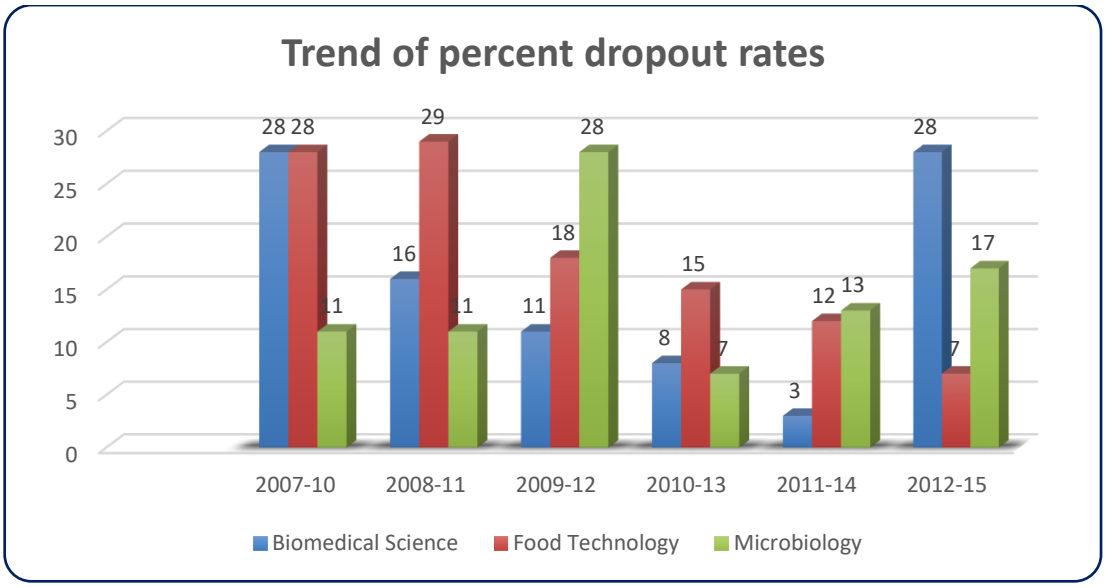
Graphical Representation of change in the cut off percentage/admission





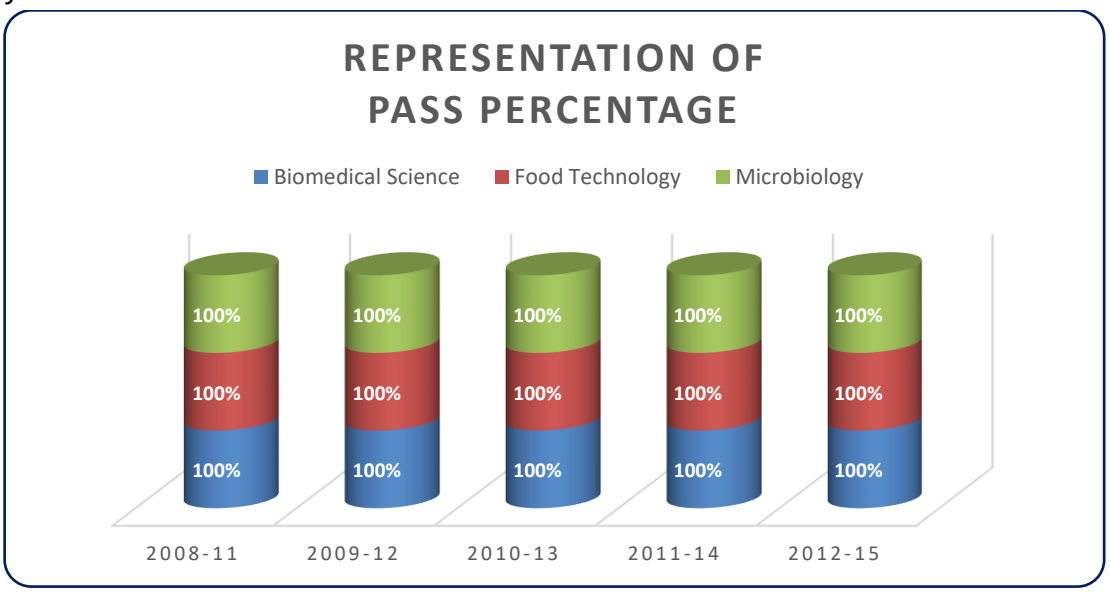
11. Change in the dropout rate

Year / Department	2007-10 batch	2008-11 batch	2009-12 batch	2010-13 batch	2011-14 batch	2012-15 Batch
Biomedical Science	28%	16%	11%	8%	3%	28%
Food Technology	28%	29%	18%	15%	12%	7%
Microbiology	11%	11%	28%	7%	13%	17%



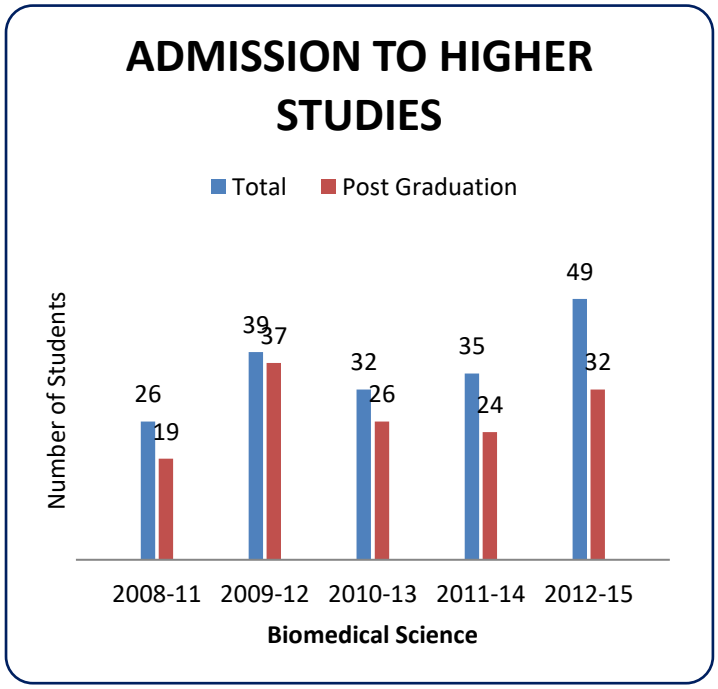
12. Data on pass percentage (UG level)

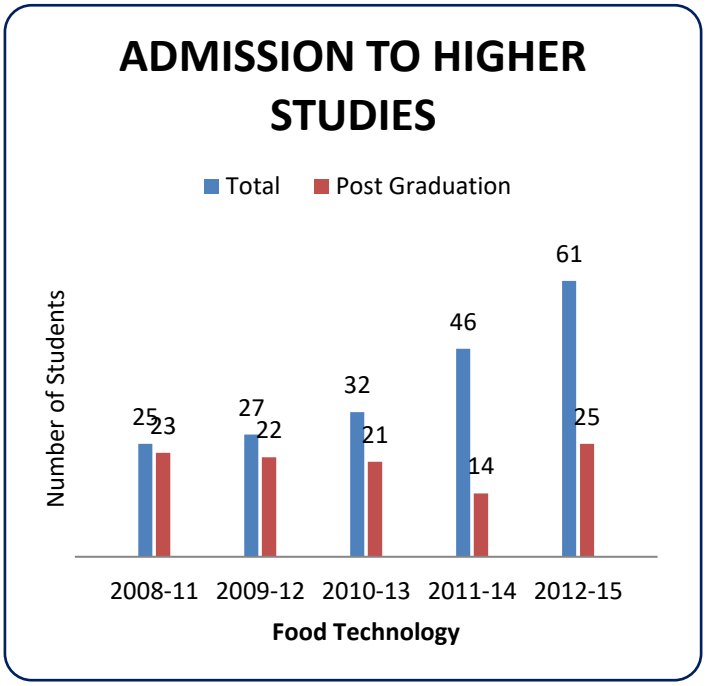
Results for most of our courses in the college has been 100% for the last few years

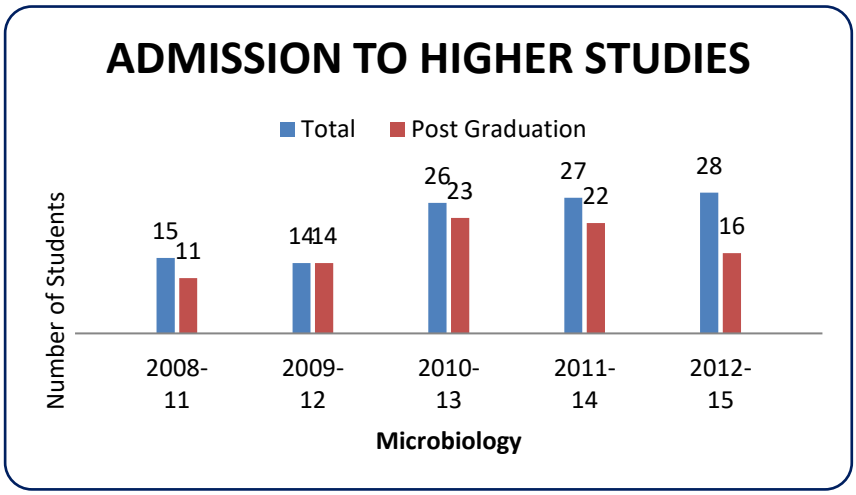


13. Data on how many students opted for PG courses

Year Department	2008-11 batch	2009-12 batch	2010-13 batch	2011-14 batch	2012-15 Batch
Biomedical Science	19 out of 26	37 out of 39	26 out of 32	24 out of 35	32 out of 49
Food Technology	23 out of 25	22 out of 27	21 out of 32	14 out of 46	25 out of 61
Microbiology	11 out of 15	14 out of 14	23 out of 26	22 out of 27	16 out of 28







Placement of students for further studies

Most of our students are placed in well reputed institutes for further studies. Some of them have joined jobs in various pharmaceutical companies or food companies. Some of the students placed in well reputed research institutes is as under:

Name of the student	Batch of enrolment	Placed for Masters
Department of BIOMEDICAL SCIENCE		
Sukrit	2012-15	Tata Institute of Fundamental Research (TIFR), Mumbai
Kritika Mehta and Gaurav Saini	2012-15	Indian Institute of Technology (IIT)
Prashant Rawat and Annu Kala	2012-15	Jawaharlal Nehru University
Pooja Saini and Shweta Warrior	2012-15	University of Delhi
Lakshya Kanojia	2012-15	Indian Institute of Management, Hyderabad
Himali Arora	2012-15	National Brain Research Institute (NBRC) Manesar
Batra Arushi Arun	2012-15	MS Baroda
Department of FOOD TECHNOLOGY		
Aditi Arya, Bhupender, Swati, Monisha	2012-15	Centre of Food Technology and Research Institute, Mysore
Abhinay	2012-15	Banaras Hindu University
Neha Sharma	2012-15	Punjab Agricultural University, Ludhiana
Anil, Fanish Talwar,Pratiksha, Satakshi,Shrishti,	2012-15	Guru Nanak Dev University, Amritsar
Arun,Chander Mohan,Mehak,Shubham	2012-15	Pondicherry University
Shefali	2012-15	Institute of Home Economics, University of Delhi
Department of MICROBIOLOGY		
Damini, Parul Yadav, Pooja Singh, Radhika Sain, Rohan Pal, Sujata Meena	2012-2015	Department of Microbiology, University of Delhi, South Campus
Aanchal Verma, Akriti Gautam, Tanvi Mahajan, Varun Rathi	2012-2015	Punjab University
Deepanshu Kumar	2012-2015	IISER, Thiruvananthapuram
Indu Pandey	2012-2015	St. Xavier's College, Kolkata
Deepali Vaid	2012-2015	Banasthali Vidyapeeth, Rajasthan
Deepika Rana, Monika Yadav	2012-2015	MDU, Rohtak

QUALITATIVE DATA (Details of the activities of 2014-15)

14. List of additional practicals introduced

DEPARTMENT OF BIOCHEMISTRY (2014-15)			
Title of the new practical	**New feature / relevance / impact**	**Number and names of the students participants**	**Resource Person**
Separation of Biomolecules using Gel Filtration Chromatogaphy	Higher order Chromatography Technique introduced	Whole batch of semester IV of B.Tech Food – Technology Please see Annexure Biochem – I for names of the students	Dr. Anita Sondhi
Quantitation of Biomolecules using Spectrophotometry	New Technique introduced		Dr. Anita Sondhi
Separation of DNA using Agarose Gel Electrophoresis	New Technique introduced		Dr. Anita Sondhi
Plot of Titration Graph of Aspartic acid: Concept of pK, pI, Net Charges, Buffering zones	Extrapolation to understand basic concept of Buffers		Dr. Anita Sondhi
To perform qualitative tests for Carbohydrates	Extrapolation to include a wide gamut of tests		Dr. Anita Sondhi

DEPARTMENT OF BIOMEDICAL SCIENCE (2014-15)			
Title of the new practical	**New feature / relevance / impact**	**Number and names of the students participants**	**Resource Person**
Study the effect of solar assisted nano particles of ZnO as the green method for the treatment of detergent water	Wastewater containing detergent from industrial and domestic source creates huge pollution in cities. Treatment of this water through method is fast, requires less treatment time, cost effective, less exposure for workers, complete reduction pathway to non-toxic end products is possible and less equipment involvement.	49 students of B. Sc. (Hons) Biomedical Science III Year Please see Annexure BMS-III for the list of students	Dr. Uma Chaudhry Dr. Parvinder Kaur
Variation in Hemoglobin Concentration with gender in the Age Group of 18-22 years	Students learn Hemoglobin estimation as part of Human Physiology paper. They were made to check gender based difference of normal haemoglobin levels.	31 students of B. Sc. (Hons) Biomedical Science II Year Please see Annexure BMS-II	Dr. Renu Baweja
Water quality assessment obtained from various house hold sources	Students carried out analysis of water quality reaching their homes and analysed for its hardness and any contamination (chemical or biological)	31 students of B. Sc. (Hons) Biomedical Science II year as in Annexure BMS -II	Dr. Parvinder Kaur

DEPARTMENT OF FOOD TECHNOLOGY (2014-15)			
Title of the new practical	**New feature / relevance / impact**	**Number and names of the students participants**	**Resource Person**
Standardization and formulation of egg pickle	New product development	4 students: Harshita, Himani,Tanu, Preeti of B. Tech. Food Technology II year	Dr. Rizwana
To determine the effect of temperature on sweet taste.	Formulation and standardization of desserts	63 students B.Sc. (Hons) Food Technology III yr Please see [Annexure Food Tech – III] For the names of the students	Dr.Eram S. Rao
To perform sensory evaluation of market milk.	Assess the quality of market milk.		Dr.Eram S. Rao
To perform effective tests (Preference and Acceptance) in the given food samples	Additional knowledge for Industry and higher learning. Especially in sensory analysis		Dr.Eram S. Rao
To determine the relative sweetness of various sugars.	Important for new product development		Dr.Eram S. Rao
To perform descriptive tests in the given food samples	For sensory research and development		Dr.Eram S. Rao

DEPARTMENT OF MICROBIOLOGY (2014-15)			
Title of the new practical	**New feature / relevance / impact**	**Number and names of the student participants**	**Resource Person**
Determination of size of microbial cell using stage and ocular micrometer	Learning of important technique not in curriculum	38 students of B. Sc. (Hons) Microbiology I year I Semester [Annexure-MICRO-I]	Dr. Purnima Anand
Demonstration of the thermal death time and decimal reduction time of *E. coli*	Mathematical analysis of growth with its application in Food and Industrial application	29 students of B. Sc. (Hons) Microbiology II year III Semester [Annexure-MICRO-II]	Dr. Ruchi Gulati Marwah

Isolation of phosphate solubilizers from soil (Enrichment technique) and to use them separately or in consortia.	To learn the importance of consortia and application of these microbes in increasing soil fertility	29 students of B. Sc. (Hons) Microbiology II year IV Semester [Annexure-MICRO-II]	Dr. Purnima Anand
Alkaline phosphatase test to check the efficiency of pasteurization of milk.	Milk quality test of industrial relevance	29 students of B. Sc. (Hons) Microbiology II year IV Semester [Annexure-MICRO-II]	Dr. Pawas Goswami
To study bacterial flora of skin by swab method	Comparative study of different types of skin and its medical relevance	30 students of B. Sc. (Hons) Microbiology III year VI Semester [Annexure-MICRO-III]	Dr. Ruchi Gulati Marwah
Isolation of microorganisms producing industrially important enzymes (cellulase, lipase etc.).	To study the pH and temperature tolerance and stability of these enzymes	30 students of B. Sc. (Hons) Microbiology III year V Semester [Annexure-MICRO-III]	Dr. Ruchi Gulati Marwah
To perform various tests such as pH and titratable acidity of various fermented milk products (yogurt, market dahi, etc)	Comparison of products of various brands available in the market	30 students of B. Sc. (Hons) Microbiology III year VI Semester [Annexure-MICRO-III]	Dr. Pawas Goswami
Determination of minimal inhibitory concentration (MIC) of an antibiotic by serial double dilution method.	Add on experiment comparison with determination of MIC by Kirby Bauer method.	30 students of B. Sc. (Hons) Microbiology III year VI Semester [Annexure-MICRO-III]	Dr. Ruchi Gulati Marwah

15. List of minor projects implemented, name of students and supervisor

DEPARTMENT OF BIOCHEMISTRY (2014-15)			
Topic of the minor project	**Duration of the project**	**Names of the students**	**Name of the Institute Visited & Biomolecule Analysed**
Name of the Coordinator : Dr. Anita Sondhi			
Biomolecule Quantitation: A Clinical perspective and the role of diet	15 days for the entire project which included	Amit Gupta, Ritikesh Bhardwaj, Shivanand Sahu Surender Singh Pal, Sandeep Kumar Mourya	Siddharth laboratory,Sector-7, Rohini, New Delhi ALBUMIN

in disease management Various centers were visited as per the details mentioned in the last column and alalyzed. The entire batch of B. Tech Food Technology IV semester was involved	visit to each Institute followed by analysis, compilation and presentation	Aishwarya Rajendran, Ankan Dutta, Jai Govind Preeti Tyagi, N. Chandrakanth	Divyaprastha Hospital, palam, New Delhi LACTATE DEHYDROGENASE
		Parth Mittal, Pragyan Aman Aman Saluja, Rishabh Dhall, Suman Gupta	Raj Lab Diagnostic Center, Dwarka Mor, New Delhi SUGAR
		Aruna Kumari, Aditi Rungta Siddharth Harish, Tanya Suri, Shivani Porwal	Holy Family Hospital, Clinical Chemistry Lab,okhla Road, New Delhi ALKALINE PHOSPHATASE
		Tanu Shiva, Akash Rao Kushal, Bhawna Chugh Ruchi Sharma	Delhi X-ray and lab, Najafgarh, New Delhi BILIRUBIN
		Akansha Rawat, Deepti Chauhan, Harshita Sarwal Diksha Kumari, Hemani Batra	Divyaprastha Clinical Lab, Palam URIC ACID
		Bharat, Ram Chander, Balram, Udit Kumar Manish Kumar Pandey	Raj lab Diagnostic Center, Dwarka Mor CHOLESTEROL
		Rahul Gupta, Manu kumar Harshit Bawa, Rahul kumar Suraj, Manjoor Ali	Sardar Vallabhbhai Patel Hospital, East Patel Nager TOTAL PROTEINS

DEPARTMENT OF BIOMEDICAL SCIENCE (2014-15)			
List of minor project	**Duration of the project**	**Names of the students**	**Supervisor and Collaborator if any**
Functional analysis of hypothetical proteins of *Chlamydia trachomatis* : an in-silico approach for prioritizing the targets.	2 months	Arpan Pandey and Sumit Dahiya of B. Sc. (Hons) Biomedical Science	Dr. Uma Chaudhry and Prof. Daman Saluja
NAAT based detection of food pathogens	2 months	Shefali Rai, Anjali Dhingra, Asmita Patel, Nancy Garg, Sonu Singh Rajput, Md. Tasleem Students of B. Sc. (Hons) Biomedical Science III year	Dr. Uma Chaudhry
Health of Indians in the 21st Century	2 months	31 students of B. Sc. (Hons) Biomedical Science II year batch of 2014-15 [Annexure BMS -II]	Dr. Uma Chaudhry
P2I: Predicting Potential Inhibitors for *Mycobacterium tuberculosis*	3 months	Anjali Dhingra, Harit, Himali Arora, Kritika Mehta, Nikena, Prashant Rawat, Shefali Rai, Sweta Students of B. Sc. (Hons) Biomedical Science III year	Dr. Anshu Bharadwaj, Dr. Shivani G. Varmani, Dr. Uma Chaudhry

DEPARTMENT OF FOOD TECHNOLOGY (2014-15)			
List of minor project	**Duration of the project**	**Names of the students**	**Supervisor and Collaborator if any**
Quality Assessment of Market Milk	2 to 3 months	Aditi, Shefali, Anjana, Swati, Satakshi, Pratiksha, Rahul, Shriya, Raghuvendra, Manvender, Neha, Aman, Faneesh, Mohini, Khaling, Chandra Mohan, Manisha, Himanshi, Neha, Bhupender, Kirty, Aditi Das Students of B.Sc. (Hons) Food Technology III year	Dr. Eram S, Rao
Development of Flavoured Tofu	2 to 3 months	Aruna, Aditi, Tanya, Shivani and Sidhartha Students of B.Tech. Food Technology II year	Dr.Dipti Sharma
Study of the functional properties of egg albumin	2 to 3 months	Ankur, Arun, Rakesh, Ekta, Kislay, Akshima, Navneet Students of B.Sc. (Hons) Food Technology III year	Dr. Rizwana
Preparation of bio fuel from used oil	2 to 3 months	Sumit and Shubham students of B.Sc. (Hons) Food Technology III year ANS Rishi and Omair students of B. Sc. (Hons) Polymer Science	Dr. Meenakshi Garg
Preparation of pizza base using millet flour	2 to 3 months	Harshita,Priti,Himani Students of B.Tech. Food Technology 2nd year	Dr. Vandita Gupta
Processing of Amla (Indian gooseberry)	2 to 3 months	Aishwarya, Ankan, Chandrakanth, Harshita, Preeti Students of B.Tech. Food Technology II year	Dr. Vandita Gupta
Utilization of milling by products for developing new health snacks	2 to 3 months	Akansha and Diksha Students of B.Tech. Food Technology II year	Dr. Vandita Gupta
Effect of frying on physicochemical properties of sesame and soyabean blend oil	2 to 3 months	Aditi, Shefali and Bhupender Students of B.Sc. (Hons) Food Technology III year	Dr. Meenakshi Garg
Organoleptic studies on Biscuits/ Cookies	2 to 3 months	Rahul Suraj, Rahul, Harshit and Manu Students of B.Tech. Food Technology II year	Dr.Eram S. Rao
Study on effect of oil on banana and tapioca chips	2 to 3 months	Aishwarya, Ankan and Chandrakanth Students of B.Tech. Food Technology II year	Dr.Dipti Sharma

DEPARTMENT OF MICROBIOLOGY (2014-15)			
List of minor project	**Duration of the project**	**Names of the students**	**Supervisor and Collaborator if any**
Isolation of *Staphylococcus* from the Currency notes in NCR – 2 students	3 months	Sujata, Radhika	Dr Pawas Goswami
Microbiological Quality of air – 1 student	3 months	Sushant Kumar	Dr Tejpal Dhawa
Survey based analysis of fermented foods	6 months	Meenakshi, Harsha, Shadab, Amit, Nanu	Dr Purnima Anand
Microbial load determination of different foods and beverages	6 months	Students of B. Sc. (Hons) Microbiology II year 30 students in 4 batches [Annexure-MICRO-II]	Dr Purnima Anand
Evaluation of distribution of different strains of *S. aureus* in acnes affected individuals and their antimicrobial susceptibility	6 months	Students of B. Sc. (Hons) Microbiology III year 29 students in 4 batches [Annexure-MICRO-III]	Dr. Ruchi G. Marwah
Isolation of antibiotic resistant bacteria from drinking water samples by replica plating	6 months	Students of B.Sc (H) Microbiology II year 30 students in 4 batches [Annexure-MICRO-II]	Dr. Ruchi G. Marwah
Preparation of wall exhibit on the contribution of Indian Scientists	6 months	Deepak ,Pooja ,Juhi,.Ayush , Durgesh ,Atul B. Sc. (Hons) Microbiology I year [Annexure-MICRO-I]	Dr. Purnima Anand

16. Faculty improvement activities such as training courses, seminars etc conducted and their impact

16 (A) TEACHING FACULTY

A Virtual Learning Environment Workshop titled **`Shaping, Teaching and Learning with VLE'** was organized on 6th September, 2014 in collaboration with the Institute of Informatics and Communications, University of Delhi, South Campus for the faculty members of our college.
Workshop was held at Institute of Informatics and Communications, University of Delhi, South Campus.

Dr. Sanjeev Singh, Associate Professor and Deputy Proctor, ICT In-charge of University of Delhi, South Campus along with his Ph.D. students Sharad Misra, Mukesh Rawat and Anil Bafila were the resource persons.

In all twenty college faculty were trained during the workshop. Participants included faculty from the participating departments as well as from other departments of the college.

S .No.	Department	Name of Teacher	Major Impact of the Workshop
1.	Biochemistry	Dr. Anita Sondhi	Faculty trained in virtual platform to have interaction with the student's and as to how to use open resources such as MOOC for posting Lecture Notes, updating Important developments in the field and online assessments
2.	Biomedical Science	Dr. Uma Chaudhry Dr. Renu Baweja Dr. Parvinder Kaur	
3.	Chemistry	Dr. Manjeet Singh	
4.	Computer Science	Dr. Bhavyadeep Dr. Arti Batra	
5.	Electronics	Dr. Avneesh Mittal Dr. Amit Kumar	
6.	Food Technology	Dr. Meenakshi Garg	
7.	Instrumentation	Dr. Pawan Kumar Dr. Manoj Kumar Dr. Anil Kumar	
8.	Mathematics	Dr. Ragini Jindal	
9.	Microbiology	Dr. Vijaya Nalla Dr. Purnima Anand Dr. Pawas Goswami Dr. Tejpal Dhewa Dr. Neha Bansal	
10.	Physics	Dr. Vandana Batra	

16 (B) NON-TEACHING STAFF

Details of the activity conducted	Participants of the Programme		Impact on the team
	Name	**Department**	
First Laboratory Staff Skill Development Program (LSSDP) Four Days 15th to 18th December 2014	Om Prakash Pandey	Biochemistry	This was our college's first initiative to train laboratory staff in areas such use of computers, microscopes, and other high end instruments. Various microbiological pre-lab preparation techniques were discussed, such as, preparing lab media,
	Rajesh Raghav	Biochemistry	
	Praveen Kumar	Biochemistry	
	Mahfooz Alam	Biology	
	Bir Singh	Biology	
	Raju	Biology	
	Amar Singh	Biology	
	Ram Kishen	Biomedical Science	
	Devender Solanki	Biomedical Science	
	Rama Shankar	Biomedical Science	

	Satish Kumar	Biomedical Science	storing bacterial cultures. Moreover a special session on personality development program was arranged in order to enhance their moral. A verbal feedback was undertaken from all the participants.
	Pramod Kr. Shukla	Food Technology	
	Savita Devi	Food Technology	
	Amit Dagar	Food Technology	
	Tarun	Food Technology	
	Shankar Dutt Bhatt	Microbiology	
	Gagan Anand	Microbiology	
	Pratap Singh	Microbiology	
	Dev Singh	Microbiology	
	Rajkumar	Computer Science	

17. Outreach activities conducted and their impact/ follow-up

Name of the activity conducted	**Department Involved and Coordinator**	**Number and names of the participant**	**Impact / Follow-up**
Database for the blood groups of the staff and students of the college Student volunteers: Pooja Saini, Neha Shukla, Prashant Rawat and Arushi Batra from Biomedical Science Department and Kanchan from Microbiology Department	***Department of Biomedical Science*** Coordinated by Dr. Uma Dhawan on 11th September 2014	90 individuals (students, lab staff and faculty) volunteers [Annexure – BMS-II and III]	To determine the blood group of the students and staff of the college who did not know their blood groups. In this camp, the blood group of 90 individuals was determined and a database of blood group of all the students who volunteered in this initiative was prepared to be used in case of any emergency.
Public awareness survey about the use of solar or other non-conventional sources of energy	***Microbiology*** Coordinated by Dr. Ruchi Marwah in May 2014 for one month	Around 500 people from Delhi NCR region were involved	It showed awareness of the people in Delhi-NCR region about the average consumption of electricity per month, and also about the use of alternate sources of energy like solar energy etc. so that they could reduce their monthly electricity expenditure.
Departmental Microbial Culture collection	***Microbiology*** Coordinated by Dr. Ruchi Gulati Marwah	Faculty of the Department maintains bacterial	Cultures supplied to various colleges and universities in Delhi-NCR and neighboring states.

	And Dr. Purnima Anand Continuous activity	and fungal cultures	These cultures are available for both research purposes as well as for various experiments in life sciences curriculum
Awareness Campaign about Probiotics Month long campaign during 2014	***Food Technology and Microbiology*** Coordinators of the campaign were Dr. Shalini Sehgal from Food Technology Department and Dr. Neha Bansal & Dr. Tejpal Dheva from Microbiology Department	The faculty and students interacted with around 1000 school students, 100 elderly people in the senior citizen homes and 500 college students in Delhi during the awareness campaign.	In India there is a lack of clarity amongst the consumers about probiotic products available in the market. Often these are confused with the fermented food. To spread awareness about probiotics, educational material was created in the form of a series of handmade posters, brochures in both Hindi and English, cartoon booklets etc. for school students.
Awareness campaign about Vitamin B12 and Folate Deficiency	***Biomedical Science and Microbiology*** Coordinator Dr Purnima Anand and Dr Uma Dhawan during Antardhwani 2014 and 2015	Public attending Antardhwan University Festival	During this study, awareness especially amongst the youths of India towards vitamin B12 and folate deficiency was created. General public awareness was also created at Annual cultural festival of University of Delhi, Antardhwani 2014 and 2015.

18. Any outstanding achievement by student/faculty (merit, award, research paper, presentation in national/international conference/ etc; full citation to be provided)

DATA PROVIDED FOR THE LAST TWO YEARS (2014-16)

DEPARTMENT OF BIOMEDICAL SCIENCE

Awards received and special achievements of the faculty members (2014-16):

Dr. Uma Chaudhry

- Received a Research Award for a period of two years (2016-18) from University Grants Commission (UGC) to undertake an independent research.
- Part of the team of BCAS 305 DU Innovation project which was selected among best twenty projects of University of Delhi for display at the Foundation Day

celebration on 1st May, 2016.

- Awarded with US Patent on PCR-based detection method for Chlamydia trachomatis and (Patent no. 9,139,883) on 22nd September, 2015. DAMAN SALUJA, UMA CHAUDHRY, MASHOOK ALI, POONAM SACHDEVA, ACHCHHEY LAL PATEL
- Awarded with two months Summer Research Fellowship from Indian National Science Academy (INSA) during 15th May 2014 to 14th July 2014 to work on her project titled "Elucidating various inhibitors of glutamate racemase of *Mycobacterium tuberculosis*" under the supervision of Dr. Madhu Chopra at Dr. B. R. Ambedkar Center for Biomedical Research, University of Delhi.
- Supervised two Ph.D. students and one Ph. D. student is currently registered.

Dr. Shivani G. Varmani

- Recipient of "Best Display Award for business idea" for the innovation project BCAS-205 (2013-2015) by the University of Delhi at the Innovation Plaza during Antardhwani

Dr. Uma Dhawan

- Awarded with UGC-Raman Fellowship for undertaking Post-Doctoral Research at Boston University, Massachussetts, USA in 2015-16.
- Part of the team of BCAS 308 DU Innovation project which was selected among best twenty projects of University of Delhi for display at the Foundation Day celebration on 1st May, 2016.
- Coordinator for an Add-on Course in Bioinformatics and *in silico* Drug Discovery. The Department of Biomedical Science of the college jointly with Acharya Narendra Dev College started an add-on course in Bioinformatics and in silico Drug Discovery for undergraduate and post-graduate students in July 2012. The duration of course is ~128 hours.
- Awarded with Best Display Award for the BCAS 208 - DU Innovation project entitled "Genetic curation of ataxia phenomes for establishment of predictive and rapid diagnostic paradigm" at University of Delhi Academic and Cultural Festival "Antardhwani-2015", 20th to 22nd February, 2015.

Books and Research Publications in journals and conference proceedings of the faculty: (2014-16)

Dr. Uma Chaudhry

- Golechha M, Sarangal V, Bhatia J, ***Chaudhry U***, Saluja D, Arya DS. (October 2014) Naringin ameliorates pentylenetetrazol-induced seizures and associated oxidative stress, inflammation, and cognitive impairment in rats: possible mechanisms of neuroprotection. Epilepsy Behav; 41:98-102. doi: 10.1016/j.yebeh.2014.09.058. PMID: 25461197, Impact Factor 2.225
- Patel AL, Mishra PK, Sachdev D, ***Chaudhary U***, Patton DL, Saluja D. (June 2014) Seroprevalence of antibodies against Pkn1, a novel potential immunogen, in Chlamydia trachomatis-infected *Macaca nemestrina* and human patients. Biomed Res Int. Vol 2014 Article ID 245483. doi: 10.1155/2014/245483. PMID: 25032212. Impact Factor 1.579

Dr. Shivani G. Varmani

- Garg.M, Wason S.and ***Varmani S.G.*** (December 2015) Understanding physical activity and quality of life among young Indian adults. International Journal of Pharmacy and Integrated Life Sciences. 4(1):16-32 Impact factor 1.9
- Garg M, Kaur, P, Sharma S, ***Varmani S***, Sadhu S. (October 2015) Evaluation of Mathematical Model to Describe Thin Layer Drying and Determine Drying Rate of Potato Peels Using Tray Drying. International Journal of Scientific Engineering and Applied Sciences. Volume 1 Issue 7 Impact factor 3.4
- Garg M, Wason S.and ***Varmani S.G***. (July 2015) To study physical activity levels. Body composition and association of body mass index with anthropometric measurements in young Indian adults. International Journal of Pharmacy and Integrated Life Sciences. Vol 3(8):36-50 Impact factor1.9
- Garg M and ***Varmani S.*** (April – Jun 2014) Nutritional health status of North Indian adults. International Journal of Food and Nutrition Sciences. Vol 3 (3): p 118-121. Impact factor 1.2
- Garg M, Sharma S, ***Varmani S***, Sadhu S. (April – Jun 2014) Drying kinetics of thin layer pea pods using tray drying. International Journal of Food and Nutrition Sciences. Vol 3 (3): p 61-66. Impact factor 1.2
- ***Varmani S***, Panda H, Sadhu S, Garg M. (June 2014) Beta Thalassemia Major and osteoporosis: etiology, pathogenesis, diagnosis and management. International Journal of Pharmacy and Integrated life Sciences. Vol 2(7): p 64-78. Impact factor 1.9
- Sadhu S, Chakraborty S, Garg M, Varmani S. (April 2014) Polymers in Energy harvesting. International Journal of Engineering Science Invention. Vol 3 (4): p1-5. Impact factor 1.7
- Sadhu S, Soni A, ***Varmani S***, Garg M. (March 2014) Preparation of starch polyvinyal alcohol (PVA) blend using potato and study of its mechanical properties. International Journal of Pharmaceutical Science Invention. Vol 3 (3): p 33-37. Impact factor 1.6
- ***Varmani S*** and Garg M. Health benefits of Moringa Oleifera: A miracle tree. (April-June 2014) International Journal of Food and Nutrition Sciences. Vol 3 (3): p 111-117) Impact factor 1.2
- ***Varmani S***, Arora H, Garg M, Sadhu S. (June 2014) Iron overload and chelation therapy in beta thalassemia major. International Journal of Pharmacy and Integrated Life Sciences. Vol 2(7): p 47-63. Impact factor 1.9
- ***Varmani S***, Mehta K, Garg M, Sadhu S. (April – June 2014) Diabetes mellitus in beta thalassemia major- pathogenesis and management strategies. International Journal of Food and Nutrition Sciences. Vol 3 (3): p 127-131. Impact factor 1.2

Dr. Uma Dhawan ; Research Publications: (last 2 years)

- Gagan Dhawan, Seema Gupta, Manisha Jain, ***Uma Dhawan***, Deepika, Priya Dungriyal, Zainab Zaidi, Yashaswi Singh, Jyoti Thakur, Dharmendra, Aayush Chauhan and Keshav Sharma. (2015). An Explorative Study on Knowledge and Awareness of Health Problems Related to Usage of Fabric Dyes by Road Side Dyers in Delhi, India. DU Journal of Undergraduate Research and Innovation

Papers / Posters presented in national / international conferences (2014-16)

Dr. Uma Chaudhry

- Presented a paper entitled 'A sneak peak into Ayurvedic Medicine: An Indian Scenario' (Vaishali joshi, Ayushi Chhabra, Kirti, Jyoti Yadav and Uma Chaudhry. May 2015) cited in "Proceedings of National Conference on Solid State Chemistry and Allied Areas (ISCAS-2015)" held at University of Delhi during 8th to 10th May 2015.
- Presented a poster entitled 'Reverse Vaccinology Approach for the Identification of Potential Universal Candidates from *Neisseria gonorrhoeae* (Ravi Jain, Uma Chaudhry and Daman Saluja. December 2014) cited in "BioWorld 2014 : Protein Structure and Function" Fourth Annual Conference Held during 12th to 14th December 2014 at IIT Delhi.
- Presented a paper entitled 'Mining *Neisseria gonorrhoeae* genome reveals novel inhibitors: A Molecular Modeling and Docking (M2D) approach to combat drug resistance' (Uma Chaudhry, Daman Saluja, Manju Bala, Himali Arora, Prashant Rawat. November 2014) cited in the Souvenir of "38th ASTICON – 2014" published in the National Conference of Indian Association for the Study of Sexually Transmitted Diseases & AIDS (IASSTD & AIDS) held during 31st October 2014 to 2nd November 2014 at PGMIR Chandigarh.
- Presented a Poster entitled 'Elucidating various inhibitors against glutamate racemase of Mycobacteria tuberculosis' (Uma Chaudhry, Alka Pawar, Madhu Chopra and Anshu Bharadwaj. November 2014) cited in "International Conference on Emerging Trends in Biotechnology ICETB 2014" held during 6th to 9th November 2014 at JNU, New Delhi, India.
- Presented a poster entitled 'Identification and characterization of novel drug targets of Mycobacteria tuberculosis' (Alka, Uma Chaudhry and Daman Saluja. April 2014) at "9th Symposium on Frontiers in Biomedical Research" held during 14th to 16th April 2014 at Dr B R Ambedkar Center for Biomedical Research, University of Delhi, Delhi.

DEPARTMENT OF FOOD TECHNOLOGY

Awards received and special achievements of the faculty members (2014-16):

Dr. Rizwana

- Received a Teaching Excellence Award for Innovation during the academic session 2014-15 on 01 May 2015 for their Innovation Project titled 'Agro-Waste management: From Waste to Wealth' from Vice Chancellor, University of Delhi.
- Recipient of "Best Display Award for best innovative idea" for the innovation project BCAS-202 (2013-2015) by the University of Delhi at the Innovation Plaza during Antardhwani

Dr. Shalini Sehgal

- Recipient of "Best Display Award" for the innovation project BCAS-203 (2013-2015) by the University of Delhi at the Innovation Plaza during Antardhwani.
- An Associate Editor of the "Probiotic Association of India" Newsletter

Dr. Meenakshi Garg

- Recipient of "Best Display Award for business idea" for the innovation project BCAS-205 (2013-2015) by the University of Delhi at the Innovation Plaza during Antardhwani

Books and Research Publications in journals and conference proceedings of the faculty: (2014-16)

Dr. Rizwana

- S. K. Shukla, Sagar, Naman, Deepika, Sundaram, Prateeksha, Ankur, Arun, Srishti, Vaishali, Rakesh, ***Rizwana,*** A. Bharadvaja and G. C. Dubey, Extraction of Cellulose Micro Sheets from Rice Husk: A Scalable Chemical Approach, DU Journal of Undergraduate Research and Innovation, 1(3) (2015)187- 194.

Dr. Shalini Sehgal

- ***S. Sehgal*** (2016) "A Laboratory Manual of Food analysis" ISBN 978-93-84588-84-7, IK International, India.
- ***Sehgal, S.,*** Dhewa, T., Bansal, N., Shashank, A., Sharma, N., Thakur, M., Himanshi, Anand, S., Mehta, S., Anil, Pal,R., Jha, A.,Chandel, G. and Sarna, P. (2015) Evaluation of Labeling Practices of Probiotic Products commercially available in Delhi Market, DU Journal of Undergraduate Research and Innovation (online), Volume 1, Issue No. 1.
- ***Sehgal, S.*** and Mehta, S. (2014) Identification of Microbial Hazards Associated with the Fresh Produce sold in South Delhi Markets and their Minimization ,International Journal of Food and Nutritional Sciences Volume 3, Issue 1, 26-32.
- Sharma, P., ***Sehgal, S***. and Raizada, P.(2014) Assessment of Hygiene and Sanitation at various Pre-schools of Delhi- a Food Safety Study, International Journal of Food and Nutritional Sciences Volume 3, Issue 1, 91-98.
- ***Sehgal, S.*** and Negi, A. (2014) Nanotechnology: Recent and Emerging Applications in Food Industry International Journal of Science and Research (IJSR), Volume 3 Issue 5, 995-1000.
- ***Sehgal, S.*** and Mehta, S. (2014) Use of Antimicrobial Dips for the reduction of surface microbial load of fresh fruits sold in South Delhi Markets, India. International Journal of Current Microbiology and Applied Sciences Volume3, Issue 6 ,12-138
- Sharma,P., ***Sehgal, S.,*** Raizada, P.(2014) Microbiological Quality of Water Served at Various Pre-School of Delhi, Research and Reviews : Journal of Food Science and Technology, Vol 3, No. 3 : 31-36

Dr. Eram S. Rao

- ***Rao. E. S*** (2014). Food Quality Testing and Evaluation: Sensory Tests and Instrumental Techniques. ISBN 978-93-81156-30-8. Variety Publishers, Delhi.
- ***Rao. E. S,*** (2015). Food Quality Analysis. ISBN 978-93-81156-37-7. Variety Publishers. Delhi
- ***Rao,E.,*** Bajpai,M., Jindal.R. (2015). Desi Delights- *A Traditional Treatise*. ISBN 978-81-930724-3-1 Yashasvi Enterprises Publishers, Delhi.
- Bajpai, M., ***Rao, E.,*** Jindal. R (2015). Stress work book for Youth. ISBN 978-81-930724-2-4 Yashasvi Enterprises Publishers, Delhi

Dr. Meenakshi Garg

- S. D. Sadhu, A. Soni and ***M. Garg.*** (2015) Thermal Studies of the Starch and Polyvinyl Alcohol based Film and its Nano Composites; Journal of Nanomedic Nanotechnol, S7:002 doi:10.4172/2157-7439 Impact factor 6.692
- ***Garg.M,*** Wason S.and Varmani S.G. (December 2015) Understanding physical activity and quality of life among young Indian adults. International Journal of Pharmacy and Integrated Life Sciences. 4(1):16-32 Impact factor 1.9
- Sadhu S, and ***Garg M.*** (2015) Preparation and Thermal and Morphological Characterization of Nanocomposites Based on Phenol Formaldehyde-Nylon Thermoset IPN. International Journal of Advanced Research. Volume 3, Issue 10,505-510 Impact factor 5.3
- ***Garg M,*** Kaur, P, Sharma S, Varmani S, Sadhu S. (October 2015) Evaluation of Mathematical Model to Describe Thin Layer Drying and Determine Drying Rate of Potato Peels Using Tray Drying. International Journal of Scientific Engineering and Applied Sciences. Volume 1 Issue 7 Impact factor 3.4
- ***Garg M***, Wason S.and Varmani S.G. (July 2015) To study physical activity levels. Body composition and association of body mass index with anthropometric measurements in young Indian adults. International Journal of Pharmacy and Integrated Life Sciences. Vol 3(8):36-50 Impact factor1.9
- ***Garg M***, Dahiya S.and Kaur. P. (January 2015) Nutritional quality of value added ladoos from amylase rich flour of chickpea and fieldpea. International Journal of Pharmacy and Integrated Life Sciences. Vol 3(2):37-51 Impact factor 1.9
- ***Garg M*** and Kaur P. (January 2015) Physico-Chemical Properties of papad from Field Pea Cultivar. International Journal of Science and Research (IJSR) Volume 4 Issue 1, Impact factor 6.3
- ***Garg M*** and Varmani S. (April – Jun 2014) Nutritional health status of North Indian adults. International Journal of Food and Nutrition Sciences. Vol 3 (3): p 118-121. Impact factor 1.2
- ***Garg M,*** Sharma S, Varmani S, Sadhu S. (April – Jun 2014) Drying kinetics of thin layer pea pods using tray drying. International Journal of Food and Nutrition Sciences. Vol 3 (3): p 61-66. Impact factor 1.2
- Varmani S, Panda H, Sadhu S, ***Garg M.*** (June 2014) Beta Thalassemia Major and osteoporosis: etiology, pathogenesis, diagnosis and management. International Journal of Pharmacy and Integrated life Sciences. Vol 2(7): p 64-78. Impact factor 1.9
- ***Garg M***, Sabharwal P, Dahiya S. (Jan-Mar 2014) Effect of processing on Amylase rich field pea porridge. International Journal of Food and Nutrition Sciences. Vol 3 (1): p 38-42. Impact factor 1.2
- Sadhu S, Chakraborty S, ***Garg M,*** Varmani S. (April 2014) Polymers in Energy harvesting. International Journal of Engineering Science Invention. Vol 3 (4): p1-5. Impact factor 1.7
- Sadhu S, Soni A, Varmani S, ***Garg M***. (March 2014) Preparation of starch polyvinyal alcohol (PVA) blend using potato and study of its mechanical properties. International Journal of Pharmaceutical Science Invention. Vol 3 (3): p 33-37. Impact factor 1.6
- Varmani S and ***Garg M***. Health benefits of Moringa Oleifera: A miracle tree. (April-June 2014) International Journal of Food and Nutrition Sciences. Vol 3 (3): p 111-117) Impact factor 1.2

- Varmani S, Arora H, ***Garg M,*** Sadhu S. (June 2014) Iron overload and chelation therapy in beta thalassemia major. International Journal of Pharmacy and Integrated Life Sciences. Vol 2(7): p 47-63. Impact factor 1.9
- Varmani S, Mehta K, ***Garg M,*** Sadhu S. (April – June 2014) Diabetes mellitus in beta thalassemia major- pathogenesis and management strategies. International Journal of Food and Nutrition Sciences. Vol 3 (3): p 127-131. Impact factor 1.2
- Sadhu S.D, A Soni, ***Garg M,*** S.G. Varmani. Study of mechanical properties of starch-poly vinyl alcohol blend based nanocomposites for food packaging. Proceedings of APA International Conference 2014.
- Sadhu S.D, Raj R, ***Garg M***, Varmani S. G, Biopolymers: A solution to Environmental Hazard. Proceedings of ICPAM International Conference 2014
- Sadhu S. D, Mallick K, ***Garg M,*** Varmani S G. Atomic force microscopy for characterisation of polymers. Proceedings of ICPAM International Conference 2014.

Papers / Posters presented in national / international conferences (2014-16)

Dr. Rizwana

- Participated and presented a paper titled 'Importance of Surface Engineering between Poly vinyl alcohol and rice husk derived cellulose for active packaging film in research conclave packaging strategies for global competitiveness' on 9th and 10th October, 2015 during "World Packaging Congress", Mumbai.
- Organizing member and presented a poster, Development and characterization of biocomposite film from rice husk and its application for packaging cookies, in the 9th National Conference on Solid State Chemistry and Allied Areas (ISCAS-2015) held at Conference Centre, University of Delhi from May 8th to 10th, 2015.

Dr. Shalini Sehgal

- Invited Speaker for presentation titled "Consumer perception and attitudes about the Probiotic foods in Indian market "at 7th Indo-Global Summit and Expo on Food & Beverages (Food India-2015) on 8-9th October, 2015 at New Delhi.
- Invited Speaker for presentation titled "Microbial hazards associated with the fresh produce sold in retail outlets of West Delhi and remedies for their control "at the National Conference on Food Safety and Consumer Safety held at University of Lucknow during 21- 22nd February, 2016.
- Presented a poster titled 'Emergence of Psychobiotics as a cure for depression' in National Symposium on "Lifestyle Disorders (NSLD): Understanding the Molecular Mechanism" held during 28th – 29th January 2015 at Shivaji College, University of Delhi, Delhi.

.Presented a poster entitled "Consumer Acceptance Of Probiotic Foods: An Indian Perspective" in the 2nd Annual PAi Conference and International Symposium on 'Probiotics and Microbiome : Gut & Beyond' held from on November 3-4, 2014 at New Delhi.

Dr. Eram S. Rao

- Presented a paper titled "Emerging Trends in Food Processing and Product Development" in Indian Food Packer, Vol. 69, No.2, pg 26-35, March- April 2015.

- Presented a paper at National Seminar on “Importance of Nutrition in the Development of Processes Food” – Protein Foods and Nutrition Development Association of India Bulletin, Sept, 2015.
- Presented a paper at National Seminar on “Social Protection through Food Processing” at the World Food Day in Agribusiness & Food Industry, Vol.12 Issue 11, Nov. 2015.
- Presented a paper at “Achievements in the Food Processing Sector vis-a- vis the Vision-2015 & Future plans for the sector” in Indian Food Packer, Vol.69 No.6, pg 96- 105 Nov-Dec, 2015.
- Presented a paper at Ahaar National Seminar on “Technology & Engineering Challenges in the development of Food Processing Industry in India” N. Delhi, 12th March 2015 on “Emerging Trends in Food Processing and Product Development”.
- Presented a paper at the CII 10th Food Safety and Quality Summit at New Delhi on “Food Safety Forewarning: Food Safety and Hygiene practices of Food Handlers: A case study of Delhi street food vendors”- Master Classes on “Innovative Tools and Techniques for Food safety Forewarning” 1-2nd December, 2015.
- Presented a paper at a National Seminar on “A decade of Progress, Challenges and Opportunities in the Food Processing Sector- Perspective 2015”- 17th Dec, 2015 at New Delhi on “Achievements in the Food Processing Sector vis-a- vis the Vision-2015 & Future plans for the sector”.
- Presented a paper at a National Seminar on “Role of Prebiotics and Probiotics in Healthy Lifestyle” on 22nd Jan, 2016 at Amity Institute of Food Technology.
- Presented a paper at a Pre-Conference International Conference Workshop on Occupational and Environmental Health on “Health centered Intervention: Nutritional supply” on 5th Feb, 2016 on the theme “Disaster and Climate Resilient Public Health System: Risk Analysis, Planning and Crisis Management”.
- Presented a poster titled “Synthesis of a novel biodegradable polyblend for food packaging” at a National seminar on “Polymer Modification, Processing and Characterization” held during 25th Jan, 2016 at Bhaskaracharya College of Applied Science, University of Delhi.
- Presented a poster titled “Synthesis and characterization of biodegradable thermoplastic polyester film for food packaging” at the 5th National Symposium on “Advances in Chemical Sciences” at Guru Nanak Dev University, Amritsar on 2nd-3rd Feb, 2016.
- Presented a poster titled “Synthesis, biodegradation and food compatibility of thermoplastic terpolyester” at a National conference on “Nanoscience- opportunities and challenges” at Maitreyi College, University of Delhi.
- Presented a poster titled “Development of cookies with biodegradable packaging material for diabetics” at the National Conference on “Food Processing and Technology: Current Status and Future Prospects (NCFPT-2016)” on 25-26 February, 2016 organized by the School of Bioengineering and Food Technology, Shoolini University, Solan (HP).
- Launched the First E-Newsletter of Association of Food Scientists and Technologists of India, Delhi Chapter. It was formally launched on 16th Oct, 2015, Vol.1, Aug-Oct, 2015.

- Developed Website http://www.afstidelhi.org/past.html of Association of Food Scientists and Technologists of India, Delhi Chapter. It was formally launched on 22nd Jan, 2016.
- Presented a paper "Food Processing Sector in India: Current Scenario and Future Prospects" National seminar on "Food and Textile Industry- Emerging Trends and Perspectives" ISBN 978-81-7844-331-0. Lakshmibai College, Delhi University February 10, pg-41.
- Presented a paper "Nutraceuticals and Functional Foods- Emerging Trends and Perspectives" at Warner School of Food & Dairy Technology, Sam Higginbottom Institute of Agriculture, Technology & Sciences. Deemed to be Univ. Allahabad UP, February 25, pg 11.
- Invited for a lecture on 'Emerging "Hot Trends" in Food Processing and Product development: Thought for Food' at Lady Irwin College on May 7, 2014.
- Presented a paper on "Food Security and Minimum Standards of Food during Disasters" at workshop jointly organized by National Institute of Disaster Management and Department of Community Medicine on 'Environmental-Health Disasters – Risk Analysis &Planning' held on September 24-25, 2014, at Maulana Azad Medical College, New Delhi
- Presented a paper entitled "Assimilation of Food Safety Culture in the Food Supply Chain: Keeping pace with a rapidly developing Food Processing Industry in India" in an International Indo-Italian workshop on "Food Technology and Cold Chain Management" which was held at Amity Microbiological Institute of Technology, U.P. India on November 26-27, 2014.
- Presented a paper entitled "Emerging Trends in Food Processing and Product Development" in a National Seminar on 'Technology & Engineering Challenges in the development of Food Processing Industry in India' which was held at Aahar on March 12, 2015.

Dr. Meenakshi Garg

- Presented a paper entitled "Nutritional Status of North Indian Obese Young Adults" at the 4th International Conference on 'Obesity and Weight Management' held at Atlanta, U.S.A December 7-9, 2015
- Presented a poster entitled "Nutritional Facts and Analysis of Cucumber Powder for the Preparation of Cucumber Flakes " at The 5th Asian Oceano Conference on Green and Sustainable Chemistry held at Indian Habitat Centre , New Delhi 15-17Jan,. 2015.
- Presented a poster entitled " Nutritional Evaluation and Utilization of Peapod Powder for Preparation of Jaggery Biscuts" at XXIII Indian Convention of Food Scientists and Technologists: Fostering Innovative Research and Enterpreneurship for Indian Foods held at NIFTEM Campus, Kundli, Haryana 13-14 Dec. 2014.
- Presented a poster entitled "Assessment of nutrient intake and food consumption pattern of north Indian adults" at 4th international conference on updating food technology: A challenge towards public health nutrition on 7-8 May. 2014. Received second poster presentation award for the same.

DEPARTMENT OF MICROBIOLOGY

Books and Research Publications in journals and conference proceedings of the faculty: (2014-16)

Dr. Vijay K. Nalla

- ***Nalla VK***, Kamthan M, Ruhela D, Kamthan A, Maiti P, et al. (2014) Characterization of a Putative Spindle Assembly Checkpoint Kinase Mps1, Suggests Its Involvement in Cell Division, Morphogenesis and Oxidative Stress Tolerance in *Candida albicans*. PLoS ONE 9(7): e101517. doi:10.1371/journal.pone.0101517.(Impact factor 3.730)**.**
- ***Nalla VK.,*** Khanduri D., Jha M.K., Chahar.M., Sen Gupta A.K.,(2015) "Role of a novel microbial consortium in treatment of waste and it's effect on the plant growth and yield- A study on Tomato crop". Journal of Agro Ecology and Natural Resource Management (ISSN: 2394-0794) Vol 2, Issue 5; July-September 2015 pp. 337-340
- Siddharth Srivastava, Anusha Chaudhary, Deepali Vaid, Deepika Rana, Lakshmi Rana, Monika Yadav, Anu Anmol, Nishant Jain, Akanksha Agarwal, Ravinder Singh ,Krishna Dutt, Siddharth Sirohi, Divya Bajaj, Yogender Pal Khasa, ***Vijay Kumar Nalla*** (2015) Identification of Novel Microbial Consortia for Rapid Degradation of Synthetic Polymers. Published in Proceedings of 3rd World Biodiversity Congress, Serbia 26th-29th October, Serbia.

Dr. Pawas Goswami

- Sharma, P, Tomar, SK, ***Goswami, P***, Sangwan, V and Singh, R. (2014), Antibiotic resistance among commercially available probiotics. Food Research International 57: 176-195. (IF 2.818)
- Sharma, P. Tomar, S. K., Sangwan, V., ***Goswami, P.*** and Singh, R. (2015). Antibiotic resistance of *Lactobacillus sp*. Isolated from commercial probiotic preparations. Journal of Food Safety. Vol. 36, Pages 38-51.(IF: 0.860)

Dr. Purnima Anand

- Bansal, N., ***Anand, P.,*** Mittal, A., Chaudhry, U., Saluja, D. 2015. Childhood obesity and the role of maternal factors. 10th Annual Symposium on Frontiers in Biomedical Research -2015 (FBR-2015) Comprehending Genes@work: From Structural Biology to Drug Discovery organized by Dr. B.R. Ambedkar Centre for Biomedical Research, University of Delhi (29th-31st Oct'2015).
- Shruti Jindal, Pragya Ahuja, Divya Bindra, Divya Khurana, Prerna Angrish, Akash Kumar, Rishi Kashyap, Balaram Pani, Ranjeet Singh Thakur, Avneesh Mittal, ***Purnima Anand,*** Neha Bansal, Uma Chaudhry and Daman Saluja. 2016. Alarming increase in the cases of childhood obesity… (Where are we heading?) National Symposium on Lifestyle Disorders held at Shivaji College (28th-29th January'2016)
  (Awarded consolation prize in the symposium)
- Prerna Singh, Neetika Naudiyal, Pulkit Singhal, Prerna Angrish, Bhoomika Shokeen, Juhi Kumari, Akash Kumar, Rishi Kashyap, Devyani Das, Manisha, Balaram Pani, Ranjeet Singh Thakur, Avneesh Mittal, ***Purnima Anand,*** Neha Bansal, Uma Chaudhry and Daman Saluja. 2016. Role of Gut Microbiota in

childhood obesity. National Symposium on Lifestyle Disorders held at Shivaji College (28th-29th January'2016).

Dr. Ruchi Gulati Marwah

- Verma,G., Singh,Y., Anjali, Sabharwal, N., Aggarwal, A., Mongia, G., Kaur, I., ***Marwah, R.G***. (2015). A short review on Microbial Fuel Cell Technology and a proposed approach for generation of electricity using waste water treatment. Published in proceedings of "National Conference on Inspired Learning" published by Indian Journal of Scientific Research and Development, Vol. 2, pp 9-11.
- Kumar, P., Kaur I., ***Marwah, R.G***., Mongia G. and Kapoor, A. (2016). An approach for electricity generation using microbial fuel cell technology: A green energy inititative. Journal of Energy Research and Environmental Technology, Vol 3, Issue 2, pp 127-130.

Dr. Neha Bansal

- Sehgal, S., Dhewa, T., **Bansal, N**., Shashank, A., Sharma, N., Thakur, M., Himanshi, Anand, S., Mehta, S., Anil, Pal, R., Jha, A.,Chandel, G. and Sarna, P. Evaluation of Labeling Practices of Probiotic Products commercially available in Delhi Market. DU Journal of Undergraduate Research and Innovation. 2015 Feb.
- Mehta, S., Anand, S., **Bansal, N**., Dhewa, T., Sehgal, S., Singh, R. 2014. Microorganisms used in Indian probiotic products. National seminar on advancements in packaging food and social impact held at Delhi. 3rd Nov, 2014.
- Sharma, N., Anil, **Bansal, N**., Dhewa, T., Sehgal, S., Singh, R. 2014. Current labeling practices of probiotic products available in Delhi market. National seminar on advancements in packaging food and social impact held at Delhi. 3rd Nov, 2014.
- **Bansal, N**., Anand, P., Mittal, A., Chaudhry, U., Saluja, D. 2015. Childhood obesity and the role of maternal factors. 10th Annual Symposium on Frontiers in Biomedical Research -2015 (FBR-2015) Comprehending Genes@work: From Structural Biology to Drug Discovery organized by Dr. B.R. Ambedkar Centre for Biomedical Research, University of Delhi (29th-31st Oct'2015).
- Shruti Jindal, Pragya Ahuja, Divya Bindra, Divya Khurana, Prerna Angrish, Akash Kumar, Rishi Kashyap, Balaram Pani, Ranjeet Singh Thakur, Avneesh Mittal, Purnima Anand, **Neha Bansal**, Uma Chaudhry and Daman Saluja. 2016. Alarming increase in the cases of childhood obesity… (Where are we heading?) National Symposium on Lifestyle Disorders held at Shivaji College (28th-29th January'2016) (Awarded consolation prize in the symposium)
- Prerna Singh, Neetika Naudiyal, Pulkit Singhal, Prerna Angrish, Bhoomika Shokeen, Juhi Kumari, Akash Kumar, Rishi Kashyap, Devyani Das, Manisha, Balaram Pani, Ranjeet Singh Thakur, Avneesh Mittal, Purnima Anand, **Neha Bansal**, Uma Chaudhry and Daman Saluja. 2016. Role of Gut Microbiota in childhood obesity. National Symposium on Lifestyle Disorders held at Shivaji College (28th-29th January'2016).

Papers/Posters presented in national / international conferences (2014-16)

Dr. Ruchi Gulati Marwah

- Presented a poster titled "*Bio-photovoltaics (BPV): Harnessing energy for future technologies"* at "National Conference on Nanotechnology and Renewable Energy-2014" held at Jamia Millia Islamia, on April 28-29, 2014.
- Presented a paper titled "*Algae: Power plants of future "* and published the paper in proceedings during National Conference on "Striving and Thriving towards Student Driven Research in Science and Technology for Inspired Learning" on October 16-17, 2014, held at Maharaja Agrasen College, University of Delhi.
- Presented a paper titled *"Bio-electricity production using algae: A brighter road ahead…."* and published the paper in proceedings during National Conference on "Recent Trends in Future Instrumentation and Electronics" held at Shaheed Rajguru College of Applied Science, University of Delhi on January 5-6, 2015.

19. List of Short term training courses/workshops conducted for students and faculty, including title, duration, no. of beneficiaries

DEPARTMENT OF BIOCHEMISTRY (Training courses/workshops conducted for students)			
Details of the training program	**Resource Persons**	**Number and names of participating students**	**Impact on the team**
Spectrophotometry: A powerful tool for quantitation One day 22nd August 2014 Hands-on-training for the use of Spectrophotometer	Dr. Anita Sondhi	30 students of B. Sc. (Hons) Microbiology III Semester [Annexure-Biochem – II]	Since students of Microbiology routinely use Spectrophotometry as a tool for the study of growth curves of bacteria and for assay of enzymes, it was important to make them understand the concept of this technique in detail.
PROTEIN PURIFICATION WORKSHOP: Organized a workshop series on Methods of Protein Purification 15th, 16th, 22nd, 23rd,29th , 30th September, 2014 Technique Expertise Imparted : Salting out, Dialysis, Ion - exchange Chromatography, Affinity Chromatography	Dr. Anita Sondhi	31 students of B. Sc. (Hons) Biomedical Science II Year [Annexure-Biochem – III	To emphasize the protocol followed for the purification of proteins and to introduce them to new techniques as this batch was studying the paper titled : Protein Structure and Function.
Workshop on Acute Myeloid Leukemia: molecular aspects One Day	Dr. Sunita Jetly, Acharya Narendra	31 students of B. Sc. (Hons) Biomedical Science II Year	Emphasis was given on molecular methods to detect Acute Myeloid Leukemia. More specifically real time –

10th March, 2015 Event Coordinator: Dr. Anita Sondhi	Dev College Dr. Uma Chaudhry	[Annexure-Biochem – III	PCR method was explained.

DEPARTMENT OF BIOMEDICAL SCIENCE (Training courses/workshops conducted for students)			
Details of the training program **Date and Coordinators**	**Resource Persons** **From college and outside**	**Number and names of participating students**	**Impact on the team**
Modern Methods in Drug Design : Prospects and Challenges 17th October 2014 Event Coordinator : Dr. Uma Chaudhry Dr. Shivani G. Varmani	Dr. Anshu Bharadwaj CSIR-Open Source Drug Discovery Unit Dr. Uma Chaudhry	49 students of B. Sc. (Hons) Biomedical Science III Year [Annesure-BMS-III]	Students were exposed to bioinformatic tools of drug discovery. How such tools help them reduce time for drug discovery process.
Molecular Modelling in Drug Discovery 3 days 16th to 18th July 2014 Event Coordinator : Dr. Uma Chaudhry Dr. Shivani G. Varmani	Dr. S. Janardhan from CSIR-Indian Institute of Chemical Technology, Hyderabad and Dr. E R Azhagiya Singam from Chemical Laboratory CSIR-Central Leather Research Institute Chennai were the trainers Dr. Anshu Bharadwaj Dr. Uma Chaudhry	31 students of B.Sc. (Hons) Biomedical Science II Year [Annesure-BMS-II]	Students were given hands-on training on the use of various online freeware tools such as GROMACS, AMBER, PYMOL, Autodock Vina, MGL Tools, Visual Molecular Dynamics (VMD) and Molecular Property Diagnostic Suite (MPDS). These tools helped them with various structure modelling studies.
Statistical Analysis of Biological Data 9th to 11th October, 2014 Event Coordinator : Dr. Uma Dhawan	Dr. S. Ramachandran from IGIB and Dr. B. S. Singh from Indian Institute of Health Management Research (IIHMR) Dr. Gagan Dhawan from Acharya Narendra Dev College Dr. Uma Dhawan	23 students [Annexure – BMS – IV]	Three days workshop was to acquaint the students with the basic statistical methods and tools used for analysing biological data. Included both lectures and hands-on-training sessions.
Proteomics and Proteogenomics	Dr. Debasis Dash and Dr. Dhirendra	In all 20 students.	Two days workshop was to acquaint the students with

10th and 11th January, 2015 Event Coordinator : Dr. Uma Dhawan	Kumar from Institute of Genomics and Integrative Biology (IGIB) Dr. Gagan Dhawan from Acharya Narendra Dev College Dr. Uma Dhawan	[Annexure – BMS – V]	the basics of Proteogenomics. The two days workshop included both lectures and hands-on-training sessions.

DEPARTMENT OF FOOD TECHNOLOGY (Training courses/workshops conducted for students)			
Details of the training program	**Resource Persons**	**Number and names of participating students**	**Impact on the team**
Workshop on Edible Packaging 28th January 2015	Dr. Susmita Dey Sadhu	63 students of B. Sc.(Hons) Food Technology III year [Annexure-FT-III]	Learnt new technique of packaging to improve shelf life
Workshop on Scientific Writing and E-Resources in Food Technology 19th January 2015	Dr. Rajesh Singh, Deputy Librarian, University of Delhi Ms. Prabhjot Kaur, IIT	Around 100 students of B. Sc. I, II and III year [Annexure-FT-I, II and III]	Learnt effective way of searching articles from journals and scientific paper writing
Workshop on Polymerase Chain Reaction (PCR) on Probiotic Research 14th January 2015	Dr. Pawas Goswami	63 students of B. Sc.(Hons) Food Technology III yepracticals ar [Annexure-FT-III]	Demonstrated operation of PCR and its use in probiotic research
Texture Analyser and its Applications in the Food Industry 5th November 2014	Mr. Devesh	63 students of B. Sc.(Hons) Food Technology III year [Annexure-FT-III]	Demonstrated operation of Texture analyser and its use
Advancements in Packaging, Food and Social Impact 3rd November 2014	Prof. N.C,Saha Mr. Deepak Manchanda Mr. Vijay Sood Prof. A.K.Ghosh	150 delegates of Food Technology Department [Annexure-FT- I, II and III] And also some Industry personnel	Highlighted the recent advances in packaging and regulatory issues. Emphasized on the significance of nutraceuticals and functional food, sustainable food packaging and environmental concerns.

DEPARTMENT OF MICROBIOLOGY (Training courses/workshops conducted for students)			
Details of the training program	**Resource Persons**	**Number and names of participating students**	**Impact on the team**
A symposium on Biofuels: An Alternative and Non-Conventional Energy Source for Future One Day symposium 2nd February 2015 Event Coordinators: Dr. Pawas Goswami Dr. Ruchi G. Marwah Dr. Neha Bansal	Prof. R.K. Saxena (Dept. of Microbiology, UDSC) Dr. Saurabh Saran (Coordinator, TBI, UDSC) Dr. Ashish Bhatnagar (Maharishi Dayanand University, Ajmer)	**60 students** B.Sc.(Hons) Microbiology II and III Year and **6 faculty** namely Dr. Ruchi Marwah, Dr. Purnima Anand, Dr. Neha Bansal, Dr. Pawas Goswami, Dr. Tejpal Dhewa, Dr. S.K. Srivastava from SSN college, DU [Annexure-MICRO-II and III]	Awareness about the global energy crisis and thus motivate students and faculty to pursue projects in the area of alternate sources of energy
Workshop on Viral Cultivation Strategies One Day 8th September 2014 Event Coordinators: Dr. Ruchi G. Marwah Dr. Neha Bansal	Dr. A. K. Prasad (Retd. Professor, Vallabhbhai Patel Chest Institute, VPCI) Dr. Madhu Khanna (Professor, VPCI)		Hands-on experience on Chick embryo technique for viral inoculation
Workshop on Mushroom cultivation One Day 12th August 2014 Event Coordinators: Dr. Tejpal Dhewa Dr. Pawas Goswami	Dr. Ajay Yadav Chief Scientist HAIC Agro research and development centre, Sonepat	54 students of the college and 2 faculty members namely Dr. Nalla Vijay Kumar Dr. Tejpal Dhewa [Annexure-MICRO – II and III]	Hands-on training on various steps involved in mushroom cultivation

20. Guest Lectures (details like name of scientist, topic, no. of students)

DEPARTMENT OF BIOMEDICAL SCIENCE (INVITED SPEAKERS)				
Invited Talk	**Resource Person and his/her affiliation**	**Date of the lecture organized**	**Name of the participants**	**Impact on the team**
Loyalty to a Model Organism: To be or Not to be? That's the question	Prof. Vani Brahmachari, Professor at Dr. B. R. Ambedkar Centre of Biomedical Research	4th March 2015	100 students of B. Sc. (Hons) Biomedical Science [Annexure-BMS-I, II and III]	Students were given awareness on various model organisms available today and their significance
Biodiversity Conservation Coordinated by Dr Parvinder Kaur	Dr Satish Chandra Garkoti, Associate Professor, School of Environmental Science, Jawaharlal Nehru University	24th February 2015	49 students of B. Sc. (Hons) Biomedical Science III year [Annexure-BMS-III]	Students given insights about Ecology and Biodiversity Conservation. Activities such as technical writing on "Recycling of Waste", and "Best out of waste" were also organized on the same day
The Swachh Technologies: Microbial Factories	Dr. V. C. Kalia Scientist	29th October, 2014	80 students of B. Sc. (Hons) Biomedical Science Part II and III [Annexure-BMS-II and III]	Insight given for our students to keep their surroundings clean and also how they can as Scientists make a difference by doing their bit for the country.
Integration of gene expression and metabolic reactions models provides insights into robustness and drug target points in M. tuberculosis	Dr. S. Ramachandran Scientist Institute of Genomics and Integrative Biology (IGIB)	9th October 2014	80 students of B. Sc. (Hons) Biomedical Science Part II and III [Annexure-BMS-II and III]	Various tools of cloning, expression and purification were described.
Developing 'molecular' or 'cellular' based protocol to define the extent of epileptogenic zone and elucidating the molecular basis of	Dr Aparna Dixit Assistant Professor, National Brain Research Centre	15th September 2014	100 students of B. Sc. (Hons) Biomedical Science Part II and III [Annexure-BMS-II and III]	The students interacted with Dr Aparna Dixit and discussed various issues related with Epilepsy and experimental design

intractable epilepsy (IE)				
Survival Strategies of Bacterial Pathogens	Dr. Yogendra Singh, Scientist, Institute of Genomics and Integrative Biology	25th August 2014	100 students B. Sc. (Hons) Biomedical Science Part II and III [Annexure-BMS-II and III]	Students were given insights on identifying pathogenic islands of bacteria.
Gonorrhea Control: What is the status today?	Dr. Manju Bala Safdarjung Hospital	24th July 2014	50 students B. Sc. (Hons) Biomedical Science Part II and III [Annexure-BMS-II and III]	Importance of antimicrobial susceptibility was emphasized
Acinetobacter baumannii An Emerging Infection Invited Talk through Skype	Dr. Siddharth Chopra Central Drug Research Institue (CDRI) Lucknow	17th March 2015	31 students of B. Sc. (Hons) Biomedical Science II year [Annexure-BMS-II]	The importation of A. baumannii and subsequent presence in hospitals was well explained.

DEPARTMENT OF FOOD TECHNOLOGY (INVITED SPEAKERS)				
Invited Talk	**Resource Person and his/her affiliation**	**Date of the lecture organized**	**Name of the participants**	**Impact on the team**
Fostering Innovation culture for successful Entrepreneurship	Mr. Vijay Sardana Business Advisor	6th February 2015	Faculty members and students of Food Technology Department [Annexure-FT-I, II and III]	Created awareness
Creating value through Intellectual Property- Need of the hour	Ms. Priyanka Sardana IPR Consultant	6th February 2015		Created awareness about IPR
Industrial Analysis of Foods	Dr. Sujata Pandit, Head R&D and Mr. Anand Gulati, Business Head, FRAC LAB Dwarka	13th August, 2014		Learnt new methods of food analysis
e-resources in Food Technology	Dr. Rajesh Singh, Deputy Librarian, University of Delhi –	19th January, 2015		Gave information about different search engines

TWO talks on : Scientific writing and e-resources in Food Technology Future prospects of budding Food Technologists	Ms. Prabhjot Kaur, Indian Institue of Technology, Delhi	19th January, 2015		Learnt scientific writing of paper and got information regarding scope of Food Technology

DEPARTMENT OF MICROBIOLOGY (INVITED SPEAKERS)				
Invited Talk	**Resource Person and his/her affiliation**	**Date of the lecture organized**	**Number and names of the participants**	**Impact on the team**
Influenza and its vaccination	Prof. A.K. Prasad, Former Head, Deptt of Virology, V.P.Chest Institute	8th September 2014	60 students of B.Sc.(Hons) Microbiology II and III Year [Annexure – MICRO – II and III]	The students and the faculty got first-hand knowledge about the latest vaccines being developed against influenza. They were also enlightened about the detailed pathogenesis of influenza virus infection and its epidemiology.
Influenza and its pathogenesis	Prof. Madhu Khanna, Deptt of Virology, V.P.Chest Institute	8th September 2014		
Oleaginous yeasts for biodiesel production	Dr. Saurabh Saran, Microbiology Deptt., TBI, University of Delhi	2nd February 2015	125 students including students from B.Sc.(Hons) Microbiology of our college and also students from other colleges	Awareness about the global energy crisis and thus motivate students and faculty to pursue projects in the area of alternate sources of energy
Fuel from Filth	Dr Ashish Bhatnagar, MDS University, Ajmer	2nd February 2015		
Butanol: A burning issue for second generation biofuels	Prof. R. K. Saxena, Department of Microbiology, University South Campus	2nd February 2015		

21. Visits to industries, institutes etc (name of place, duration of visit and no. of students)

DEPARTMENT OF BIOMEDICAL SCIENCE (VISITS)				
Place and date of visit	**Resource Persons involved (From college and place of visit)**	**Duration of the visits**	**Number and Name of the participants**	**Impact on the team**
Institute of Informatics and Communications University of Delhi South Campus	Dr. Sanjeev Singh Associate Professor and Proctor ICT In-Charge Dr. Anshu Bharadwaj from CSIR Dr. Shivani G. Varmani and Dr. Uma Chaudhry	3rd March, 2015	13 students of B. Sc. (Hons) Biomedical Science III year Chaitanya Jain, Kaushal Bodwal, Chitra, Sabita, Aaastha, Ashnam Nisha Mansuri, Deepika, Nidhi Yadav, Surbhi Dahiya, Jagriti Yadav, Vaishali Joshi and Kirti	Students were made aware about genome annotation tools and approaches like BLAST, PHYRE, CDD, Brenda, BEL. Introduction to Gene Ontology tools
CSIR-Open Lab at CSIR Headquarters	Dr. Anshu Bharadwaj, Scientist CSIR-Open Source Drug Discovery Unit Dr. Uma Chaudhry	12th March 2015	22 students of B. Sc. (Hons) Biomedical Science III year and one faculty member and a non-teaching member [Annexure-BMS-III]	Students were given insights of drug resistance in *Acitinobacter baumanii* Various functional characterization tools were learnt to identify novel drug targets of the organisms
Department of Biophysics, All India Institute of Medical Sciences (AIIMS)	Dr. (Mrs.) Rajeswari R. Moganty Department of Biochemistry, AIIMS Dr. Kapil Roy	15th March 2015	9 students of B. Sc. (Hons) Biomedical Science Rekha, Deepti, Monika Samra, Megha Chaudhry, Manisha, Prajakta, Stabonia, Ayushi and Aastha	Students were introduced to the world of biophysics and the multitude of avenues that it opens up and how it builds strong foundation
Industrial Visit to "Yakult", Sonepat	Dr. Parvinder Kaur	22nd September 2014	31 students of B. Sc. (Hons) Biomedical Science III year	Students observed large scale preparation of *Yakult* and significance of

			[Annexure-BMS-III]	Probiotics in overall health improvement was discussed
HAIC Agro research and development centre, Sonepat for a workshop on Mushroom cultivation	Dr. Ajay Yadav, Chief Scientist (HAIC) Dr. Parvinder Kaur	12th August 2014	49 students of B. Sc. (Hons) Biomedical Science III year [Annexure-BMS-III]	Got knowledge about Mushroom cultivation and harvesting as possible career option
Industrial visit to Superior industries, Faridabad	Dr. Neha Singh	10th October 2014	30 students of B. Sc. (Hons) Biomedical Science III year [Annexure-BMS-III]	Students learnt the industrial scale production of products

DEPARTMENT OF FOOD TECHNOLOGY (VISITS)				
Place of visit	**Resource Persons involved (From college and place of visit)**	**Duration of the visit**	**Number and Name of the participants**	**Impact on the team**
Indian Institute of Technology, Delhi	Dr.Meenakshi Garg	19th January, 2015	Aditi, Bhupender, Shefali, Priyanka	Explored recent developments in plastic packaging

DEPARTMENT OF MICROBIOLOGY (VISITS)				
Place of visit	**Resource Persons involved (From college and place of visit)**	**Duration of the visit**	**Number and Names of the participants**	**Impact on the team**
Mother Dairy Plant, Patparganj	Dr. Pawas Goswami	One day 30th June 2014	27 students B.Sc.(Hons) Microbiology [Annexure – MIC-III]	Students got first-hand experience of processing of milk and its products and learnt about various adulteration tests.
Industrial Visit to “Yakult”, Sonepat	Dr. Tejpal Dhewa Dr. Pawas Goswami	One day 12th August 2014	54 students of B.Sc.(Hons) Microbiology II&III Year [Annexure – MIC II and III]	Students observed preparation of *Yakult* and learnt about significance of Probiotics in our health improvement
HAIC Agro research and development centre, Sonepat	Dr. Tejpal Dhewa Dr. Pawas Goswami	One day 12th August 2014	54 students of B.Sc.(Hons) Microbiology II&III Year	Got knowledge about Mushroom cultivation and harvesting as

for a workshop on Mushroom cultivation	Dr. Ajay Yadav, Chief Scientist (HAIC)		[Annexure – MIC II and III]	possible career option
Industrial visit to Superior industries, Faridabad	Dr. Tejpal Dhewa Mr. Amit (Chemist)	One day 10th October 2014	15 students of B.Sc.(Hons) Microbiology III Year [Annexure – MICRO - III]	Gained practical knowledge of manufacturing of beer and other products using microorganisms
TBI, University of Delhi (South Campus)	Dr. Ruchi Gulati Marwah and Dr. Neha Bansal (BCAS) Dr. Saurabh Saran (TBI, UDSC), Prof. R. K. Saxena	One day	60 students of B.Sc.(Hons) Microbiology II&III Year [Annexure – MICRO - II and III]	Students got first-hand experience of running pilot scale fermentor and learnt about its importance in various industries.

22. List of Lab manuals/SOPs generated for all participating departments

DEPARTMENT OF BIOCHEMISTRY		
Name of the Lab manual / SOPs generated	**Content of the manual**	**Beneficiaries**
Biochemistry Manual Resource Person: Dr. Anita Sondhi	1. Chromatography Manual 2. Electrophoresis Manual 3. Spectrophotometry Manual 4. Biomolecule Analysis Manual 5. Preparation of solutions and Buffers Manual	Students of B. Sc. (Hons) Biomedical Science B. Sc. (Hons) Food Technology B. Sc. (Hons) Microbiology
DEPARTMENT OF BIOMEDICAL SCIENCE		
Name of the Lab manual / SOPs generated	**Content of the manual**	**Beneficiaries**
Molecular Biology Resource Person: Dr. Uma Chaudhry	1. Culture and maintenance of bacteria 2. To prepare competent cells of Escherichia coli culture. 3. To transform competent cells of E.coli (DH5α) cells with recombinant plasmid. 4. To demonstrate antimicrobial resistance in E. coli bacteria. 5. Isolation of plasmid DNA from Escherichia coli by alkaline lysis 6. Quantitative estimation of DNA by the diphenylamine reaction 7. To perform PCR based for the detection of food pathogens	Students of B. Sc. (Hons) Biomedical Science

Human Genetics Resource Person: Dr. Uma Chaudhry	1. To prepare pedigree charts for the Blood group analysis, Tongue rolling, Ear lobes, and Color blindness. 2. To perform metaphase chromosome spread using peripheral blood sample. 3. To study the various abnormal karyotypes observed in humans. 4. Isolation and purification of genomic DNA from whole blood 5. To detect single nucleotide polymorphisms (SNPs) using SNP specific primers and PCR. 6. To study VNTRs (Variable Number of Tandem Repeats) in human genome as the polymorphism loci. 7. Website based analysis to retrieve a nucleotide sequence from NCBI, designing primers for PCR based detection of the downloaded gene and mapping primers on the genome.	Students of B. Sc. (Hons) Biomedical Science
DEPARTMENT OF FOOD TECHNOLOGY		
A Laboratory Manual of Food analysis Resource Person: Dr. Shalini Sehgal	Thirty two experiments dealing with proximate analysis of food and functioning of related laboratory equipments	Students of B. Sc. (Hons) Biochemistry B. Sc. (Hons) Food Technology
Food Safety Manual Resource Person: Dr. Shalini Sehgal	Experiments dealing with the various aspects of safety such as microbial load in food, water quality, air quality and personal hygiene	Students of B. Sc. (Hons) Microbiology B. Sc. (Hons) Food Technology
Food Microbiology Manual Resource Person: Dr. Shalini Sehgal	Experiments dealing with morphology of the microbes, nature of the microorganism and methods of enumeration (qualitative and quantitative)	Students of B. Sc. (Hons) Microbiology B. Sc. (Hons) Food Technology
Food Quality Testing and Evaluation: Sensory Tests and Instrumental Techniques	Twenty two experiments have been designed with the objective to develop in the student scientific fervor and ability to apply appropriate tools and techniques to evaluate sensory properties of foods. Name of the Author: E. S. Rao, (2014), ISBN No 978-93-81156-30-8	Students of B.Tech and B. Sc. (Hons) Food Technology, Delhi University AND

Food Quality Analysis	Food Quality Analysis is compilation of certain qualitative, and quantitative procedures which are taught to the under graduate students of Food Technology. Twenty eight experiments based on IS Methods of Analysis for Adulterants and Contaminants in Foods have been designed. Name of the Author: E. S. Rao, (2014), ISBN No 978-93-81156-37-7	Reference Manual for Teachers of various colleges and universities of India as well as Delhi University.
DEPARTMENT OF MICROBIOLOGY		
Laboratory workbook of Bacteriology	Various bacterial culturing and staining techniques 1. To perform simple staining of the given bacterial cultures. 2. To perform Gram staining of the given bacterial cultures. 3. To perform endospore staining for the given bacterial culture. 4. To perform negative staining of the given bacterial cultures. 5. To check the presence of capsule in the given bacterial culture. 6. To perform acid fast staining of the given bacterial cultures. 7. To isolate a pure culture of a given bacterium by performing streak plate method. 8. To determine the bacterial numbers in a given culture by serial dilution method. 9. To observe for bacterial motility by using hanging drop slide method 10. Figures	Students and Faculty of microbiology and related fields
Laboratory workbook of Ecology	Experiments related to soil properties, soil enzymes and isolation of soil microflora showing different properties 1. To determine the pH of a given soil sample. 2. To determine the moisture content of the given soil samples. 3. To determine the water-holding capacity (WHC) of given soil samples. 4. To determine the percolation rate of water through the given soil sample. 5. To determine the capillary action of various soil samples. 6 .To isolate microbes (bacteria and fungi) from soil at different temperatures. 7. To isolate and enumerate bacteria and fungi from rh izosphere, rhizoplane and root-free soil. 8. To detect the presence of urease enzyme in soil. 9. To detect the presence of amylase enzyme in the soil samples. 10.To isolate *Rhizobium* from root nodules of legumes 11. To isolate *Azotobacte*r from rhizospheric soil.	

	12.To detect the presence of dehydrogenase enzyme in the soil.	
Departmental Magazine *Life under lens* issue I	Scientific articles from both students and faculty	
Special issue of *Life under lens* on Antimicrobial Resistance	Includes scientific abstracts and articles from students and faculty	

Generation of VIRTUAL LABS (for Life Sciences).

Breaking away from the traditional hierarchical method of teaching, towards a constructive approach, we have been able to develop few virtual labs under the Star College Scheme which would help students learn the techniques which are difficult to perform in the labs.

1. To conduct Ames test or Reverse mutation test for screening substances for mutagenicity
2. Agarose Gel electrophoresis of DNA
3. Perform Southern Blot Hybridization
4. Detection of microbial load in a given sample.

This new method of learning marks a paradigm shift in teaching as well, provisioning students to understand and develop a scientific acumen. E – learning modules are also being generated in the form of Virtual Labs and question bank for students.

Collection of video lectures

We envisage starting the process of making videos of very popular lectures of well-known Scientists which could be accessed by students any time. Even classroom lectures of teachers can be recorded and shared with students studying in remote areas.

23. **Feedback mechanism adopted (to be indicated in term of how the quality of teaching and hands on training improved)**

There are several informal occasions where the Principal interacts with the students. The aim of this interaction is to seek feedback for the improvisation in the teaching methodology. The suggestions are constructively taken and being worked upon at both individual and departmental level along with the Principal. The college strongly intends to formalize this system to achieve higher standards in teaching and learning. The feedback is also taken by the

participants of various events like seminar/workshop/conferences/invited talks / popular lectures etc. Student's feedback on the industrial training helps the teacher to incorporate new and relevant aspects in the curriculum. College also collects feedback from students directly (through Student's Advisory Committee) or indirectly through Class Representatives (CR's). This feedback is analyzed and communicated to the Department for further improvement of teaching and learning process. Feedback from students, industry experts and alumni is obtained informally.

The college monitors and evaluates the quality of its enrichment programs by constant interaction with its stakeholders by seeking feedback through the college website, departmental blog like the blog of Department of Polymer Science polybcas.blogspot.com and college library blog bcaslib.blogspot.com The Polymer science Department has developed a blog "http://polybcas.blogspot.in" (bcas.du.ac.in/courses_ps.htm) to share the relevant information of the departmental events/activities, which is linked to the college website and being administrated by the department. The students can also give their feedback and alumni share the experience through this platform in effective and easier way. Library of the college has developed a blog "bcaslib.blogspot.in" dedicated to the students, where students can get e-books, previous year question papers, online reference sources (credo references, encyclopedia Britannica, Dictionary and online books and other relevant information

(Please find attached feedback form template in Annexure - FEEDBACKS)

24. Any special innovative approach adopted by the college in improving the UG education

The college has always adopted a student- centered learning approach. There has been a paradigm shift of teaching during last few years. There is a gradual change from simple chalk and talk method to blended learning. The teaching methodology has also improved starting from 'Instructional Paradigm' towards 'Learning Paradigm' wherein learning is motivated through increasing curiosity of concepts among the students. In order to inculcate innovative ideas of teaching and learning, some of the faculty members of our college has been trained in Virtual Learning Environment and are constantly improving their teaching styles. This faculty enrichment was made possible by the support of Star College Scehem.

25. A summary on "how the Scheme helped in strengthening of the UG education and what would not have been possible without this" (not more than 1000 characters)

The Star College Scheme has helped in nurturing excellence among the students of the four participating departments. This scheme has helped college in providing hands-on training in various experiments such as spectrophotometric estimation, study of polyploidy in onion root tip by colchicine treatment, preparation of different culture media for selective isolation and identification of bacteria, and many others. We have also been able to introduce advanced techniques such as quantification of DNA using marker, Metaphase spread of chromosomes, various types of Chromatography, determination of viscosity of a macromolecule, DoT ELISA assay, Ouchterlony Double Diffusion, PCR techniques either through individual experiments or through minor research projects. These training programs would surely help our students during higher studies and also subsequently prepare them for national level entrance examinations. Increase in the number of books in our library and access to advanced level text books and journals has enabled students to further improve their knowledge.

During the second phase of the scheme, the participating departments have largely focussed on Interdepartmental and interdisciplinary activities which has increased interactions among the students of various disciplines. Opportunity to interact with eminent national and international speakers is a big hit among our students. Moreover, this scheme has helped them inculcate a strong research foundation. This not only prepares them ahead of students from other colleges but also makes them open to the idea of thinking beyond what is immediately in front of them.

The scheme has helped faculty of the participating departments as well. Faculty are encouraged to attend specialized training programs and workshops in Bioinformatics, Metagenomics etc. Such initiatives have helped them to keep abreast with latest developments in the field.

26. Suggestions/feedback for improving the scheme

Our college is really benefitted by the Star College Scheme and **sincerely thank Department of Biotechnology (DBT) for the funding**. This scheme has helped not only in procuring various instruments but also maintaining them for the last few years. All are instruments are functional and available to the students to carry out their activities. The scheme has also helped in enhancing the overall quality of teaching and learning in our college via participation in workshops, training programs etc.

In our opinion we can use this platform to have virtual classrooms and also prepare certain online courses which could be made available to students studying in remote areas. This would help the scheme to reach colleges in remote areas. Moreover, lectures of eminent scientists and invited speakers can be recorded as video lectures and made available to all the participating colleges under the star college scheme. Lab manuals prepared under the scheme can be made available to the students of colleges throughout India. Virtual labs and biorepository collection of our college could be made as a center so that other colleges can be benefitted. Our college intends to work in this direction from this year onwards. More so we have initiated a program of 'Training the trainers' through which we follow that if any faculty member undertakes some training outside, he or she is supposed to impart that training to other faculty and teachers as well.

LIST OF ANNEXURES

ANNEXURE – BIOCHEM- I :

Students of B. Tech. Food Technology II year (2014-15)

Total Number of students = 40

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	RAHUL GUPTA	21	RAHUL KUMAR SURAJ
2	HEMANI BATRA	22	AKASH RAO
3	MANISH KUMAR PANDEY	23	KUSHAL
4	RITIKESH BHARDWAJ	24	JAI GOVIND
5	AISHWARYA RAJENDRAN	25	PARTH MITTAL
6	TANU SHIVA	26	MANJOOR ALI
7	HARSHIT BAWA	27	MANU KUMAR
8	ADITI RUNGTA	28	SURENDER SINGH PAL
9	TANYA SURI	29	PREETI TYAGI
10	ARUNA KUMARI	30	HARSHITA SARWAL
11	AMIT GUPTA	31	BHAWNA CHUGH
12	SHIVANI	32	DEEPTI CHAUHAN
13	SIDDHARTH HARISH	33	RUCHI SHARMA
14	N. CHANDRAKANTH	34	AKANSHA RAWAT
15	ANKAN DATTA	35	PRAGYAN KHANNA
16	RAM CHANDER	36	DIKSHA KUMARI
17	BHARAT	37	AMAN SALUJA
18	BALRAM	38	SHIVA NAND SAHU
19	SANDEEP KUMAR MOURYA	39	SUMAN GUPTA
20	UDIT KUMAR	40	RISHABH DHALL

ANNEXURE – BIOCHEM - II :

Students of B. Sc. (Hons) Microbiology II year (2014-15)

Total Number of students = 30

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	TANIA	16	JHA AKSHAY AMARENDRA
2	SHUBHAM SINGH	17	GUNJAN GANDHI
3	NEETIKA NAUDIYAL	18	SUSHANT SAGAR
4	DAMINI SHARMA	19	NABIN KUMAR PATRA
5	DIVYA	20	MEENAKSHI
6	NISHIKA SABHARWAL	21	ABHISHEK
7	AKANKSHA RAWAT	22	NEHA YADAV
8	PRERNA SINGH	23	HARSHITA BIRUJA
9	MEETAKSH KAMBOJ	24	VINAY YADAV
10	SIDDHARTH	25	LALIT KUMAR
11	AKANSHA SHARMA	26	ANJALI MANJHI
12	HIMANSHU SEN	27	SRISHTI PRAJAPAT
13	AKHIL KUMAR	28	DEEPAK
14	ADITYA RAJ	29	RAVI KUMAR
15	KALYANA SUNDARI R	30	ABHISHEK RATH

ANNEXURE – BIOCHEM - III :

Students of B. Sc. (Hons) Biomedical Science II year (2014-15)

Total Number of students = 31

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	STABONIA MAJI	17	VIKRAM SEN
2	AYUSHI CHHABRA	18	DIKSHA SHARMA
3	SABITA YADAV	19	SURBHI DAHIYA
4	VAISHALI JOSHI	20	DEEPIKA YADAV
5	HIMANI PANDEY	21	AYUSHI YADAV
6	ANUVRAT SIRCAR	22	BUSHRA NOOR S.R.N.
7	PIYUSH WADHWA	23	NIDHI YADAV
8	AASTHA KAPOOR	24	KIRTI SHARMA
9	CHAITANYA JAIN	25	ASHNAM NISHA MANSURI
10	PALLAVI SAGAR	26	KAUSHAL BODWAL
11	CHITRA SREENIVASAN	27	DURGESH KUMAR
12	KUNAL CHUTANI	28	KIRTI
13	ARZOO GARG	29	RAVI CHAUHAN
14	JAGRITI YADAV	30	JYOTI YADAV
15	SOMESHWAR NATH JHA	31	PRASHANT RAJORIA
16	NANKI SINGH		

ANNEXURE – BMS - I :

Students of B. Sc. (Hons) Biomedical Science I year (2014-15)

Total Number of students = 41

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	RAJAT MANN	22	SWAPNILA SHARMA
2	DIVYA KHURANA	23	SAKSHI
3	ANA	24	DOLLY JAIN
4	DIVYA BINDRA	25	ASHISH MAMGAIN
5	VIKAS SHARMA	26	SASWATA BHATTACHARYYA
6	BHAWNA KUMARI NEHA	27	GAURAV KUMAR
7	AKSHAYA C NAMBIAR	28	TARNEET RAUR
8	RAHUL MADAAN	29	SAGAR
9	GUNEET KAUR	30	NABANITA HALDER
10	PRAGYA AHUJA	31	MANPREET KAUR
11	AKASH T.S.	32	NITIN KUMAR
12	SHRUTI JINDAL	33	VIVAN VARMA
13	SIMARAN LAKHINA	34	KHUSHBOO NAAZ
14	GARIMA MEHTA	35	HARSH PRASAD TAMTA
15	SIDHANT KALIA	36	SHIVANI
16	SAKSHI BEHL	37	NAVEEN KUMAR
17	PRAKRITI CHHABRA	38	RAHUL GUPTA
18	BHAWNA SAMA	39	VIPUL BHARADWAJ
19	JYOTI PINGHAL	40	SWAPNILA SHARMA
20	ANJALI SINGH	41	SAKSHI
21	SAMARTH GUPTA		

ANNEXURE – BMS - II :

Students of B. Sc. (Hons) Biomedical Science II year (2014-15)

Total Number of students = 31

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	STABONIA MAJI	17	VIKRAM SEN
2	AYUSHI CHHABRA	18	DIKSHA SHARMA
3	SABITA YADAV	19	SURBHI DAHIYA
4	VAISHALI JOSHI	20	DEEPIKA YADAV
5	HIMANI PANDEY	21	AYUSHI YADAV
6	ANUVRAT SIRCAR	22	BUSHRA NOOR S.R.N.
7	PIYUSH WADHWA	23	NIDHI YADAV
8	AASTHA KAPOOR	24	KIRTI SHARMA
9	CHAITANYA JAIN	25	ASHNAM NISHA MANSURI
10	PALLAVI SAGAR	26	KAUSHAL BODWAL
11	CHITRA SREENIVASAN	27	DURGESH KUMAR
12	KUNAL CHUTANI	28	KIRTI
13	ARZOO GARG	29	RAVI CHAUHAN
14	JAGRITI YADAV	30	JYOTI YADAV
15	SOMESHWAR NATH JHA	31	PRASHANT RAJORIA
16	NANKI SINGH		

ANNEXURE – BMS - III :

Students of B. Sc. (Hons) Biomedical Science III year (2014-15)

Total Number of students = 49

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	POOJA SAINI	26	NITU
2	KRITIKA MEHTA	27	AAKASH DUDHMANDE
3	SHWETA WARRIER	28	NANCY
4	MEENAKSHI	29	S.S SUDARSHAN
5	LAKSHYA KANOJIA	30	ANNU KALA
6	NIKENA KHWAIRAKPAM	31	ARYA PRASAD
7	EKTA KANOJIA	32	H.NIVETHA
8	ANJANA KERKETA	33	VINEET NEGI
9	PRASHANT RAWAT	34	ANSHUMAN SHAH
10	NEHA SHUKLA	35	SONU KUMAR
11	MANSI	36	ASHNA GUPTA
12	SUKRIT MAHAJAN	37	NITI RANI
13	GAURAV SAINI	38	VISHAL KUMAR
14	PRATIGYA MISHRA	39	SUMIT SOLANKI
15	SHIROHI GOVIL	40	SURBHI
16	ANJALI	41	NIKITA TANWAR
17	STEPHY ANN ABRAHAM	42	HARIT PANDA
18	HIMALI ARORA	43	PARVESH KUMAR
19	BATRA ARUSHI ARUN	44	MD. TASLEEM
20	KANIKA KARDAM	45	SHWETA
21	PRIYANKA SUJEET	46	ROHIT KUMAR
22	ARUN KUMAR	47	SUNANDA TANWAR
23	AYUSHI DHILLON	48	KUNDAN KR. SAH
24	ASMITA PATEL	49	SHEFALI RAI
25	DEEPALI CHAUDHRY		

ANNEXURE – BMS - IV :

Students participants of Statistical Analysis of Biological Data (2014-15)

Total Number of students = 23

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
B. Sc. (Hons) Biomedical Science, Bhaskaracharya College of Applied Sciences		B. Sc. (Hons) MIcrobiology, Bhaskaracharya College of Applied Sciences	
1	SHWETA WARRIER	15	AKRITI
2	ARUSHI BATRA	16	VANDANA SINGH
3	GUNEET KAUR	17	POOJA SINGH
4	AKASH T. S.	18	PARUL YADAV
5	AKSHAYA C NAMBIAR	19	VARUN RATHI
6	BHAWNA SAMA	20	AANCHAL VERMA
7	NITU	B. Sc. (Hons) Biomedical Science, Acharya Narendra Dev College	
8	NIKENA		
9	ANNU KALA		
10	PRASHANT RAWAT	21	PRAVER GUPTA
11	AAKASH DUDHMANDE	22	SHRUTI GUPTA
12	SUKRIT MAHAJAN	23	MANISHA GOEL
13	PIYUSH WADHWA		
14	KUNAL CHUTANI		

ANNEXURE – BMS - V :

Students participants of Statistical Analysis of Biological Data (2014-15)

Total Number of students = 20

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
B. Sc. (Hons) Biomedical Science, Bhaskaracharya College of Applied Sciences		B. Sc. (Hons) Biomedical Science, Acharya Narendra Dev College	
1	ANA	12	PRAVER GUPTA
2	GUNEET KAUR	13	SHRUTI GUPTA
3	AKASH T. S.	14	ANANYA BHAV
4	AKSHAYA C NAMBIAR	15	SHRISTI VAJPAYEE
5	BHAWNA SAMA	16	NITISH MALHOTRA
6	BHAWNA KUMARI NEHA	17	SHIVANI KATIYAR
7	SAKSHI BEHL	18	JOSHIKA SINGH
8	PRAKRITI CHABRA	19	SAKSHI BHARADWAJ
9	GARIMA MEHTA	20	SHAZEB AHMED
10	RAHUL MADAAN		
11	SIDHANT KALIA		

ANNEXURE – FT - I :

Students of B. Sc. (Hons) Food Technology I year (2014-15)

Total Number of students = 39

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	KOMAL	21	SAKSHI BISHT
2	ARUN KUMAR	22	NEHA KUMARI
3	NIKITA CHHABRA	23	SHWETA CHAUDHARY
4	ARPIT BUDHIRAJA	24	ABHILASHA
5	HARLEEN KAUR	25	SANGH PRIYA
6	NIKUNJ SUNEJA	26	MAMTA SOHNI
7	MAHIMA GEMINI	27	KAPIL KUMAR SHARMA
8	AVNEET KAUR	28	KULDEEP KUMAR SINGH
9	MANSI SOLANKI	29	RAJAT BUNDELA
10	BHAWANA ANAND	30	KAMNA KUNDRA
11	AAKARSH CHITTRANSH	31	MOHD. SADIQ
12	MUHAMMAD ASHFAQUE P	32	SAKSHI
13	MONU CHAURASIYA	33	AJAY DHAMA
14	HIMANSHU GOYAL	34	SADHNA
15	SHILPA KUMARI	35	NITISH SINGH
16	ISHWAR SINGH TANWAR	36	AVISEKH ANAND
17	KIRTI TIWARI	37	SAUMYA SOOD
18	AMARJEET	38	GAURAV KUMAR
19	SANDEEP KUMAR	39	TUSHAR BHARDWAJ
20	PRINCE KUMAR		

ANNEXURE – FT - II :
Students of B. Tech. Food Technology II year (2014-15)

Total Number of students = 40

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	RAHUL GUPTA	21	RAHUL KUMAR SURAJ
2	HEMANI BATRA	22	AKASH RAO
3	MANISH KUMAR PANDEY	23	KUSHAL
4	RITIKESH BHARDWAJ	24	JAI GOVIND
5	AISHWARYA RAJENDRAN	25	PARTH MITTAL
6	TANU SHIVA	26	MANJOOR ALI
7	HARSHIT BAWA	27	MANU KUMAR
8	ADITI RUNGTA	28	SURENDER SINGH PAL
9	TANYA SURI	29	PREETI TYAGI
10	ARUNA KUMARI	30	HARSHITA SARWAL
11	AMIT GUPTA	31	BHAWNA CHUGH
12	SHIVANI	32	DEEPTI CHAUHAN
13	SIDDHARTH HARISH	33	RUCHI SHARMA
14	N. CHANDRAKANTH	34	AKANSHA RAWAT
15	ANKAN DATTA	35	PRAGYAN KHANNA
16	RAM CHANDER	36	DIKSHA KUMARI
17	BHARAT	37	AMAN SALUJA
18	BALRAM	38	SHIVA NAND SAHU
19	SANDEEP KUMAR MOURYA	39	SUMAN GUPTA
20	UDIT KUMAR	40	RISHABH DHALL

ANNEXURE – FT - III :

Students of B. Sc. (Hons) Food Technology III year (2014-15)

Total Number of students = 63

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	ADITI	33	VARUN KUMAR
2	SHEFALI JINDAL	34	PRIYANKA SINGH
3	ANJANA RATHORE	35	ANKUR RAWAT
4	SWATI ANAND	36	SRISHTI MAJUMDAR
5	SHATAKSHI SHARMA	37	SHILPA GOEL
6	PRATIKSHA	38	SUMIT
7	RAHUL PANDEY	39	RAKESH BINDU
8	SHRIYA MEHTA	40	PRASHANTH KUMAR DUBEY
9	RAGHVENDRA SINGH	41	AKSHIMA VASHISHTHA
10	NEHA SINGH	42	AKANSHA BANSAL
11	MANVENDER SINGH	43	ABHISHEK BHARDWAJ
12	AMAN JAIN	44	KISLAY BARANWAL
13	FANEESH TALWAR	45	SHREYA MALIK
14	Mohini Kataria	46	EKTA SHARMA
15	REIMOIBONG SHENNAH KHALING	47	HIMANSHU
16	CHANDER MOHAN	48	ROOPAM NEGI
17	MANISHA THAKUR	49	SITA RAM
18	HIMANSHI	50	AMAN PAL
19	NEHA SHARMA	51	RAHUL KUMAR
20	BHUPENDER SINGH	52	Arun Kumar Gupta
21	KIRTY PANT	53	VINEET
22	ADITI DAS	54	MANJEET SINGH YADAV
23	UJAYA MALHOTRA	55	KM Manju
24	Vaishali Mahajan	56	Samridhi Babbar
25	Mohit Yadav	57	Navneet Kaur
26	Abhinay Shashank	58	Maanas Sharma
27	Shubham Rohilla	59	Deepali Saroya
28	Ojaswi Gautom	60	Anil
29	MEHAK PURI	61	Vikas
30	JYOTI BISHT	62	Plaksha Gupta
31	SHATAKSHI	63	Pushpender Kumar Arya
32	DOLLY		

ANNEXURE – MICRO - I :

Students of B. Sc. (Hons) Microbiology I year (2014-15)

Total Number of students = 40

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	RUPESH AGGARWAL	21	AJAY AGGARWAL
2	POOJA YADAV	22	BHARTI SHARMA
3	VIRAT SHARMA	23	PARAS KUMAR
4	ATUL KUMAR DHURIYA	24	DURGESH KUMAR
5	MANSI SINGH	25	MANPREET KAUR BAGGA
6	VICKY	26	SHAONI BHATTACHARYA
7	PUNEET KUMAR	27	MANORMA MANI
8	LOVISHA PASRICHA	28	AAYUSH WADHWA
9	AVANTIKA SHRIVASTAV	29	LAKSHITA MEWARA
10	KAMAKSHI NEGI	30	PULKIT SINGHAL
11	ARVIND YADAV	31	MANISHA
12	DEEPAK KOCHER	32	VIKAS KUMAR
13	KANIKA RANA	33	POOJA JANGRA
14	JUHI KUMARI	34	BHOOMIKA SHOKEEN
15	SIMRAN BABBAR	35	SANKALP SINGH PANWAR
16	SURBHI SINGHAL	36	SHAGUN TANK
17	DEVYANI DAS	37	HEMANT KUMAR
18	RIDDI CHAUDHARY	38	SHARAT CHANDRA
19	JUHI MUSHAHARY	39	ANUJ YADAV
20	AKRITI BHAGAT	40	SHASHANK SHEKHAR

ANNEXURE – MICRO - II :

Students of B. Sc. (Hons) Microbiology II year (2014-15)

Total Number of students = 30

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	TANIA	16	JHA AKSHAY AMARENDRA
2	SHUBHAM SINGH	17	GUNJAN GANDHI
3	NEETIKA NAUDIYAL	18	SUSHANT SAGAR
4	DAMINI SHARMA	19	NABIN KUMAR PATRA
5	DIVYA	20	MEENAKSHI
6	NISHIKA SABHARWAL	21	ABHISHEK
7	AKANKSHA RAWAT	22	NEHA YADAV
8	PRERNA SINGH	23	HARSHITA BIRUJA
9	MEETAKSH KAMBOJ	24	VINAY YADAV
10	SIDDHARTH	25	LALIT KUMAR
11	AKANSHA SHARMA	26	ANJALI MANJHI
12	HIMANSHU SEN	27	SRISHTI PRAJAPAT
13	AKHIL KUMAR	28	DEEPAK
14	ADITYA RAJ	29	RAVI KUMAR
15	KALYANA SUNDARI R	30	ABHISHEK RATH

ANNEXURE – MICRO - III :

Students of B. Sc. (Hons) Microbiology III year (2014-15)

Total Number of students = 29

S. NO.	NAME OF THE STUDENT	S. NO.	NAME OF THE STUDENT
1	LOKHO DOMINIC	16	ROHAN PAL
2	DEEPANSHU KUMAR	17	VANDANA SINGH
3	GARIMA CHANDEL	18	MEENAKSHI SAHNI
4	LAKSHMI RANA	19	AANCHAL VERMA
5	POOJA SINGH	20	NANU RAM
6	SUJATA MEENA	21	DEEPALI VAID
7	DAMINI	22	PARUL YADAV
8	DEEPIKA RANA	23	TANVI MAHAJAN
9	KANCHAN	24	ANU ANMOL
10	INDU PANDEY	25	ANUSHA CHAUDHARY
11	RADHIKA SAIN	26	AKRITI GAUTAM
12	VARUN RATHI	27	KUNZES WANGMO
13	MONIKA YADAV	28	AMIT KUMAR
14	TENZIN METOK	29	MD SHADAB ALI
15	HARSHA		

ANNEXURE SAMPLE FEEDBACK FORM

Department of……
Bhaskaracharya College of Applied Sciences
University of Delhi
Dwarka, Sector-2, Phase-I

Name of the Event:

S. no.	Programme	Kindly Mark the Appropriate Response					
		Excellent	**Very Good**	**Good**	**Average**	**Poor**	**Not Applicable**
1.	Relevance of the Symposium Topic						
2.	Experience at Registration Desk						
3.	**Lectures organized during the symposium**						
	Relevance of lecture topic						
	Presentation Content						
	Response to Queries						
	Overall Impression						
4.	**Streak Art**						
	Facilities Provided						
5.	**Quiz**						
	Choice of Questions						
	Conduction						
6.	**Posters (Overall Presentation)**						
7.	**Overall Impression of event**						

Suggestions: Kindly suggest the topics you want us to take up for seminars/symposiums in future

_____

_____

Signatures:

Name:

College: