



Mehr Chand Mahajan  
DAV College for Women  
Sector 36-A, Chandigarh (U.T.)



Progress Report for Star College Scheme  
(Session 2016-17)

Submitted to

Department of Biotechnology  
Ministry of Science and Technology, Govt. of India

# *MCM DAV College for Women*

## *AN INSTITUTION PAR EXCELLENCE*

*MCM DAV College for Women – an institution which has carved a niche for itself in the national academic circles, has become a definitional as an institution that caters not only to the educative and scholarly development of its stakeholders but also promises a well – rounded and holistically progressive future for them. Founded in 1968 to commemorate the exemplary contribution of Justice Mehar Chand Mahajan, Ex-Chief Justice of India and former Prime Minister of Kashmir, the college has been a seat of learning to reckon with. Be it academics, sports or cultural and social activities, the college has been an invincible victor. The secret behind this story of success abounding is the strong foundation of the college, which exudes the core values of our culture and tradition and is still open to absorbing the changes that come our way in the fast moving world around us. The college is a rare example of a temple of learning that not only maintains the value-system of the yester years, but also creates a way to organically involve in it the ever- changing scenarios of the global world, with its technological and business demands.*

# *Acknowledgement*

*We greatly acknowledge that the facilities provided under the STAR College scheme in the pursuit of excellence has been proved very beneficial for the MCM DAV College for Women, Chandigarh in taking one more step towards implementing your objective to provide academic and physical infrastructure for achieving excellence in teaching and unique exposure of students to experimental science.*

*The STAR College scheme provide us a great platform in combining and imparting scientific as well as holistic education to the students. The grant provided under the scheme enabled the institute to emphasize more on practical training to students by providing specialized infrastructure and consumables. Well-equipped modern laboratories, library, teaching aids, and other training facilities in our college, helped us in enhancing scientific interest among the students and in promoting research based learning at undergraduate level in the college.*

*The provided opportunities under the scheme to learn from stalwarts, visits to nearby institutes and universities, workshops, seminars and various other forums, helped us in improving critical thinking and substantial increase in the percentage of "hands on" experimental work among the students. This scheme has been proved equally beneficial for the students and the teachers, as it helped us in scaling up the skills of the teachers by organizing different faculty programs.*

*Star College scheme proved a great opening for the students as it equipped them with the modern research methodologies techniques, innovative minor research projects and the skills for their professional growth. The scheme has a significant positive impact on the student awareness about the scientific research, methodologies and their implementation. The scheme has armed us to promote and increase our efforts in disseminating quality learning scientific knowledge with the special emphasis on the practical training and to provide access and exposure to students to modern research laboratories and industries in the country.*

*Dr. Nisha Bhargava*

*Principal*

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## *I. Name of the Departments supported*

*Department of Food Science* *Dr. Geeta Mehra*

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*Department of Chemistry* *Dr. Alka Kansra*

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*Department of Botany* *Dr. Neelam Dhand*

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*Department of Physics* *Dr. Renu Bedi*

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*Department of Zoology* *Dr. Neetu*

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*Overall coordinator (Member Secretary)* *Dr. Geeta Mehra*  
*Asst. Professor Dept. Of Food Sc.*  
*Cell No. 9815638247*  
*Fax No. 2613047*  
*Email: [mails4geeta@gmail.com](mailto:mails4geeta@gmail.com)*

## *Annexure –I*

1. **Name of the College:** MCM DAV College for Women, Sector 36-A, Chandigarh.
2. **Status (Govt./ Govt. Aided/ Autonomous/Pvt):** Govt. Aided
3. **Women's College or Co-educational:** Women's College
4. **Urban/Rural:** Urban
5. **No. of departments supported:** 05
6. **NAAC Ranking + Year:** A Grade (2006)
7. **Details of extramural funding received in the last 3 years (UGC, DBT, DST; duration, period and amount):**

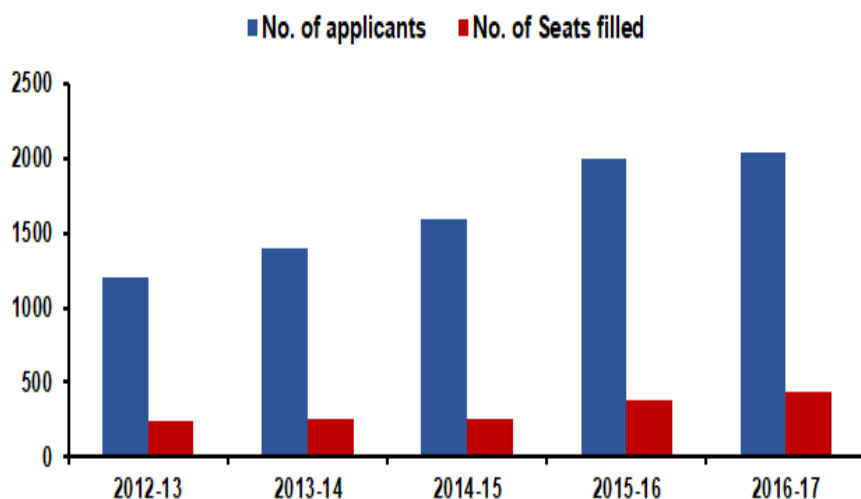
Grant of Rs. 93 lakhs received, for a period of three years (2016-2019) under Star College Scheme, from Department of Biotechnology, Ministry of Science and Technology, Government of India.

### *III. Quantitative data (Submitted by all departments)*

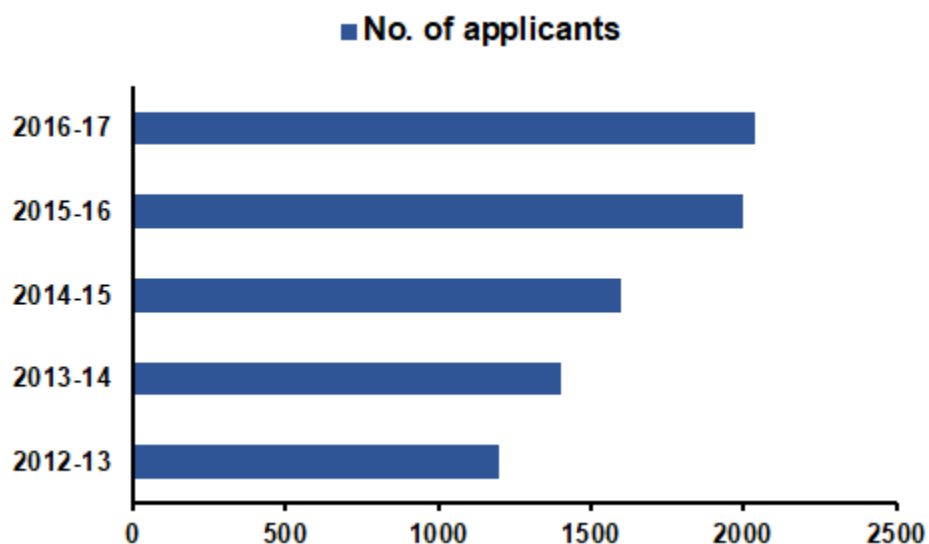
#### **8. No. of applicants vs. No. of seats in each department**

There is no fixed number of seats. Seats are filled according to the infrastructure availability. However, in case of MFT course, fixed number of seats (n=70) are filled.

Year	No. of applicants	No. of Seats filled
2012-13	1200	244
2013-14	1400	259
2014-15	1600	252
2015-16	1999	384
2016-17	2040	441



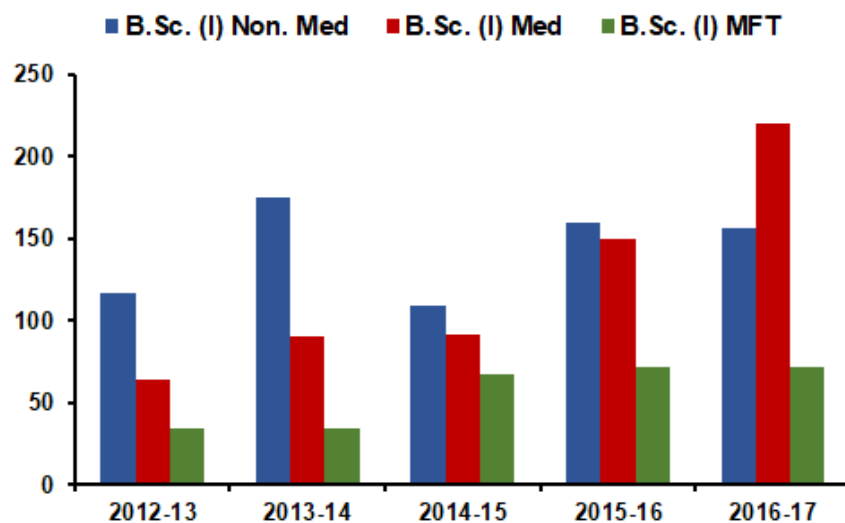
Year	No. of Applicants
2012-13	1200
2013-14	1400
2014-15	1600
2015-16	1999
2016-17	2040



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

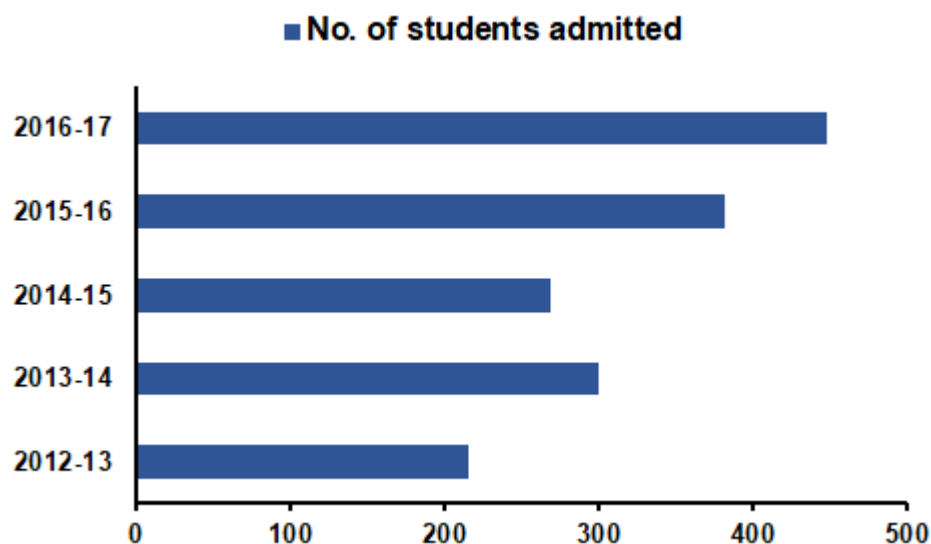
Year	No. of students admitted in different courses		
	B.Sc. (I) Non. Med	B.Sc. (I) Med	B.Sc. (I) MFT
2012-13	117	64	35
2013-14	175	90	35
2014-15	109	92	68
2015-16	160	150	72
2016-17	157	220	72

\*All passed students of 1<sup>st</sup> and 2<sup>nd</sup> year are admitted to 2<sup>nd</sup> and 3<sup>rd</sup> year respectively under same course.



\*All passed students of 1<sup>st</sup> and 2<sup>nd</sup> year are admitted to 2<sup>nd</sup> and 3<sup>rd</sup> year respectively under same course.

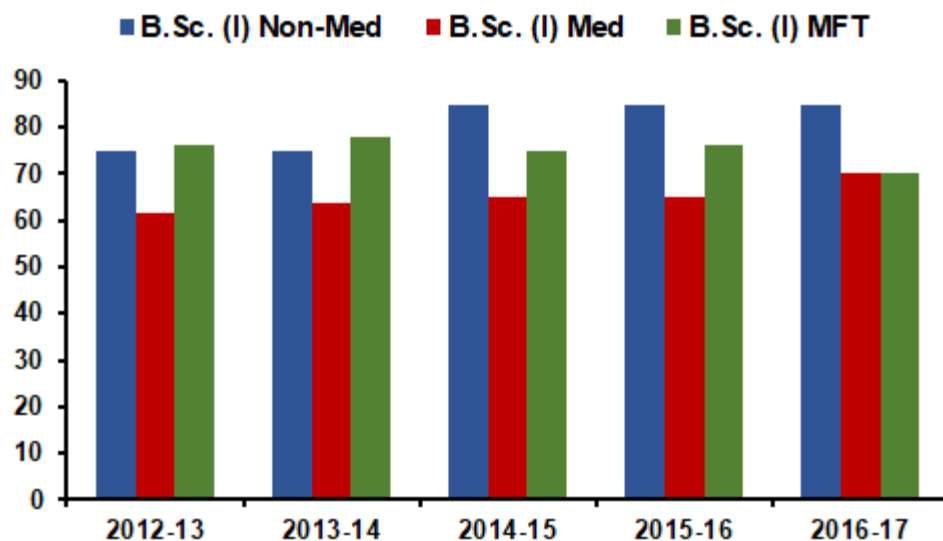
Year	No. of students admitted in different courses
2012-13	216
2013-14	300
2014-15	269
2015-16	382
2016-17	449



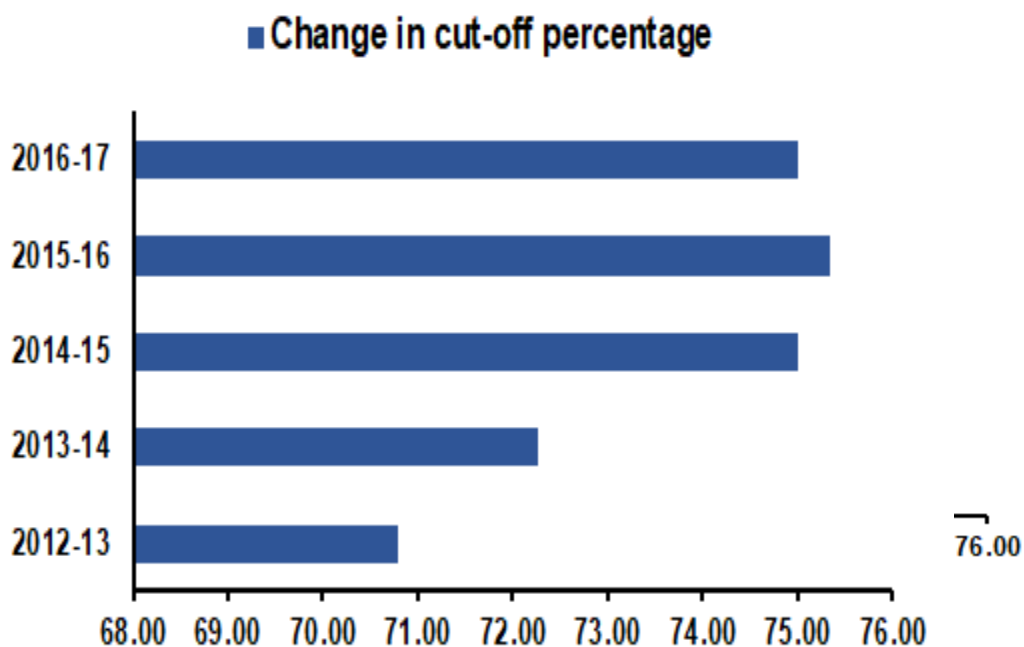
**10. Change in the cut off percentage/admission in different courses:**

Year	Cut- off percentage/admission in different courses		
	B.Sc. (I) Non Med	B.Sc. (I) Med	B.Sc. (I) MFT
2012-13	75	61.4	76
2013-14	75	63.8	78
2014-15	85	65	75
2015-16	85	65	76
2016-17	85	70	70

\*All passed students of 1<sup>st</sup> and 2<sup>nd</sup> year are admitted to 2<sup>nd</sup> and 3<sup>rd</sup> year respectively under same course.

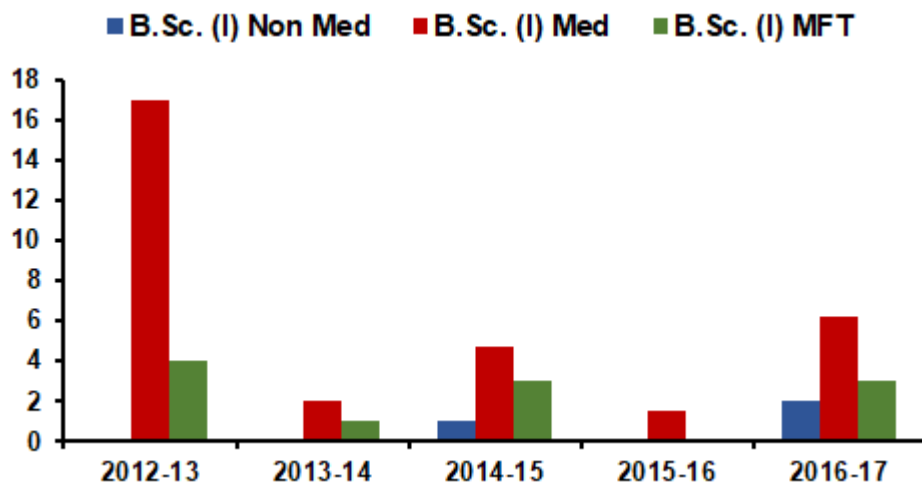


Year	Change in cut-off percentage
2012-13	70.80
2013-14	72.27
2014-15	75.00
2015-16	75.33

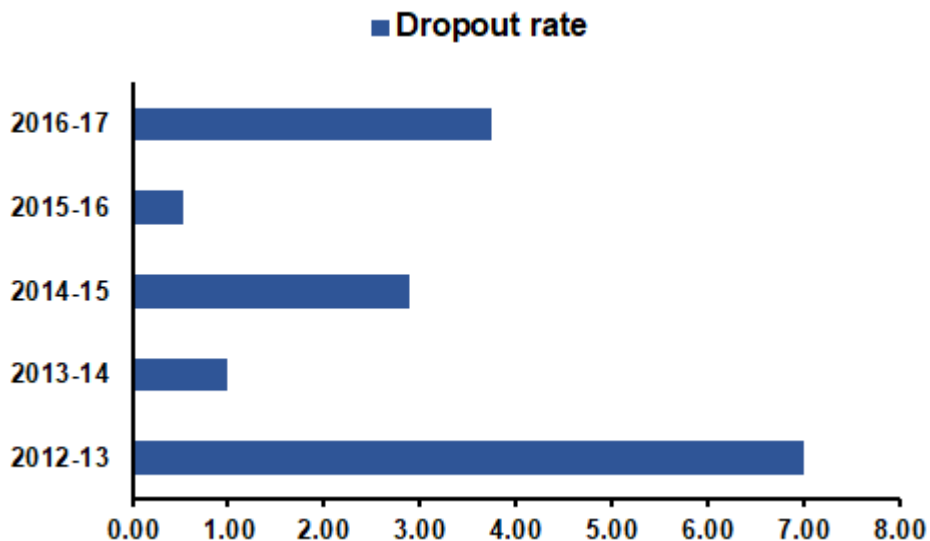


# 11. Change in the dropout rate (B.Sc. I to B. Sc. II)

Year	Dropout in different courses		
	B.Sc. (I) Non Med	B.Sc. (I) Med	B.Sc. (I) MFT
2012-13	0	17	4
2013-14	0	2	1
2014-15	1	4.68	3
2015-16	0	1.58	0
2016-17	2	6.25	3

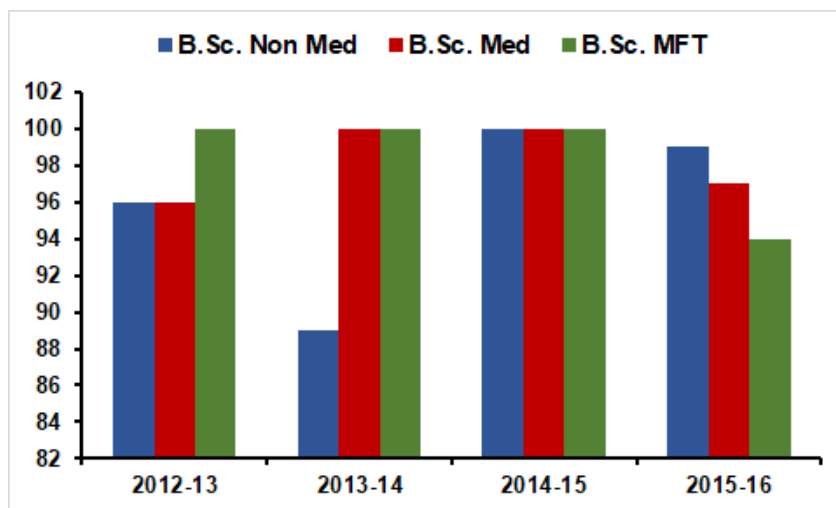


Year	Change in Dropout Rate
2012-13	7.00
2013-14	1.00
2014-15	2.89
2015-16	0.53
2016-17	3.75

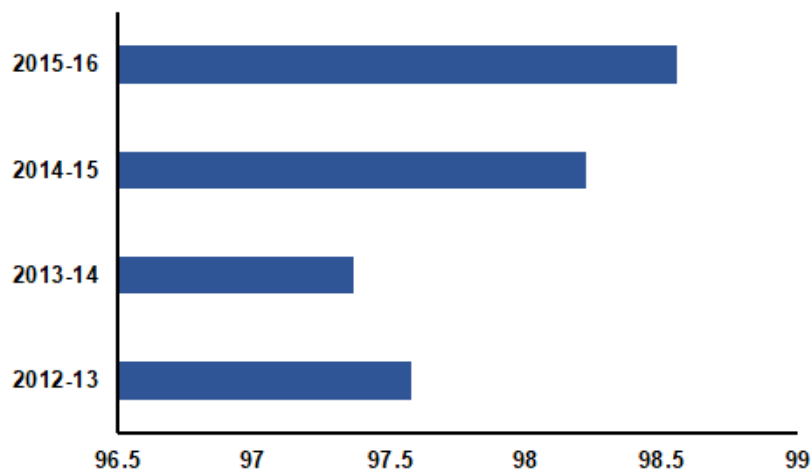


## 12. Data on pass percentage

Year	B.Sc. Non Med	B.Sc. Med	B.Sc. MFT
2012-13	96	96	100
2013-14	89	100	100
2014-15	100	100	100
2015-16	99.07	97	94

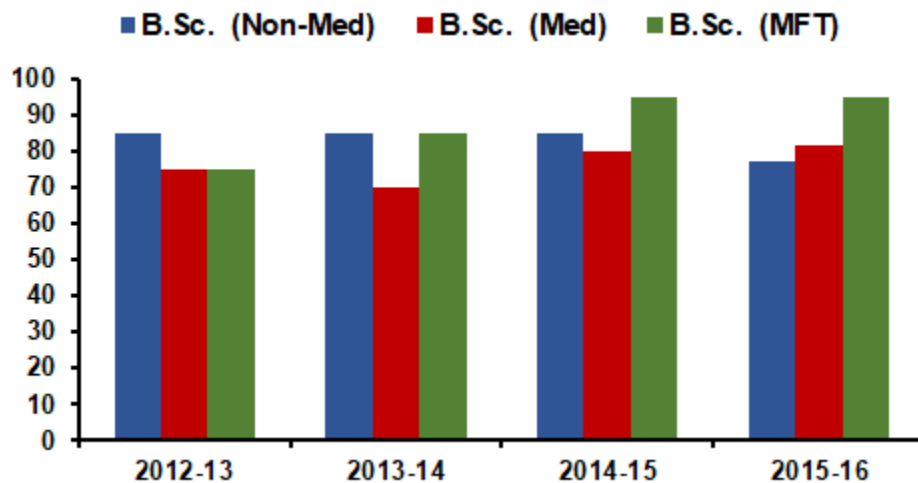


Year	Pass Percentage
2012-13	97.58
2013-14	97.37
2014-15	98.22
2015-16	98.56

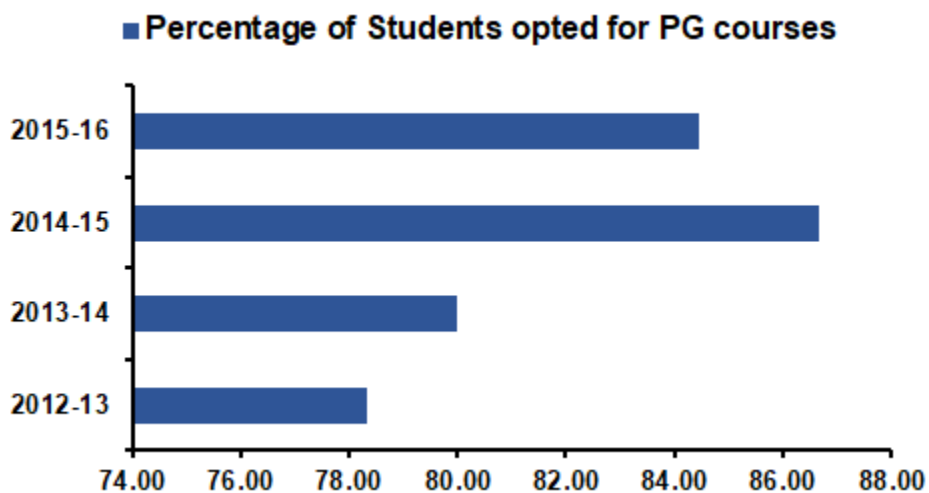


### 13. Data on how many students opted for PG courses

Year	Percentage of students opted for PG courses		
	B.Sc. (Non-Med)	B.Sc. (Med)	B.Sc. (MFT)
2012-13	85	75	75
2013-14	85	70	85
2014-15	85	80	95
2015-16	77	81.4	95



Year	Percentage of Students opted for PG courses
2012-13	78.33
2013-14	80.00
2014-15	86.67
2015-16	84.47



## *IV. Quantitative Data (Submitted by all Departments)*

### **14. LIST OF ADDITIONAL PRACTICALS INTRODUCED (2016-17)**

#### **Department Of Food Science:**

##### **B.Sc (Microbial & Food Technology) – I<sup>st</sup> Year (59 students) [Annexure II]**

1. To demonstrate the colony morphology of different bacterial and fungal isolates
2. To quantify the bacterial load by drop method.
3. To perform direct counting of microbial cells in sample using Neubauer chamber.
4. To study motility of bacterial samples by soft agar method.

Faculty members involved were Dr. Geeta Mehra, Dr. Vandana Sharma, Dr. Sandeep Kaur, and Dr. Sonu

##### **B.Sc (Microbial & Food Technology) – II<sup>nd</sup> Year (67 students) [Annexure III]**

1. Cut-out analysis of canned food products.
2. Curcumin content in curcumin powder sample.
3. Separation of dyes by column chromatography.
4. Use of minimal media to study mutations.
5. Effect of U.V radiations on growth of bacteria - a qualitative analysis.
6. Isolation of DNA from *Bacillus* using lysozyme enzyme.

Faculty members involved were Dr. Geeta Mehra, Dr. Vandana Sharma, Dr. Ruchi Chauhan, Dr. Kirti

##### **B.Sc (Microbial & Food Technology) – III<sup>rd</sup> Year (63 students) [Annexure IV]**

1. Detection of coliforms in golgappa water samples.
2. Detection of *coliforms* from water sample and isolation of *Campylobacter* from milk sample taken from dairy farm.
3. Microbiological analysis of ice-creams sold by local vendors.
4. Microbiological analysis of street vended ice samples.
5. Isolation and identification of spoilage causing organisms from eggs.

Faculty members involved were Dr. Geeta Mehra, Dr. Vandana Sharma, Dr. Kirti, Dr. Sandeep Kaur

**Department of Chemistry:**

Sr. No.	Title	Number and Name of Students	Name of Teachers
1	a) Preparation of Standard solutions. b) Volumetric determination of strength of unknown base. c) Study of effect of dilutions on viscosity such as with 10%, 5% & 3% solution of glycerol.	B.Sc. (I)  465 students	Dr. Reenu Dr. Amandeep Saroa Ms. Arshdeep Kaur Ms. Arunima Dr. Qudrat Hundal Ms. Deeksha Dr. Aastha Kuhad
2	a) Back titration for the estimation of Ca in given sample. b) pH metric determination of $K_b$ of weak base. c) Survey of water samples for hardness in the region around Chandigarh, Panchkula and Mohali d) Setting up of an electrochemical cell. e) Setting up of a concentration cell	B.Sc. (II)  302 students	Dr. S. Dev Dr. Amandeep Saroa Dr. Gargi Dhaka Dr. Rishu Ms. Arunima Dr. Swatika Ms. Shashi Ms. Swati
3	a) Conductometric titration of mixture of strong and weak acid. b) Determination of melting point of the Organic and Inorganic compounds prepared in the laboratory. c) Oxidation of Toluene with Conc. $\text{HNO}_3$ d) Determination of saponification value for different oils.	B.Sc. (III)  188 students	Dr. S. Dhiman Dr. S. Sharma Dr. Amandeep Dr. Reenu Ms. Shweta

## Department of Botany:

- Maintenance of Vermiculture and Vermicompost units to convert kitchen and garden waste into organic manure.
- Maintenance of a bio-diversity pond for the study of flora and fauna.
- A nature walk (comprised of a series of visits to Botanical Garden and Rishi Vatika) was organized for the students of B. Sc. I, II and III.
- Experiments on different aspects of soil analysis

**Department of Physics:**

Sr. No.	Classes	Title
1.	B.Sc (I)	1. To verify Bernoulli's theorem 2. To study various modes of compound pendulum and make rangoli patterns with that 3. To make a solenoid, inductor and transformer from scratch and study the effect of magnetic field and induced e.m.f. produced by a current carrying solenoid
2.	B.Sc. (II)	1. To study Zeeman effect 2. To find out efficiency of an electric kettle 3. To find wavelength of blue LED by forming Newton's rings
3.	B.Sc. (III)	1. To study logic gate circuits (NOT, AND, OR, NAND, NOR) 2. To study flip flop circuits (RS, JK, D) 3. To study LCR circuits using CRO

**Department of Zoology:**

Title	Number of Students
i. Isolation and identification of parasites from gills of fish.	37
ii. Isolation and identification of parasites from infected fruits and vegetables.	B.Sc. III (Medical)
iii. Fixation, Embedding, Cutting of tissue sections and their Staining.	
iv. Precipitation of casein from milk.	
v. Estimation of following chemical parameters of water of a fish pond:	
a. pH	
b. Dissolved oxygen	
c. Phosphates	
d. Total dissolved solids	
e. Nitrates	
f. Hardness	22

g. Chlorides	B.Sc. III (Medical)
vi. Identification of Zooplankton and Phytoplankton in pond water.	
vii. Estimation of dry weight of <i>Drosophila melanogaster</i> and <i>Drosophila gigas</i> .	116
viii. Estimation of microbial diversity in wild caught and lab reared <i>Drosophila</i> .	B.Sc. II (Medical)
ix. Preparation of polytene chromosomes of <i>Drosophila melanogaster</i> .	
x. To study the effect of heat shock on the puffing activity of polytene chromosomes of <i>Drosophila</i>	
xi. Sketching of microscopic objects using Camera lucida.	125
xii. Measurement of microscopic objects using oculometer and stage micrometer.	B.Sc. I (Medical)
xiii. Preparation of food for <i>Drosophila melanogaster</i> .	
xiv. Cellular analysis in coelomic fluid of earthworm and cockroach.	

### 15. LIST OF MINOR PROJECTS IMPLEMENTED, NAME OF STUDENTS AND SUPERVISOR

#### Department of Food Science:

S.No	Student's Name	Roll No.	Research Project	Faculty Supervisor
1.	Aaina Batra; Yasmine	5045;5920	Comparative physiochemical and microbial analysis of different brands of honey	Dr.Geeta Mehra
2.	Caharanjeet; Ishita Sharma	5016;5002	Comparative study for potability of drinking water from different sources in Chandigarh	Dr.Geeta Mehra
3.	Riya Puri; Amarjot Kaur	5004;5047	Assessment of adulteration in milk and milk products	Dr.Geeta Mehra
4.	Aditi; Malika Naranag	5905;5901	Packaged Food labelling	Dr.Geeta Mehra
5.	Avinash; Suwesh Gulati; Ehidiman Anand; Chanchal	5012;5015;5035;5037	Assessment of Adulteration in Spices, Honey, Tea	Dr.Geeta Mehra

S.No	Student's Name	Roll No.	Research Project	Faculty Supervisor
			,Coffee and Sugar	
6.	Jayati Sharma; Harleen Singh	5913;5912	Microbiological analysis of natural breeding habitat of N-Choe.	Dr.Vandana Sharma
7.	Yukti Madaan; Nandini	5029; 5028	Exploring potential of lignocellulosic jute bag waste for the production of value added products	Dr.Vandana Sharma
8.	Ramandeep Badwal	5032	Enzymatic improvement of multigrain bread	Dr.Vandana Sharma
9.	Tanvi	5902	Nanotechnology in Food industry	Dr.Vandana Sharma
10.	Amandeep Kaur	5915	Sources of contamination of milk and their potential effect of consumer health	Dr.Vandana Sharma
11.	Prakriti Sharma, Suhavi Kaur	5049;5048	Science to camouflaged food: a review	Dr.Sonu
12.	Aisha Eram, Kajal Karn	5018;5020	Effect of repeated heating on physico-chemical properties of edible oils	Dr.Sonu
13.	Anjali, Anu Gautam	5050;5030	Efficacy of herbal edible coating on food products	Dr.Sonu
14.	Riya Sethi, Seerat Samra	5009;5006	Nutraceutical properties of custard apple actegenin	Dr.Sonu
15.	Diksha, Khemjot Kaur	5038;5911	Study on diseases acquired by vegetarians and non-vegetarians	Dr.Sonu
16.	Sukhleen Kaur; Khyati Hooda	5926; 5040	Bacteriophages: potential bio-preservative agents in Food Industry	Dr. Sandeep
17.	Aditi Sharma; Jessica Sarao	5905;5927	Tulsi: Superherb for physical and mental health	Dr. Sandeep
18.	Nikita Bindra; Mehak Singla; Keerat	5041;5027; 5023	Conservation and Restoration of Cultural heritage against Microbial bio-deterioration	Dr. Sandeep
19.	Chandini; Sunita Chauhan	5044;5036	Antimicrobial Potential of Human Breast Milk against	Dr. Sandeep

S.No	Student's Name	Roll No.	Research Project	Faculty Supervisor
			neonatal pathogens	
20.	Mehak Sandhu	5007; 5017	Cancer preventing Attributes of Probiotics and its link to gut microbiome	Dr. Sandeep
21.	Shivani Sharma; Kirandeep Kaur;	5003; 5005	Significance and control of biofilms in food processing industries & A study on microbiological analysis and hygiene conditions of food served in college canteen and mess and street-vended food samples sold in Chandigarh.	Dr.Ruchi
22.	Eashani	5010	Antimicrobial: Mode of action against spoilage microorganisms	Dr.Ruchi
23.	Harkirat; Chanchal	5021; 5037	Isolation of heavy metal resistant bacterial strains strains from soils of industrial areas.	Dr.Ruchi
24.	Loveneet Kaur; Tanya	5033; 5046	A study on antimicrobial properties of essential oils.	Dr.Ruchi
25.	Sheetal Devi; Bandana	5907; 5924	By-Products and waste products of food industry.	Dr.Ruchi
26.	Monarch	5914	Food Antimicrobial: Mode of action against spoilage microorganisms.	Dr.Ruchi
27.	Puneet Kaur; Surbhi Jain	5022;5906	Development of Brown rice Kheer and Application of Hurdle Technology for its stability at ambient temperature	Dr.Kirti Goel
28.	Deepika Goyal; Kirti Nehra	5917; 5921	Study on Infant Formula	Dr.Kirti Goel
29.	Rhidima; Harleen Gujral	5035;5014	Development of Spinach Fortified Paneer	Dr.Kirti Goel
30.	Savee; Japmeet Kaur	5008;5013	Effect of Constituents on Yoghurt Properties	Dr.Kirti Goel

**Department of Chemistry:**

Sr. No.	Supervisor	Name of Students	Name of Projects
<b>Summer / Winter Projects</b>			
1.	Dr. A.R. Choudhury, Department of Chemistry, IISER, Mohali.	Ms. Aanchal Bhalla and Sushmita Rani	Synthesis and Characterization of a substituted Fluorinated Amide
2.	Dr. A.R. Choudhury, Department of Chemistry, IISER, Mohali.	Ms. Aanchal Bhalla	To study Intrinsic Dissolution Rates of active pharmaceutical ingredients.
3.	Dr. Rama Sastri, IISER Mohali	Ms. Anamika	Synthesis and characterization of some heterocyclic natural products core precursor
4.	Dr. Sanjay Singh, IISER Mohali	Ms. Vashita	A Mercury (II) Carbene adduct as catalyst for Hydroamination Reactions
5.	Reddy's Laboratory, Baddi	Ms. Kirti	Training on quality control of pharmaceutical products

S.No	Class	Name of Projects	Name of Teachers	% of Students
1.	B.Sc.(I)	Determination of elements in common kitchen spices	Dr. Reenu, Dr. Amandeep Saroa,,Ms. Arshdeep Kaur, Ms. Arunima, Dr. Qudrat Hundal, Ms. Deeksha, Dr. Aastha Kuhad, Ms. Shweta, Ms. Shashi	100%
2.	B.Sc (II)	Determination of EMF of an electrochemical cell	Dr. S. Dev, Dr. Amandeep Saroa, Dr. Gargi Dhaka, Dr. Rishu, Ms. Arunima, Dr. Swatika, Ms. Shashi, Ms. Swati	100%
3.	B.Sc.(II)	Determination of pH using Quinhydrone electrode.		100%
4.	B.Sc (II)	Determination of thermodynamic parameters using EMF measurement.		100%
5.	B.Sc (III)	Comparison of yield of oxidation of Toluene in acidic, basic and neutral medium	Dr. S. Dhiman, Dr. S. Sharma, Dr. Amandeep, Dr. Reenu, Ms. Shweta	100%
6.	B.Sc (III)	Spectroscopic determination of Strength of the $\text{Fe}^{3+}$ ion in a substance.		100%
7.	B.Sc (III)	Comparison of saponification values for different oils		100%

**Department of Botany:**

S. No.	Title	Number of beneficiaries	Name of Teacher/(s) involved
1.	To study different genera of Algae	92 B.Sc. I (Medical)	Dr. Gunjan Sud
2.	To study different genera of Fungi		
3.	To study different genera of Bryophytes		
4.	To study of different genera of Pteridophytes		
5.	Seed germination (viability Test)	25 B.Sc. II (Medical)	Dr. Geetika Singh
6.	Determination of soil pH of different areas including campus and surrounding areas	16 B.Sc. II (Medical)	Dr. Geetika Singh
7.	Comparative studies of pollen grains among various genera	20 B.Sc. II (Medical)	Dr. Gunjan Sud
8.	Study of Different types of fruits of angiosperms	20 B.Sc. II (Medical)	Dr. Gunjan Sud
9.	Comparative studies related to chlorophyll concentrations among various genera	15 B.Sc. III (Medical)	Dr. Purnima Bhandari
10.	Comparative studies related to relative water content (RWC) among various genera	15 B.Sc. III (Medical)	Dr. Purnima Bhandari

***Interdisciplinary project with Zoology:***

- Set up and maintained Vermiculture and vermicompost units to convert kitchen and garden waste into organic manure.
- Maintained a Biodiversity pond for the study of flora and fauna

**Department of Physics:**

In order to make the students conversant with the technical aspects of various processes, related to Physics and other fields of science, going on in various industries, the students of B.Sc. III were assigned project work. As a part of the project work, they undertook

industrial training and submitted the project reports as listed below. All the students of BSc III (NM) and BSc III (Voc) performed these projects.

Sr. No.	Title	Name of Students	Teacher's Name
1.	C++ coding and programming	5	Mrs. Poonam Jain, Dr. Yogita
2.	Literature survey on the field of Nano biotechnology	20	Mrs. Poonam Jain, Dr. Yogita,
3.	To study mysteries of science	5	Dr. Yogita
4.	To study microprocessors and microcontrollers	5	Dr. Yogita
5.	To study the process of automation	6	Mrs. Poonam Jain
6.	To study Quark Model	5	Mrs. Poonam Jain
7.	Nanotechnology and its applications	10	Mrs. Raman Chadha
8.	Basics of MS word and related softwares	10	Dr. Rajni Bansal
9.	To study FET characteristics	10	Dr. Rajni Bansal
10.	To study the concepts of oscillators	10	Mrs. Poonam Jain
11.	To understand the concept of super fluidity	02	Dr. Renu Bala
12.	To study Zener diode as a voltage stabilizer	10	Ms. Mridu Sharma
13.	To study the concept of modulation and demodulation	10	Dr. Renu Bedi
14.	To study the plateau curve of a G M counter	05	Mrs. Poonam Jain
15.	To understand the concepts of superconductivity	07	Dr. Yogita

#### **Department of Zoology:**

- i. Habitat characterization of mosquito species breeding in N-Choe, Chandigarh (10 students)
- ii. Preparation of Benzimidazole based Organic Nanoparticles (8 Students)
- iii. Preparation of organic-inorganic nanohybrids of silver (8 students)

- iv. Antimicrobial evaluation of Benzimidazole based Organic Nanoparticles and organic-inorganic nanohybrids (8 students)
- v. Comparison of nitrogen content in vermicompost prepared using newspaper cuttings, disposable cups, vegetable waste, floral waste and tea bags (20 students)
- vi. Preparation of glue from fish scales and fins (22 students)
- vii. Studies on the food preferences of laboratory reared *Drosophila melanogaster* (10 Students)
- viii. Studies on the correlation of diet and haemoglobin content in college students (25 students)
- ix. Estimation of regeneration capability in the earthworm, *Eisenia foetida* (10 students)
- x. Histopathological studies on different animal tissues (38 students)

**16. FACULTY IMPROVEMENT ACTIVITIES SUCH AS TRAINING COURSES, SEMINARS ETC CONDUCTED AND THEIR IMPACT**

**Department of Food Science**

Title
<p>Seven Day National Faculty Development Programme on ‘Expanding Paradigms of Pedagogy’ from 13<sup>th</sup> -19<sup>th</sup> April, 2017 which included:</p> <ul style="list-style-type: none"> <li>• Learning of statistics-r and SPSS</li> <li>• Data presentation</li> <li>• Effective writing of research based grants</li> <li>• Career development of teachers and 4<sup>th</sup> UGC amendments</li> <li>• Plagiarism and its usage</li> <li>• Women empowerment and funding available for women entrepreneurship</li> </ul>

**Impact of the Faculty Improvement Activities:**

- Development of research orientation and scientific temperament
- Awareness about different funding schemes for availing research grants
- Awareness on resource generation, improving writing skills
- Knowledge about statistical tools, data analysis and effective data presentation methods

**Department of Chemistry:**

Sr. No.	Date	Training courses	Topic	No. of Students
1.	28 <sup>th</sup> February, 2017	Dr. A. R. Choudhary IISER, Mohali	Laboratory Safety Practices	100 students & 25 Laboratory Attendants
2.	20 <sup>th</sup> Septemeber 2016	Enma Popli SkillSmart Training Chandigarh	Skill Development	120
3.	27 <sup>th</sup> March, 2017	Dr. Shweta Sharma	Career Counseling	100

**Impact:**

- Thrust towards research orientation of students through project work was fulfilled.
- Visible impact was that the student had a better understanding of theory, and they started attending summer and winter projects in reputed institutes like PU, IISER etc.
- Students experienced the hands on training through the workshop.
- Seminars on Career planning and stress management helped students to think about their future perspective in a brighter way.
- Students were given exposure to industries with industrial visit to places like PSPL, Derabassi and CSIO laboratories.

**Department of Botany:*****Faculty Development programme***

- i. A seven-day national faculty development programme on '*Expanding Paradigms of Pedagogy*', organized by Mehr Chand Mahajan DAV College for Women. Sector-36, Chandigarh from April 13, 2017 to April 19, 2017.

***Impact:***

- i. Enhances the teaching skills of the faculty and motivates them to pursue interdisciplinary research
- ii. Enthusiastic participation of the faculty in extra-curricular activities.

## **Department of Physics:**

1. **Workshop on Research pedagogical tools:** Dr. Renu Bedi, HOD, Department of Physics participated in workshop at IISER Mohali from Jan 23, 2017 to Jan 25, 2017.
2. **Workshop on Experimental Physics:** A one-day workshop of 'Experimental Physics' was organized by Department of Physics on March 27, 2017. About 40 students and all faculty members of Department of Physics took part in the workshop. Mr. Amrajit Singh from Guru Angad Dev College, Khadur Sahib, Amritsar was the resource person. Students were taught to make scientific equipment like solenoid, transformer and inductors from scratch and perform various experiments with them. The main motive of the workshop was to inculcate scientific temperament in the students and teach them to make scientific equipment at low cost.

## **Impact:**

- These faculty improvement measures opened up avenues for discussions on various topics of Physics education and current developments.
3. **Lecture on Lab safety:** Lecture on lab safety was organized by faculty of Science for students, lab staff and faculty as an interdepartmental activity. Dr. A K. Chowdhary delivered a lecture on Lab safety on National Science day on Feb 28, 2017 at 1100 am in Room no. 8. All faculty members and about 50 students of department of Physics attended the lecture.

## **Dr. Renu Bedi:**

- 1) Member of Choice based credit system (CBCS) committee in Department of Physics, Punjab University.
- 2) Member of Board of Studies, Panjab University, Chandigarh.
- 3) Appointed paper setter for under graduate classes.
- 4) Actively involved in social work with **Handicapped Society**, Sector 12-A, Panchkula.

## **Mrs. Raman Chadha**

- 1) Pursuing PhD in the field of Nanotechnology.
- 2) As a convener of medical committee, organized various medical camps and lectures by eminent doctors and medical experts in the college.

**Mrs. Poonam Jain**

- 1) Member of Choice based credit system (CBCS) committee in Department of Physics, Punjab University.
- 2) Pursuing PhD in the field of Nanotechnology.
- 3) Paper setter for University Examinations.

**Dr. Yogita**

- 1) Attended and presented a poster at a National Seminar on ‘Emerging trends in Nanoscience and Nanotechnology’ at G.G.S.C.W., Sector 26, Chandigarh on Feb 18, 2017.

**Dr. Renu Bala**

- 1) Attended and presented a poster at a National Seminar on ‘ ’ at PGGCG, Sector 11, Chandigarh on Jan 22, 2016,
- 2) Attended Orientation programme (Nov 29-Dec 26 2016) held at Punjab University, Chandigarh.

**Department of Zoology:**

- i. Seven days Faculty Development Programme on **“ICT: New Dimensions in Research and Higher Education”** organized by MCM DAV College for Women, Sector 36-A, Chandigarh from 26.11.2016 to 02.12.2016.
- ii. Seven days National Faculty Development Programme on **“Expanding Paradigms of Pedagogy”** organized by MCM DAV College for Women, Sector 36-A, Chandigarh from 13.04.2017 to 19.04.2017.

**Impact of the Faculty Improvement Activities:**

- Renewal of enthusiasm of the faculty for interdisciplinary research.
- Active participation of faculty in co-curricular & extracurricular activities.

**17. OUTREACH ACTIVITIES CONDUCTED AND THEIR IMPACT/ FOLLOW-UP****Department of Food Science:**

- Active involvement in organizing food, nutrition and health related activities including awareness and extension lectures.

- Students and faculty play active role in blood and organ donation camps and free health checkup camps in the College.
- Students are actively involved in NCC cleanliness drive, NSS, and Rotract Club.
- Students were actively involved in making of food and water adulteration kits and displayed and performed basic adulteration tests to the local street vendors thus disseminating the awareness and knowledge about food safety and health.
- Students of B.Sc. IIIrd year displayed the functioning of Food Adulterant Detection Kits with video of its demonstration in collaboration with the Armed Forces Medical College, Pune.
- Students showed active participation in evaluating the degree of hygiene and contamination seen in local street foods (Golgappa; sugarcane juice, ice-creams, kulfi etc.) sold in and around Chandigarh by performing microbial tests through their specially designed research projects and practical assignments.
- Students showed active participation in “Ek Diya Ek Koshish” event organized by Chandigarh Radio station: 94.3 Big FM hosted by RJ Manav. The money collected was donated for providing hearing aid to deaf people.

**Impact:**

- Sensitization of students and faculty towards social challenges and their mitigation, and their responsibilities towards these causes.
- Sensitization of students towards embarking skill development and entrepreneurship temperament.
- Sensitization of students towards food safety and its importance and the need to implement hygiene practices.
- Better correlation of theoretical and practical knowledge by planning, executing, and performing research based projects of social relevance and use.

**Department of Chemistry:**

- 1) Department of Chemistry organized a visit to Ashiana, a home for orphan and destitute children, on 17<sup>th</sup> March, 2017.

2) Ashmita (BSc non-medical 3rd year) is working as a Coordinator with a national NGO named "MaaKaSapna ". She has actively organized several events, project management, team management, handling the crisis, initiated new projects.

3) Sehaj Gulati, Anushka Arora, Anshul Rawat, Mehak Kaur, Deepika Khatri, Rubal and Deepika Bhola participated in the blood donation camp organized by MCM DAV College for Women.

Such philanthropic activities ensure feeling of social responsibilities. Department will conduct more such activities in near future.

#### **Department of Botany:**

Mrs. Neelam Dhand works on weekends as honorary visiting faculty in Bhai Jaitajee Foundation Chandigarh.

#### **Department of Physics:**

- Department is actively involved in organizing all the health related activities including awareness lectures, extension lectures and free health check up camps.
- The faculty in collaboration with the department of Hepatology, PGIMER registered the college staff members and students for organ donation.
- Students participated in various inter disciplinary activities such as art workshops, NSS, NCC and Rotoract club.

#### **Impact:**

With these activities, students become more aware and responsible for their contribution towards the society.

#### **Department of Zoology:**

- Setting up of Vermiculture and vermicompost units in the College campus to convert kitchen and garden waste into organic manure.

**Follow up:** The manure thus produced was used to grow medicinal plants in the college campus.

- Active involvement in organizing all the health related activities including awareness lectures, extension lectures and free health check up camps in the College.

**18. ANY OUTSTANDING ACHIEVEMENT BY STUDENT/FACULTY (merit, award, research paper, presentation in national/international conference/ etc; full citation to be provided)**

**Department of Food Science:**

**Students' Achievements**

- Students actively participated in Poster and Oral Presentations at UGC and INSA Sponsored 2 days National Level Seminar on “**Animal Diseases: Impact on Human Health and Control Issues**” on 30th and 31st August, 2016; organized by Department of Zoology & Department of Food Science
- Kajal Karn and Ishita Sharma of MFT III year got 1<sup>st</sup> prize in Poster competition at National Level Seminar on “Animal Diseases: Impact on Human Health and Control Issues” on 30<sup>th</sup> and 31<sup>st</sup> August, 2016
- Tamanna Awasthi of MFT III year got the Best Poster Presentation titled ‘Comparative Chemical Analysis of Green and Black Tea Brands’ at HETIS, 2016.
- Students actively participated in dissemination of knowledge about food safety to local street vendors during a workshop on “Awareness generation and dissemination of knowledge and skills about recent advances in nutrition and food safety” from 22-26 November, 2016 organised in collaboration with PGIMER..Students of MFT(III) year displayed various food and water adulteration kits and performed adulteration tests
- Secured second position in Football inter college sports competition held on 8 January-12 January 2017 at Gursar Sidhar (Ludhiana)- Ramandeep Ghuman of B.Sc. (MFT) II year
- Jayati Sharma of B.Sc. (MFT) III year bagged second prize in Poster making competition in Research category in National Seminar and Science Day celebrations held at DAV College, Sector 10, Chandigarh on 27-28<sup>th</sup> Feb,2017
- Nikita, Prabhleen and Jaspreet Kaur of B.Sc. (MFT) II year got first prize in poster making competition on the topic: “Hygienity of Swimming Pools’ in Science fest on 25March,2017
- Abhiruchi of BSc. MFT-II year got first prize in Science Cosplay contest held during Science Fest at MCM DAV College in Science fest on 25March, 2017

**Faculty Achievements**

**Dr. Geeta Mehra**

- **Evaluator and Examiner for dissertations** of Master of Science in Dietetics and Food Service Management [M.Sc. (DFSM)] of IGNOU, Regional Centre, Chandigarh. 16 dissertations evaluated in 2017

- Guiding Graduate research projects for B.Sc. MFT. Major areas of research include novel product development, functional foods, nutraceuticals, and food quality and safety.
- **Expert** for project on “**Detection of Common Food Adulterants**” sanctioned by Armed Forces Medical Research Committee to Lt. Col. (Dr.) Puja Dudeja, Department of Community Medicine, Armed Forces Medical College (AFMC), Pune. Project executed via a video shot for Armed Forces in the laboratory of Department of Food Science, MCM DAV College for Women, Sector 36-A, Chandigarh, on November 25, 2016. Grant of **Rs. 30000/-** received in the form of chemicals.
- Participated in **STEM Teacher Training Workshop on Research Based Pedagogical Tools – Level 2**, at IISER, Pune; sponsored by DBT, Newton Bhabha Fund of the British Council and Centre of Excellence in Science and Mathematics, IISER Pune; conducted by Sheffield Hallam University, United Kingdom, March 1 – 4, 2017.
- Participated in **STEM Teacher Training Workshop on Research Based Pedagogical Tools – Level 1**, at IISER, Mohali; sponsored by DBT, Newton Bhabha Fund of the British Council and Centre of Excellence in Science and Mathematics, IISER Pune; conducted by Sheffield Hallam University, United Kingdom, January 23 – 25, 2017.
- Participated in **Workshop on Fundamentals of Biorisk Management** organised by Department of Biotechnology, Panjab University, Chandigarh in collaboration with Sandia National Laboratories, USA from June 6-10, 2016.
- **Member** of core committee and in-charge for Sciences for Nielsen-India Today Ranking of Colleges, since 2012-2016.
- Mehra, G. 2016. **Dispose of that disposable cup**. The Tribune, Jobs and Careers, August 27, 2016.
- Mehra, G. 2016. **One Course, many options – B. Sc. Microbial and Food Technology**. The Tribune, Jobs and Careers, June 29, 2016.
- Mehra, G., 2017. DBT Star College Scheme: Transforming Science Education in India, **Resource Person** for DBT Star College Scheme sponsored Seminar-cum- Workshop organised by Faculty of Sciences, Doaba College, Jalandhar, March 27.
- Mehra, G., 2017. Food: Nourishment or Punishment, **Invited Lecture** to Civil Service Students of Centre for IAS and Other Competitive Examinations, Panjab University, Chandigarh, February 23.
- Mehra, G., 2016. Food Adulterants and their testing, **Invited speaker** at DST sponsored Workshop on Awareness Generation and Dissemination of Knowledge and Skills about Recent Advances in Nutrition and Food Safety organised by School of Public Health, PGIMER, Chandigarh, in collaboration with Department of Food Safety & Standards, Chandigarh Administration,

Chandigarh at Vishwakarma Mandir Sabha, Mani Majra, Chandigarh, November 22 – 26.

- Mehra, G., 2016. Food: Nourishment or Punishment, **Invited Lecture** to Civil Service Students of Centre for IAS and Other Competitive Examinations, Panjab University, Chandigarh, November 18.
- Mehra, G., 2016. Session on Agri-Food Business: Opportunities Galore during Workshop on Novel Food Products Development – way forward for Skill India, held at Rajiv Gandhi National Institute of Youth Development, Regional Centre, Chandigarh, October 14, 2016.
- Mehra, G., 2016. Scope of Developing Agro and Food Processing Industries. **Resource person** for Faculty Development Programme at Post Graduate Government College, Sector 11, Chandigarh, sponsored by Department of Science & Technology, Govt. of India, and Entrepreneurship Development Institute of India, Ahmedabad, and conducted by Regional Centre for Entrepreneurship Development, Chandigarh, on September 20, 2016.
- Mehra, G., 2016. Scope of Developing Agro & Food Processing Industries: **Resource person** for Workshop on Startup India Standup India by Rajiv Gandhi National Institute of Youth Development, Regional Centre, Chandigarh and Regional Centre for Entrepreneurship Development, on September 7.
- Mehra, G., 2016. Food for Health: Biochemical Aspects. **Resource person** for Workshop on Health and Well-being – The Theory and Practice of Yoga, organised under Generation UK – India Study Placement Program (2016) by Doon University and British Council, on August 19.
- Mehra, G., 2016. Genetically Modified Foods--- On the cross roads, **Invited lecture** to Civil service students of Centre for IAS and Other Competitive Examinations, Panjab University, Chandigarh, May 10.
- Mehra, G., 2016. Food to fulfill social, psychological and physiological functions, **Invited lecture** to Civil service students of Centre for IAS and Other Competitive Examinations, Panjab University, Chandigarh, April 13.

#### **POSTER PRESENTATIONS**

- Kaur, A., Puri, R. and Mehra, G. 2017. Assessment of Adulteration in Milk and Milk Products. In: National Seminar on “Biological Sciences: Prospects & Perspectives” & Science Day Celebrations at Dept. of Bioinformatics and Biotechnology, DAV College, Sector 10, Chandigarh, in association with Punjab State Council for Science & Technology, February 27 – 28.
- Kaur, C., Sharma, I. and Mehra, G. 2017. Comparative study for potability assessment of drinking water from different sources in Chandigarh. In: National Seminar on “Biological Sciences: Prospects & Perspectives” & Science Day Celebrations at Dept. of Bioinformatics and Biotechnology, DAV College, Sector 10, Chandigarh, in association with Punjab State Council for Science & Technology, February 27 – 28.

- Aditi, Narang, M. and Mehra, G. 2017. Packaged Food Labeling: IF FOOD COULD TALK! In: National Seminar on “Biological Sciences: Prospects & Perspectives” & Science Day Celebrations at Dept. of Bioinformatics and Biotechnology, DAV College, Sector 10, Chandigarh, in association with Punjab State Council for Science & Technology, February 27 – 28.
- Kaur, A., Mehra, G. and Bishnoi, S. 2017. Effect of repeated frying on rancidity of oil samples collected from different food vendors of tricity. In: National Seminar on “Biological Sciences: Prospects & Perspectives” & Science Day Celebrations at Dept. of Bioinformatics and Biotechnology, DAV College, Sector 10, Chandigarh, in association with Punjab State Council for Science & Technology, February 27 – 28.
- Gulati, S., Anand, R., Chanchal, and Mehra, G. 2017. Comparative Physico-chemical and Microbial Analysis of Different Brands of Honey. In: National Seminar on “Biological Sciences: Prospects & Perspectives” & Science Day Celebrations at Dept. of Bioinformatics and Biotechnology, DAV College, Sector 10, Chandigarh, in association with Punjab State Council for Science & Technology, February 27 – 28.
- Awasthi, T., Bhatia, S., Kaur, R. and Mehra, G. 2016. Comparative Chemical Analysis of Green and Black Tea Brands. In: 2nd International Conference on “Harnessing Engineering, Technology & Innovation for Sustainable Growth” (HETIS 2016) at SSBUICT, Panjab University, Chandigarh, September 30 – October 1. **(Best Poster Award).**

#### **ORAL PRESENTATION**

- Mehra, G. 2016. Development of gluten-free nutrition bar. In: 2nd International Conference on “Harnessing Engineering, Technology & Innovation for Sustainable Growth” (HETIS 2016) at SSBUICT, Panjab University, Chandigarh, September 30 – October 1.
- **Coordinator**, Workshop on Novel Food Products Development – way forward for Skill India, held at Rajiv Gandhi National Institute of Youth Development, Regional Centre, Chandigarh, October 13 – 17, 2016.

#### **Dr. Vandana Sharma**

- Conducted practical examination of M.Sc. Microbiology students in Bhojia Institute of Life Sciences, Baddi in July, 2016.
- Organized National Symposium on “Nanobiotechnology And Microbial Technology For Advancements In Industry And Medicine” Jointly Organized By: Department Of Biotechnology Chandigarh College Of Technology Cgc Campus- Mohali, & Association Of Microbiologists of India (Ami), Chd Unitas member of organizing committee in Aug., 2016.
- Paper presented titled ‘Genetically modified probiotic bacteria- boon or bane’ in National Symposium on “Nanobiotechnology And Microbial Technology For Advancements In Industry And Medicine” Jointly Organized By: Department Of Biotechnology Chandigarh College Of Technology Cgc

Campus- Mohali, & Association Of Microbiologists of India (Ami), Chd Unit as member of organizing committee in Aug.,2016.

- Co-convener of UGC and INSA sponsored two days National Seminar on “Animal Diseases: Impact on Human Health and Control Issues” jointly organized by Department of Zoology and Food Science on 30<sup>th</sup> and 31<sup>st</sup> Aug,2016.
- Awarded Research Fellowship to work on Project entitled “Studies on Geomaterial- Microbe Interactions” in IIT, Bombay, jointly sponsored by INSA, IASc and NASI.
- Conducted one day Faculty Development Programme (FDP) jointly organized by SD College, Chandigarh and AMI Chd. Unit as member of organizing committee in Sept.,2016.
- Attended National symposium on “Bioactive Compounds: Translating Promises into Practice” organized by Department of Microbiology, Panjab University, Chandigarh on 7<sup>th</sup> Oct., 2016.
- Invited as resource person for delivering lecture on “Global antibiotic resistance” at 7 days NSS camp from 9 -15 Oct., 2016.
- “Bioprospecting Potential for development of novel antimicrobial drugs”, Poster presented in International symposium on “Microbial Resource Centers and Conservation of Microbial Diversity” organized by IMTECH on 10 Nov., 2016.
- Attended 7 day FDP on “ICT- New dimensions in research and higher education” from 26 Nov. to 2 Dec. 2016.
- Participated in the “STEM Teacher Training Workshop on Research Based Pedagogical Tools” workshop held from 23-25 Jan., 2017 at the Indian Institute of Science Education and Research, Mohali, jointly sponsored by DBT, Govt. of India, Newton Bhabha Fund of the British Council and IISER Pune.
- Attended 7 day FDP on “Expanding Paradigms of Pedagogy” from 13-19 April,2017.

#### **Dr. Sandeep Kaur**

- Member of the organizing team in National Seminar on “Animal Diseases: Impact on Human Health and Control Issues” on 30<sup>th</sup> and 31<sup>st</sup> August, 2016.
- Best Poster Presentation titled ‘Fish Borne Zoonoses: Potential Source of Infection in Humans’ in National Seminar on “Animal Diseases: Impact on Human Health and Control Issues” on 30<sup>th</sup> and 31<sup>st</sup> August, 2016.
- Member of the organizing team in the Workshop on “Novel Food Product Development – way forward to Skill India, held at Rajiv Gandhi National Institute of Youth Development, Chandigarh from Oct 13th, 2016 to Oct 17th, 2016.
- Two International Publications:
  - Kaur S, Harjai K, Chhibber S (2016) In Vivo assessment of Phage and Linezolid based implant coatings for treatment of methicillin resistant S.

aureus (MRSA) mediated Orthopaedic device related infections. PLoS ONE 11(6): e0157626.

- Chhibber S, Shukla A, Kaur S (2017). "Transfersomal phage cocktail : an effective treatment against methicillin resistant *S. aureus* (MRSA) mediated Skin and Soft tissue infections (SSTIs)".Antimicrobial Agents and Chemotherapy. Accepted (Printing in process; AAC02146; doi:10.1128/AAC.02146-16).
- Presented oral presentation on “ Climate Change and Resurgence of Chickungunya in India” at International Conference on Advancements in Science and Technology (ICAST) held on April20-21,2017 at Rayat Bahra University, Mohali, Panjab in association with DRDO, New Delhi.

#### **Dr. Ruchi**

- Member of the organizing team in National Seminar on “Animal Diseases: Impact on Human Health and Control Issues” on 30<sup>th</sup> and 31<sup>st</sup> August, 2016.
- Member of the organizing team in the Workshop on “Novel Food Product Development – way forward to Skill India, held at Rajiv Gandhi National Institute of Youth Development, Chandigarh from Oct 13th, 2016 to Oct 17th, 2016.
- Poster presentation on " A study on the type and morphology of microbes responsible for spoilage in different types of foods" at National science day celebrations at DAV College, Sec 10, Chandigarh.

#### **Dr. Sonu**

- Best Poster Presentation titled ‘Analysis of Vitamin C Content and its Degradation during Storage in Amla and Amla Products’ at HETIS, 2016
- Member of the organizing team in the Workshop on “Novel Food Product Development – way forward to Skill India, held at Rajiv Gandhi National Institute of Youth Development, Chandigarh from Oct 13th, 2016 to Oct 17th, 2016.

#### **Dr. Kirti Goel**

- Member of the organizing team in the Workshop on “Novel Food Product Development – way forward to Skill India, held at Rajiv Gandhi National Institute of Youth Development, Chandigarh from Oct 13th, 2016 to Oct 17th, 2016.

**Department of Chemistry:**

***Achievements by Faculty***

**Dr. Shefali Dhiman**

- 1 **Biodegradable Plastic Using Different Plasticizers**, Imperial Journal of Interdisciplinary Research, Vol-2, Issue-8, 2016 ISSN: 2454-1362, <http://www.onlinejournal.in> (**INTERNATIONAL**)
- 2 **Animal Research-Boon or Curse** in the Proceedings of the UGC sponsored national seminar on “Animal Diseases:Impact on Human Health and Control Issues” at MCM DAV College for Women, Sector 36, Chandigarh sponsored by UGC and Indian National Science Academy on 30<sup>th</sup> and 31<sup>st</sup> August, 2016 (**NATIONAL**).
- 3 **Dr Shefali Dhiman** Presented research paper titled “Neuropsychological Deficits and Neuroimaging Correlates of Psychopathy and Antisocial Personality Disorder” at the 3rd International and 5th Indian Psychological Science Congress, Chandigarh, India, October 2016 under the aegis of National Association of Psychological Science organized by PGGC, Sector 46, Chandigarh.
- 4 **Dr Shefali Dhiman** Presented research paper titled “Neuro-Imaging and Neuropsychological Impairments in Chronic Alcohol Abuse” at the 3rd International and 5th Indian Psychological Science Congress, Chandigarh, India, October 2016 under the aegis of National Association of Psychological Science organized by PGGC, Sector 46, Chandigarh.
- 5 **Dr Shefali Dhiman** was member, organizing committee at the MCM Science Fest “Celebrating Science in Life”at MCM DAV College for Women, Sector 36, Chandigarh sponsored by DBT, Ministry of Science and Technology on 24<sup>th</sup> Feb, 2016.
- 6 **Dr Shefali Dhiman** Presented research paper titled “Animal Research-Boon or Curse” at the Two Days National seminar on “Animal Diseases:Impact on Human Health and Control Issues” at MCM DAV College for Women, Sector 36, Chandigarh sponsored by UGC and Indian National Science Academy on 30<sup>th</sup> and 31<sup>st</sup> August, 2016.
- 7 **Dr Shefali Dhiman** was member, organizing committee at the Two Days National seminar on “Animal Diseases:Impact on Human Health and Control Issues” at

- MCM DAV College for Women, Sector 36, Chandigarh sponsored by UGC and Indian National Science Academy on 30<sup>th</sup> and 31<sup>st</sup> August, 2016.
- 8 **Dr Shefali Dhiman** attended the Dean College Development Council sponsored **National Workshop for Faculty Development** on 19<sup>th</sup> March, 2016, at MCM DAV College for Women, Sector 36, Chandigarh
  - 9 **Dr Shefali Dhiman** attended the **RUSA-sponsored 7-day Faculty Development Program** on ICT-New Dimensions in Research and Higher Education from 26<sup>th</sup> Nov-2<sup>nd</sup> Dec, 2016 at MCM DAV College for Women, Sector 36.

#### **Dr. Sagarika Dev**

- 1 **Dr. S. Dev** attended RUSA sponsored Faculty development programme on ICT-New Dimensions in Research and Higher Education from 26<sup>th</sup> Nov 2016 to 2<sup>nd</sup> Dec 2016 organised by MCM College.
- 2 **Dr. S. Dev** submitted a research proposal as co-supervisor along with Dr. Angshuman Roy Choudhary of IISER Mohali to CSIR.
- 3 **Dr S. Dev** was member, organizing committee at the MCM Science Fest “Celebrating Science in Life” at MCM DAV College for Women, Sector 36, Chandigarh sponsored by DBT, Ministry of Science and Technology on 24<sup>th</sup> Feb, 2016.
- 4 **Dr S. Dev** was member, organizing committee at the Two Days National seminar on “Animal Diseases: Impact on Human Health and Control Issues” at MCM DAV College for Women, Sector 36, Chandigarh sponsored by UGC and Indian National Science Academy on 30<sup>th</sup> and 31<sup>st</sup> August, 2016.

#### **Dr. Qudrat Hundal**

- 1 **Dr. Q. Hundal** attended RUSA sponsored Faculty development programme on information communication technology new dimensions in research and higher education from 26<sup>th</sup> Nov 2016 to 2<sup>nd</sup> Dec 2016 organised by MCM College.
- 2 **Dr. Q. Hundal** has attended a workshop on Instrumentation Techniques in Chemistry (HPLC, GC, FTIR, UV-VISIBLE Spectrometer) on 15<sup>th</sup> Mar 2017 organised by Resonance Club of the Department of Chemistry, GGDSD College sector-32, Chandigarh.

## Ms. Gargi Dhaka

- 1           **Ms. G. Dhaka** published a research article in **Inorg. Chim. Acta** 2016, 450, 380-385 on “Benzothiazole possessing reversible and reusable selective chemosensor for fluoride detection based on inhibition of excited state intramolecular proton transfer”.
- 2           **Ms. G. Dhaka** published a research article in **Inorg. Chem. Commun.** 2016, 72, 57-61 on “Spectroscopic evaluation of a novel multi-element sensitive fluorescent probe derived from 2-(2'-phenylbenzamide)benzimidazole: Selective discrimination of  $\text{Al}^{3+}$  and  $\text{Cd}^{2+}$  from their congeners”.
- 3           **Ms. G. Dhaka** published a research article in **J. Photochem. Photobiol. A** 2017, 335, 174-181 “Exploiting the INHIBIT-ESIPT Mechanism for the Design of Fluorescent Chemosensor With a Large Blue-Shift in Emission”.
- 4           **Ms. G. Dhaka** published a research article in **Chemistry Select** 2016, 1, 4229-4234A on “Novel Di(6-aminouracil-5-yl)-arylmethane derivative as Fluorescence Ratiometric Chemodosimeter for Mercury Detection in Aqueous Solution”.
- 5           **Ms. G. Dhaka** presented poster entitled “ $\text{Hg}^{2+}$ -induced deprotonation of an anthracene-based chemosensor: set-reset flip-flop at the molecular level using  $\text{Hg}^{2+}$  and  $\text{I}^-$  ions.” In Professor Ram Chand Paul National Symposium on “Progressive Trends in Chemical Sciences” 23<sup>rd</sup> Jan 2016.

## Ms. Shashi Janeoo

- 1           **Ms. S. Janeoo** published a research article in AIP Conference Proceedings (2016) Volume 1731, Issue 1, 10.1063/1.4947750 entitled “Structural and optical characterization of  $\text{In}_2\text{O}_3/\text{PANI}$  nanocomposite prepared by in-situ polymerization”.
- 2           **Ms. S. Janeoo** won 3<sup>rd</sup> prize in Poster presentation in Science Fest organized by MCM DAV College for Women, sector – 36A, Chandigarh.

## *Achievements of Students*

- **Ms. Shreya Sharma** (B.Sc. III. NM) has achieved 3<sup>rd</sup> position in P.U. Semester III exam.

- **Ms. Anamika Avni** bagged 7<sup>th</sup> position in Semester I and 10<sup>th</sup> position in Semester II in P.U. M.Sc Examination.
- **Ashmita** (BSc non-medical 3<sup>rd</sup> year) is working as a Coordinator with a national NGO named "MaaKaSapna ". She has actively organised several events on handling the crisis and initiated new projects. She was the Vice President for Physics eureka club last year and also anchored the fest along with Vatika and Sumiran. She was acknowledged with certificates for event planning and execution for more than 3 events and have got experience letter for completing the tenure for one year.
- **Akshita Sharma** (BSc medical 3<sup>rd</sup> year) won 3<sup>rd</sup> prize in oral Power Point presentation on Akshay Urja held at GCG college sector 11 on September 2016. She has won 2nd prize at poster presentation in National Seminar held at MCM DAV College on September 2016.
- **Gundeep Kaur** (BSc medical 3<sup>rd</sup> year) won 2<sup>nd</sup> prize in poster presentation in National Seminar held at MCM DAV college on September 2016.
- **Simran** (BSc medical 3<sup>rd</sup> year) won 2nd prize in poster presentation in zoology National Seminar held in MCM DAV college on September 2016.
- **Saloni** (BSc medical 3<sup>rd</sup> year) won Consultation prize in poster making on akshay urja held at GCG College sector 11 on September 2016.
- **Sanskriti** (BSc medical 3<sup>rd</sup> year) won silver medal at state level Punjab state taekwondo championship held in Ludhiana on 11- 13 February 2017.
- **Ms. Deepti** (M.Sc. II) secured a 1<sup>st</sup> prize in quiz on Spectroscopic techniques at S.D. College, Chandigarh on 15<sup>th</sup> March, 2017.
- **Ms. Ankita Gupta** (M.Sc. II) secured a 3<sup>rd</sup> prize in quiz on Spectroscopic techniques at S.D. College, Chandigarh on 15<sup>th</sup> March, 2017.

### **Department of Botany:**

#### **Faculty Achievements:**

##### **1. Dr. Purnima Bhandari**

- Awarded Ph.D Degree
- **Bhandari, P.** and Garg, N. 2016. Differential response of silicon and/or mycorrhization in modulating proline metabolism and soluble sugar accrual in salt-stressed chickpea plants. In: National conference of plant physiology-2016, Challenges in Crop physiology research: From

molecular to whole plant; organized by Department of Crop physiology, University of Agricultural Sciences, Bengaluru and Indian Society for Plant Physiology, New Delhi. DECEMBER 8th- 10th, 2016. Poster presentation

- **Bhandari, P.** and Garg, N. 2016. Modulatory responses of silicon nutrition and/or *Funneliformis mosseae* in improving growth and nutrient status in salt stressed *Cicer arietinum* L. genotypes. In: CHASCON 2016; organized by Panjab University; FEBRUARY 29th-march 2nd 2016. Poster presentation.
- **Bhandari, P.** and Garg, N. 2016. Differential response of silicon fertilization and/or mycorrhization in modulating ascorbate-glutathione cycle and antioxidant scavenging capacity *Cicer arietinum* L. genotypes subjected to long term salinity. In: National Conference on Plant Science Research: Looking beyond 21st century for environmental and agricultural revolution. Organized by Society for Plant Research (VEGETOS) and department of Botany, University of Delhi, New Delhi, INDIA. January 5th-7th, 2016. Oral presentation.

## 2. Dr. Geetika Singh

- Awarded Ph.D Degree

## 3. Dr. Gunjan Sud

- Was one of the Organizing member of the two days National Seminar entitled “Animal Diseases- Impact on Human Health”, organized by the departments of Zoology and Microbial food Technology, MCM College for Women sector 36-A on 30-31st August, 2016.

## *Publications (2016-17)*

### 1. **Dr. Purnima Bhandari**

- Garg, N., **Bhandari, P.**, Kashyap, L. and Singh, S. 2017. Arbuscular mycorrhizal symbiosis: A boon for sustainable legume production under salinity and heavy metal stress. In: MYCORRHIZAL FUNGI, (eds.) Aggarwal, A. and Yadav, K., Astral International Pvt., Ltd, New Delhi, pp. 247-273.
- Garg, N. and **Bhandari, P.** 2016. Silicon nutrition and mycorrhizal inoculations improve growth, nutrient status, K<sup>+</sup>/Na<sup>+</sup> ratio and yield of *Cicer arietinum* L. genotypes under salinity stress. Plant Growth Regul. 78: 371–387. (I.F.: 2.33)

- Garg, N. and **Bhandari, P.** 2016. Interactive effects of silicon and arbuscular mycorrhiza in modulating ascorbate-glutathione cycle and antioxidant scavenging capacity in differentially salt-tolerant *Cicer arietinum* L. genotypes subjected to long-term salinity. *Protoplasma*. 253:1325-1345 (I.F.: 2.34)

## 2. Dr. Geetika Singh

- **Geetika Singh**, Richa, M.L. Sharma. 2016. Effect of ageing on endogenous auxins, Gibberlins and abscisic acid in the three species of bamboo seeds in relation to loss of viability during storage. *Biolife*. 4(2): 370-375.
- **Geetika Singh**, Richa and M.L.Sharma. 2016. Effect of prolonged storage on the biochemical constituents of primary metabolites in three species of bamboo seeds. *International journal of pharmaceutical sciences review and research*. 39(1): 248-250.

## 3. Dr. Gunjan Sud

- *Pilosella echinoides* (Lumitzer) F.W. Schultz & Schultz Bipontinus (Asteraceae)-A lesser known taxon from Himachal. *Indian Forester*. 142(7):708, 2016.
- Research note viz. *Zinnia peruviana* L. (Asteraceae) – an overlooked species from Himachal Pradesh has been accepted for publication in the peer reviewed journal *Indian Forester*.
- Research paper entitled *Prenanthes aitchisoniana* (Beauv.) Roohi Bano & Qaiser (Asteraceae) - First record from India has been sent for publication to the peer reviewed international online journal *Check List the journal of biodiversity taxa*.
- Research paper entitled *Additions to the Asteraceae of Una District, Himachal Pradesh* has been submitted for publication to *J. Econ. Taxon. Bot.*

### ***Books Published/Revised***

1. Plant Ecology and Taxonomy, 2nd Semester, B. Sc. I, H P University with Lab Manual ISSN 81-87223-75-8, New Edition, 2017. Trueman Publications, Jalandhar, Mrs. Neelam Dhand.
2. Foundations of Botany, B. Sc. I, 1st Semester(Major). Phycology, Mycology, Plant Pathology, Bryophyta, Pteridophyta under CBCS, ISSN 81-

87223-33-2, 1st Edition 2005, New Edition 2017. Trueman Publications, Jalandhar, Mrs. Neelam Dhand.

3. Plant Pathology for Core Elective 6th Semester of HP University, New Edition 2016, Trueman Publications, Jalandhar, Mrs. NeelamDhand  
ISBN 81-87223-31-6

4. Bioinformatics for Core Elective 6th Semester of HP University, New Edition 2016, Trueman Publications, Jalandhar, Mrs. NeelamDhand  
ISBN 81-87223-41-3

5. Cytogenetics, Evolutionary and Cell Biology for Zoology 4thsemester of B.Sc. II of HP University New Edition 2016, Trueman Publications, Jalandhar, KN Bhatia & Mrs. NeelamDhand  
ISBN 81-87223-72-3

6. Biochemistry, Biotechnology and Molecular Biology for 5thsemester (Major) B.Sc. III of HP University New Edition 2016, Trueman Publications, Jalandhar, KN Bhatia & Mrs. NeelamDhand  
ISBN 81-87223-70-7

7. Biochemistry, Biotechnology and Molecular Biology for Zoology 5thsemester (Major) B.Sc. III of HP University New Edition 2016, Trueman Publications, Jalandhar, KN Bhatia & Mrs. NeelamDhand  
ISBN 81-87223-71-5

8. Genetics Paper – B for 2nd Semester of B.Sc. I of Panjab University New Edition 2015, 2016 Trueman Publications, Jalandhar, KN Bhatia & Mrs. Neelam Dhand  
ISBN 81-87223-51-0

### **Department of Physics:**

#### **Students and faculty achievements:**

- i. Shreya Sharma was ranked 3<sup>rd</sup> position in 3<sup>rd</sup> semester in the session 2015-16.
- ii. Students of Department of Physics won prizes in ‘Synergic Fest’ held at PGGCG, Sector 11, Chandigarh on Feb 23, 2017
  - Manasvi BSc I : 1<sup>st</sup> prize in Essay writing
  - Purnima and Deepti BSc II: 1<sup>st</sup> prize in Scientific Rangoli
- iii. Students of Department of Physics won following competitions in ‘MCM Science Carnival’ held at MCM DAV College, Chandigarh on March 25, 2017
  - Shreya Sharma: BSc III (NM) 1<sup>st</sup> prize in Quiz
- iv. Students of Department of Physics won following competitions in ‘Science Fest’ at PGGCG-42, Chandigarh on March 28, 2017

- Yashika : BSc II (NM) 2<sup>nd</sup> prize in Extempore
- Priya Sharma, Aishwarya Khurana and Meha Saini : BSc (III) NM 2<sup>nd</sup> prize in Caligraphy

Faculty of Physics department prepared LAB MANUAL

- “Users Manual for Practical Physics”, B.Sc.I and B.Sc II

These manuals are strictly according to the prescribed syllabus of Panjab University.

Teachers of the Department published following books/ research publications

**Dr. Renu Bedi**

- “Statistical and Thermodynamics” for B.Sc. II by Dr. Renu Bedi.
- “Quantum Physics” for B.Sc II and “Mechanics” for B.Sc I by Raman Chadha.
- “Nuclear Physics” for B.Sc III by Poonam Jain.
- Lab Manual for Practical Physics B.Sc I Dr. Renu Bedi, Ms. Raman Chadha and Ms. Poonam Jain
- Lab Manual for Practical Physics B.Sc II Dr. Renu Bedi, Ms. Raman Chadha and Ms. Poonam Jain
- International peer-reviewed journal publication on “A low cost,sulfurization free approach to control optical and electronic properties of  $\text{Cu}_2\text{Zn Sn S}_4$  via precursor variation” by Dr. Yogita;
  - Solar Energy Materials And Solar Cells **157**, 820 (2016)
- International peer-reviewed journal publication on “Study of weakly interacting trapped gas” by Dr. Renu Bala;
  - European Journal of Physics B **89**, 228 (2016).
- International peer-reviewed journal publication on “Study of nuclear dynamics using IQMD model” by Dr. Rajni Bansal; International Journal Of Applied And Pure Physics **13**, 238 (2017).

**Department of Zoology:**

- **Sarabjeet Kaur.** Fish health alterations as potential biomarker of environmental quality in rivers of Punjab (India). *Pollution Research* (In Press)

- **Ruchira Sen.** Scharf, M.E., Cai, Y., Sun, Y., **Sen, R.**, Ray Choudhury, R., Boucias, D.G. 2017. A Meta-analysis testing eusocial co-option theories in termite gut physiology and symbiosis. *Communicative and Integrative Biology*.  
<http://www.tandfonline.com/doi/abs/10.1080/19420889.2017.1295187>
- **Dr. Shivani Singla** attended and presented a paper at 20<sup>th</sup> Punjab Science Congress organized at IET Bhaddal Campus, Ropar from 07.02.2017 to 09.02.2017.
- **Dr. Harpreet Kaur** attended and presented a paper at 13<sup>th</sup> Conference on Vectors and Vector-Borne Diseases at Hotel Crowne Plaza, Chennai, from 27.02.2017 to 01.03.2017.
- **Shreya Sharma, Sunidhi Sharma & Sonia Sandhi** of B.Sc. III Medical qualified IIT-JAM

**19. LIST OF SHORT TERM TRAINING COURSES/WORKSHOPS CONDUCTED FOR STUDENTS AND FACULTY, INCLUDING TITLE, DURATION, AND NO. OF BENEFICIARIES**

**Department of Food Science:**

S.No.	Title	Duration	No. of participants		
			Students	Teachers	Lab Attendants
1.	<b>National Level Seminar:</b> Department of Food Science and Department of Zoology organized a UGC and INSA sponsored 2 days National Level Seminar on “Animal Diseases: Impact on Human Health and Control Issues”; at MCM DAV College for Women, Chandigarh. ( <b>Annexure V</b> )	30-31 Aug, 2016	B.Sc. MFT III [20]	6	-
2.	Rajiv Gandhi national Institute of Youth Development, Regional Centre, Chandigarh in Collaboration with Department of Food Science, MCM DAV College for Women organized a “ <b>Workshop on Novel Food Product Development- Way Forward to Skill India</b> ”. ( <b>Annexure V</b> )	13-17 Oct, 2016	B.Sc. MFT II [66]  B.Sc. MFT (III) - 6	6	-

S.No.	Title	Duration	No. of participants		
			Students	Teachers	Lab Attendants
3.	Workshop on “Awareness generation and dissemination of knowledge and skills about recent advances in nutrition and food safety” catalysed and supported by Rastriya Vigyan Evam Prodyogiki Sanchar Parishad, DST, New Delhi and organized by School of Public Health, PGIMER, Chandigarh in collaboration with Dept. of Food Safety & Standards Chandigarh. (Annexure V)	22-26 Nov, 2016	BSc. MFT III [25]	3	-

#### **Department of Chemistry:**

1. Workshop on “Laboratory Safety Practices” on 28 February 2017. Approximately 100 participants including students as well as faculty attended the workshop.
2. The department has conducted a training course on “NMR spectroscopy, 2D-NMR, 13C-NMR, COSY & NOSY” for students on 19 October 2016. Approximately 80 students attended the workshop.
3. Workshop on Skill Development was held by Enma Popli Skill Smart Training Chandigarh for the students on 20<sup>th</sup> September 2016. Approximately 120 students attended the workshop.
4. 5 postgraduate students have attended a workshop on Instrumentation Techniques in Chemistry (HPLC, GC, FTIR, UV-VISIBLE Spectrometer) on 15<sup>th</sup> Mar 2017 organized by Resonance Club of the Department of Chemistry, GGDSD College sector-32, Chandigarh.
5. The department has conducted a lecture on “Career Counselling” on 27<sup>th</sup> March, 2017 by Dr.. Shweta Sharma. Approximately 100 participants including students as well as faculty attended the workshop.

6. The department has conducted a training course on “Solid state Chemistry”, by Dr. A. R. Choudhury, IISER Mohali on 29<sup>th</sup>-30<sup>th</sup> March 2017.

### **Department of Botany**

1. **Visits to P. N. Mehra Botanical Garden, P. U., Chandigarh** were organized for the students of B. Sc. II (Section A and B) on 15<sup>th</sup> and 16<sup>th</sup> September, 2016 and for B. Sc. III on 7<sup>th</sup> October, 2016 to study the local flora in its natural habitat. The students also visited Plant Tissue Culture lab of Botany department, P. U., Chandigarh, learnt the ways and techniques of Plant Tissue Culture, and interacted with the faculty.
2. **A meeting of the advisory committee members from DBT, New Delhi** was held in the college on 21.01.2017 in which Dr. Suman Govil and Dr. Prince Sharma visited the college and the department gave its presentation regarding the various activities and projects held by it under the star college status. An interactive session with members from DBT under Star College Scheme was also held.
3. **An interactive session** was held in the college in which the faculty from all science departments interacted with **Prof. Sunita and her team of research scholars from Ruia College, Mumbai** and discussed various activities and projects being taken up by the undergraduate students of both the colleges (both being star colleges). Prof. Sunita also visited the college Botanical Garden and Rishi Vatika
4. **A lecture on Laboratory safety practices** by Dr. AR Choudhury, IISER, Mohali was organized on the occasion of Science Day – 28<sup>th</sup> February 2017. It was attended by the all the science faculty and around 95 science students of various departments. Besides, members of non-teaching staff (lab attendants) also attended the same where they gained knowledge about lab safety during the experimentation process

### **Department of Physics:**

Theoretical knowledge coupled practical exposure is quite essential to provide an edge to the students in this era of cutthroat competition. Guided by this dictum, Department of Physics organized the following activities for the students:

## **I. Workshop on Experimental Physics**

**Workshop on Experimental Physics:** A one-day workshop of ‘Experimental Physics’ was organized by Department of Physics on March 27, 2017. About 40 students and all faculty members of Department of Physics took part in the workshop. Mr. Amarjit Singh from Guru Angad Dev College, Khadur Sahib, Amritsar was the resource person. Students were taught to make scientific equipment like solenoid, transformer and inductors from scratch and perform various experiments with them.

**Impact:** The activity proved extremely beneficial in imparting practical knowledge, thereby creating better understanding of the subject of electronics in students and their skill development. The main motive of the workshop was to inculcate scientific temperament in the students and teach them to make scientific equipment at low cost.

## **II. ‘Eureka’**

With a vision to promote Physics as well as to provide the students a platform for displaying their talent, Department of Physics instituted **PHYSICS SOCIETY** having students from all classes [B.Sc. (Non-medical and Vocational)]. A fun filled and educational event **EUREKA** was organized by Physics Society in the session 2016-17. 100 students of UG classes participated in this Physics Fest. Following activities were organized:

- i. Poster Making
- ii. Power Point Presentations
- iii. Scientific cartoons
- iv. Working Models

**Impact:** Students got the chance to display their talents in various activities related to Physics.

## **III. Workshop on oil extraction**

A one-day workshop on oil extraction was organized by Department of Physics on March 28, 2017 in collaboration with BUTI pvt. Ltd. Demonstrations for the extraction of oils from mustard, Almond seeds were given to the students and faculty of Department of Physics.

**Impact:** This workshop helped students learn about the methodology of oil extraction from various seeds.

## Department of Zoology

Session	Title of the workshop	Duration	No of Beneficiaries
2016-17	Fresh water Pearl Culture	1 day	22 students (B.Sc. III Medical), 2 teachers & 1 Senior Lecture Assistant

## 20. GUEST LECTURES (DETAILS LIKE NAME OF SCIENTIST, TOPIC, AND NO. OF STUDENTS)

### Department of Food Science:

S. No.	Speaker's Name	Title of the lecture	No. of Students
1.	Prof.Sanjay Chhibber Professor,	Antibiotic Resistance among Microorganisms	63
2.	Dr. Amarjeet Singh, Professor, Community Medicine, PGIMER, Chandigarh	Special keynote lecture on Food Safety	63
3.	Dr.Bharat, University of Legal Prof. U. S. Shivhare, SSBUICT, Panjab University, Chandigarh	Processing of Guar Seed for Production of Guar Gum	63
4.	Mr. Gurharminder Singh, Senior Scientific Officer Punjab State Council for Science and Technology	Intellectual Property Rights: Introduction and Significance	63
5.	Dr. Shet Masih, Director, Molecular Diagnostics & Research Laboratories (MDRL)	Pathogens Detection using Advanced Molecular Techniques for Food Safety	63

**Department of Chemistry:**

<b>Sr. No.</b>	<b>Date</b>	<b>Guest Lecture</b>	<b>Topic</b>	<b>No. of Students</b>
1.	28 <sup>th</sup> February, 2017	Dr. A. R. Choudhary IISER, Mohali	Laboratory Safety Practices	100
2.	19 <sup>th</sup> October 2016	Dr. Sugumar IISER, Mohali	NMR spectroscopy, 2D- NMR, 13C-NMR, COSY & NOSY	80
3.	20 <sup>th</sup> September 2016	Enma Popli SkillSmart Training Chandigarh	Skill Development	120
4.	16 <sup>th</sup> March	Dr. Navneet Kaur	Organometallic and Inorganic Synthesis	50
5	27 <sup>th</sup> March	Dr. Shweta Sharma	Career counseling	100
6.	29 <sup>th</sup> and 30 <sup>th</sup> March	Dr. A. R. Choudhury	Solid State Chemistry	50

**Department of Botany:**

<b>S. No</b>	<b>Speaker's Name</b>	<b>Designation</b>	<b>Title of the lecture</b>	<b>No. of Students</b>	<b>Date</b>
1.	Dr. Sunita Kapila	Professor, Dept. of Botany, Panjab University, Chandigarh	Cytology	30	23 <sup>rd</sup> September, 2015
2.	Dr. Daizy R. Batish	Professor, Dept. of Botany, Panjab University, Chandigarh	Eco-physiology	50	23 <sup>rd</sup> January, 2016

**Department of Physics:**

1. Department of Physics organized a lecture on the topic “**Levitating trains and superconductivity**” by **Prof. Klaus Morawetz on Feb 14, 2017**”. Prof. Morawetz is a Professor at Munster University of Applied Sciences, Germany.
2. Department of Physics organized a lecture on “**Scientific basis of Indian and Modern calendars**” By **Dr. Prem Sagar Mishra on March 20, 2017**. This lecture was attended by the entire physics faculty and the students of B.Sc. II and III year. In this lecture, Dr. Prem Sagar beautifully explained that how calendars serve as a link between cosmos and mankind. He talked elaborately on Indian and international calendars. He also explained the three types of calendars i.e. Solar, Lunar and luni-solar calendars. His talk was very informative for the students and students really enjoyed the evolution of various type of calendar in the history of mankind.

**Department of Zoology:**

Session	Name of the Scientist	Title	No. of Students
2016-17	<b>Prof. H.S. Singh</b> Pro Vice Chancellor & Dean Sciences C.C.S. University, Meerut, U.P.	Piscine Zoonosis	300 (B.Sc. I, II & II Medical)

**21. VISITS TO INDUSTRIES, INSTITUTES (name of place, duration of visit and no. of students)****Department of Food Science:**

1. A study tour to Pushpa Gujral Science City, Kapurthala Road, Jalandhar was organized for students of B.Sc. MFT 1st and 3rd year on 12th November, 2016.
2. Students of BSc.(MFT) II year visited Lotus Ice Cream Factory, Industrial area , Chandigarh on 25-26 Nov,2016  
Number of students = B.Sc. MFT II yr. = 66

**Department of Chemistry**

1. Visit to CSIO Labs, Sec 30, Chandigarh on 28<sup>th</sup> Feb 2017 (20 Students of B.Sc. III)
2. Industrial visit to PCPL Dera Bassi (25 students B.Sc.II and M.Sc.I).
3. Visit to S.D. College, Chandigarh for training on different instruments on 15<sup>th</sup> March, 2017 (5 students and 1 faculty).

**Department of Botany:**

Visits to P. N. Mehra Botanical Garden, P. U., Chandigarh were organized for the students of B. Sc. II (Section A and B) on 15<sup>th</sup> and 16<sup>th</sup> September, 2016 and for B. Sc. III on 7<sup>th</sup> October, 2016 to study the local flora in its natural habitat. The students also visited Plant Tissue Culture lab of Botany department, P.U., Chandigarh, where they interacted, learnt the ways and techniques of Plant Tissue Culture, and interacted with the faculty.

**Department of Physics:**

S.No.	Name of Place	Duration of Visit	No. of students
1.	Central Scientific Instrumentation Organisation (CSIO), Sector 30, Chandigarh	One day	12
2.	INST, Mohali	One day	20
3.	Central Forensic Science Laboratory (CFSL), Chandigarh.	One day	10
4.	UIET Panjab University, Chandigarh.	One day	20
5.	INDOSAW, Ambala	One day	10

**Department of Zoology:**

Session	Name of Place	Duration of Visit	No. of students
2016-17	Central Poultry Development Organization (Northern Region), Chandigarh	One day	35 (B.Sc. III Medical)

**22. LIST OF LAB MANUALS/SOPS GENERATED FOR ALL PARTICIPATING DEPARTMENTS****Department of Food Science:**

- SOPs for all the instruments available in the Departmental labs
- SOP for waste disposal and washing in Microbiology lab
- SOP for disposal of chemical waste generated in labs
- HACCP for hostel mess and college canteen
- Food adulterant detection pamphlets, videos and posters Lab manual on
  - Food Engineering,
  - Bio-informatics,
  - Processing of Foods of Animal origin
  - Bioanalytical Techniques

**Department of Chemistry:**

Lab Manuals for the ready reference of the students were prepared jointly by all the faculty members of the department on the following topics:

- Spectroscopy
- Chromatography
- Preparation of Organic Compounds
- Volumetric Analysis
- Stereochemistry
- Surface Tension and Viscosity

**Department of Botany:**

*Plant Ecology and Taxonomy*, 2<sup>nd</sup> Semester, B. Sc. I, H P University with Lab Manual ISSN 81-87223-75-8, New Edition, **2017**. Trueman Publications, Jalandhar, Mrs. Neelam Dhand.

### **Department of Physics:**

Faculty of Physics department prepared LAB MANUAL “Users Manual for Practical Physics”, B.Sc.I and B.Sc II

### **Department of Zoology:**

- SOPs for BOD Incubator, Autoclave, Centrifuge, Microtome
- Lab Manuals on Haematology

### **23. FEEDBACK MECHANISM ADOPTED (TO BE INDICATED IN TERM OF HOW THE QUALITY OF TEACHING AND HANDS ON TRAINING IMPROVED)**

- Feedback forms filled up by the students were analyzed .
- Now, students are able to perform all the practicals individually, giving them confidence during final exams.
- Number of practicals performed has increased, leading to better understanding of the theoretical concepts, thus giving students an edge among their peers in other colleges and universities.
- Projects during final year are now research based rather than review based.

### **24. ANY SPECIAL INNOVATIVE APPROACH ADOPTED BY THE COLLEGE IN IMPROVING THE UG EDUCATION**

- **Memorandum of Understanding** made between Department of Food Science, MCM DAV College for Women and Bonn Cremica Food Industries Pvt. Ltd., Ludhiana in Nov. 2016
- **Memorandum of Understanding** made between Department of Food Science, MCM DAV College for Women and Molecular Diagnostic & Research Laboratories (MDRL) Pvt. Ltd., Chandigarh on 10/8/2016
- Students of BSc. (MFT)-III year presented their research work in form of posters at National Seminar and Science Day celebrations held at DAV College, Sector 10, Chandigarh on 27-28<sup>th</sup> Feb, 2017 and Science Fest held at MCM DAV College for Women, Chandigarh on 25 March, 2017.
- Students are doing market surveys,
- Development of food adulterants detection kits
- Imbibing enterprising capabilities and application based learning
- Participating in oral and poster presentations in National and International seminars and conferences.
- Industrial interface

- Implement new projects to the under graduate classes.
- Arranged inter-institutional summer / winter projects.
- Demonstrate new practicals to the under graduate classes to widen up their theoretical as well as experimental knowledge.
- Knowledge about the various web sites related to the topics.
- Extra material is provided to advanced learners.
- Several theoretical projects are assigned to the students. More emphasis over hands-on training and education.
- Students are encouraged to participate in various seminars and workshops to prepare them for research in their respective careers.
- Hands on training programmes followed by allotment of minor research projects to UG students.

**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)**

- All the students were exposed to hands on skills
- Sufficient availability of chemicals and glass wares facilitated practical learning
- Review projects were converted to research projects
- Industrial visits and guest lectures were facilitated
- Various workshops, seminars and fests were sponsored by the Star college scheme funding
- SOPs and lab manuals were generated
- Inter departmental and inter college cohesion increased
- College and departmental reputation enhanced
- Improved ranking in India Today
- Number of applicants increased and drop –outs decreased
- Number of admissions increased. Second unit of B.Sc. MFT initiated
- New found confidence and enthusiasm in faculty and students
- Student’s interest in Sciences developed
- Greater number of postgraduate admissions in sciences.
- More number of faculty participating in FDPs

**26. SUGGESTIONS/FEEDBACK FOR IMPROVING THE SCHEME**

- Timely release of funds would help maintain the enthusiasm of faculty as well as students.
- Tentative dates for yearly submission of progress report and its format, UC/SE, and presentations should be finalized in the beginning of the session
- Less paper work and more emphasis on, on the spot verification

- Please do not shoot the messenger/Co-ordinator. Star college scheme is a teamwork which requires focused efforts from administration and the participating departments. In case of short-comings, please indicate/suggest improvements department wise so that specific action is taken.
- Non recurring grant should be increased
- Funding should be provided to establish central instrumentation facility
- Product Development lab for innovative food product development and its shelf-life studies is required
- More computers are required to facilitate teaching and research
- Funding for accessing online library and indexing databases
- Training / workshops for Star College Scheme Coordinators should be held in New Delhi to facilitate better functioning at the beneficiary institutions.

## **ANNEXURE-II**

### **B.Sc. MFT I Year (2016-17)**

<b>S.No</b>	<b>Roll No.</b>	<b>Student Name</b>
1	5051	Ritika Mittal
2	5054	Tejaswini Jaswal
3	5055	Gursimran Kaur
4	5057	Prachi Minhas
5	5058	Medhavi
6	5059	Navneet Kaur
7	5060	Purva Aggarwal
8	5061	Lovepreet Kaur
9	5063	Chhavi Dhiman
10	5064	Anjali Rahlan
11	5066	Gurleen Pannu
12	5068	Sonia Kayath
13	5069	Amber Asghar
14	5071	Himanshi Bansal
15	5072	Simranjeet Kaur
16	5073	Kangan K
17	5076	Sonia Sharma
18	5077	Riya
19	5080	Komal Atlas
20	5082	Komal
21	5081	Kulveer Kaur
22	5085	Jhanvi Trehan
23	5087	Vaani Dutta
24	5088	Kamaljit Kaur
25	5089	Sharanya Bhardwaj
26	5090	Nisha Chaudhary
27	5094	Tanvi
28	5098	Ujjwal
29	5100	Bahaar Hundal
30	5945	Aditi Vashisht
31	5946	Eva Dixit

32	5947	Ramanpreet Kaur
33	5948	Kanika
34	5949	Mahima
35	5951	Komal Kanugo
36	5952	Riya
37	5953	Anuragi
38	5954	Rakshandha Sood
39	5955	Vishwajot Kaur
40	5956	Amandeep Kaur
41	5958	Ananaya Talwar
42	5959	Nikita Sharma
43	5960	Shweta Arora
44	5961	Alka Goel
45	5962	Sarah Sharma
46	5963	Shaheena Singh
47	5964	Iknoor Kaur
48	5965	Jasleen kaur Benipal
49	5966	Diksha Prasher
50	5967	Amandeep Kaur
51	5968	Ramneet Kaur
52	5969	Chahat Verma
53	5971	Sonal Mishra
54	5972	Shagun Bajaj
55	5973	Harshita Arya
56	5974	Japneet
57	5975	Bhavya
58	5976	Shruti Soni

### **ANNEXURE-III**

#### **B.Sc. MFT II Year (2016-17)**

<b>Sr No.</b>	<b>Roll No</b>	<b>Name</b>
1	4901	Jasmine Cheema
2	4902	Aishwarya Dhiman
3	4903	Simran Saini
4	4904	Meera
5	4905	Jasmine Kaur Multani
6	4906	Sumedha Chauhan
7	4907	Sanveer Kaur
8	4908	Perna
9	4910	Navreen Kaur
10	4911	Abhiruchi
11	4912	Nitika Sharma
12	4913	Vaishnavi Sharma
13	4915	Sumehar Kaur
14	4918	Ritika Kadian
15	4919	Vijayanti Dagar
16	4921	Palak Soni
17	4922	Simran Sharma
18	4927	Ravneet Kaur
19	4928	Simran Nagrani
20	4929	Jaspreet Kaur
21	4931	Twinkle Kakkar
22	4932	Aditi Sharma
23	4933	Dipti
24	4935	Prabhleen Kaur
25	4936	Navpreet Kaur
26	4937	Tejroop Kaur
27	4938	Nikita Kundu
28	4940	Sanya Chauhan
29	4941	Dibjot Kaur
30	4942	Sukhleen Kaur
31	4943	Aditi
32	4944	Priyanka
33	4945	Bharti Gambhir
34	4946	Aanchal Sehgal
35	4947	Jasmine Kaur
36	4948	Akshima Sharma
37	4949	Isshu
38	4950	Panvi Ahuja
39	4952	Ramandeep Kaur Virk
40	4954	Dharna Sharma
41	4955	Vaishali Jhinja
42	4956	Vani Angra

43	4957	Amanjot Kaur
44	4960	Vasavi Karol Sood
45	4961	Prashasti Bhardwaj
46	4962	Anjali
47	4964	Navya
48	4965	Saima
49	4966	Sakshi Rathi
50	4967	Kanika
51	4968	Aastha Ghai
52	4970	Neha
53	4971	Kritika Sharma
54	4972	Chetanshi
55	4973	Manika Jaryal
56	4974	Ankita
57	4975	Ashmita Rathi
58	4976	Simran Behniwal
59	4977	Avni
60	4978	Riya
61	4979	Ramandeep Kaur
62	4980	Divya
63	4983	Jasleen kaur
64	4984	Tanvi Saini
65	4985	Ananya
66	4986	Rashmi Surial
67	4969	Ranshi

**ANNEXURE-IV**

**B.Sc. MFT III Year (2016-17)**

<b>S.No</b>	<b>Roll No.</b>	<b>Student Name</b>
1	5001	Komalpreet Kaur
2	5002	Ishita Sharma
3	5003	Shivani Sharma
4	5004	Riya Puri
5	5005	Kirandeep Kaur
6	5006	Seerat Samra
7	5007	Mehak Sandhu
8	5008	Savee Sharma
9	5009	Riya Sethi
10	5010	Eashani Goyal
11	5011	Manju
12	5012	Avinash Kaur
13	5013	Japmeet Kaur
14	5014	Harleen Gujral
15	5015	Suwesha Gulati
16	5016	Charanjeet Kaur
17	5017	Divya Bhandari
18	5018	Aisha Eram
19	5020	Kajal Karn
20	5021	Harkirat Kaur
21	5022	Puneet Kaur
22	5023	Keerat kaur
23	5027	Mehak Singla
24	5028	Nandani Goyal
25	5029	Yukti Madaan
26	5030	Annu Gautam
27	5032	Ramandeep Kaur
28	5033	Loveneet Kaur
29	5035	Ridhima Anand
30	5036	Chandni Sharma
31	5037	Chanchal
32	5038	Diksha Jaswal
33	5040	Khyati
34	5041	Nikita
35	5044	Sunita Chauhan
36	5045	Aaina Batra
37	5046	Tanya Dwivedi
38	5047	Amarjot Kaur
39	5048	Suhavi Kaur
40	5049	Prakriti Sharma

41	5050	Anjali Uppal
42	5901	Malika
43	5902	Tanvi
44	5905	Aditi
45	5906	Surbhi Jain
46	5907	Sheetal Devi
47	5908	Aavani Gulati
48	5910	Ravisha
49	5911	Khemjot Kaur
50	5912	Harleen Singh
51	5913	Jayati Sharma
52	5914	Monarch Bishnoi
53	5915	Amandeep Kaur
54	5916	Neha Arora
55	5917	Deepika Goyal
56	5918	Prabhjot Kaur
57	5920	Yasmeen Kaur
58	5921	Kirti Nehra
59	5923	Sheetal
60	5924	Bandna Devi
61	5925	Tanvi Singh
62	5926	Sukhleen preet Kaur
63	5927	Jessica

## ANNEXURE - V

**1. National Level Seminar:** Department of Food Science and Department of Zoology organized a UGC and INSA sponsored 2 days National Level Seminar on “Animal Diseases: Impact on Human Health and Control Issues ”; from 30-31 August, 2016 at MCM DAV College for Women, Chandigarh.

nar will cover a wide array of topics from the field of Microbiology, Veterinary Science and Health Care. The event would be graced by the presence of eminent scientists and practitioners who would share their vast experience and expertise with the young and budding research and student community. The research papers, case studies relevant to the below given themes and addresses are welcome.

boundary and Emerging Animal Diseases.  
Infectious Diseases  
Economic Aspects of Animal Diseases  
Health and Food Safety  
Disease Diagnosis  
Epidemiology  
Prevention and Control of Animal Diseases  
Disease Management



**ION GUIDELINES**

paper should be in word format.  
submitted for the seminar should be in English, in New Roman font, size 12, typed in double space and not exceed 3000 words.  
Use of reference should be followed for references and links. For more details click <http://www.apastyle.org>  
On submission of the paper, the following items should be included on the first page:  
1. Page showing the title of the manuscript, the name, name, and full address of the author/s with e-mail ID, number, including acknowledgment if any.  
2. List of up to 300 words, five or fewer key words.  
3. Headers should be left justified with Arabic numerals. First word should be capitalized. Headers should be in bold, and subheads in italics.  
4. Papers will be reviewed by the editorial committee and the papers will be published in the form of seminar proceedings book with ISBN No.


**NOTES (ORAL/POSTER)**

be parallel sessions for the oral and poster presentations.  
will be allowed for the presentation and 03 minutes for conclusion.  
structor and faculty of power point presentation will be provided.  
space for poster session will be provided with not more than 10 spaces and required board, for mounting & displaying.  
er should be presented by not more than two

UGC and INSA Sponsored  
Two Days National Level Seminar  
on  
**"Animal Diseases: Impact on Human Health and Control Issues"**  
30<sup>th</sup> & 31<sup>st</sup> August, 2016

   
Organized by  
**Department of Zoology & Department of Food Science**

**MCM DAV COLLEGE FOR WOMEN  
CHANDIGARH**



**ORGANIZING COMMITTEE**

Chief Patron : Shri Punam Suri  
President  
DAV College Managing Committee

Patron : Dr. Niha Bhargava  
Principal

Convener : Dr. Neetu  
HOD (Zoology)

Co-convener : Dr. Vandana Sharma  
Asst. Prof. (Food Science)

Organizing Secretary : Dr. Sarabjeet Kaur  
Asst. Prof. (Zoology)

Organizing

**REGISTRATION FORM**

**MCM DAV COLLEGE FOR WOMEN, CHANDIGARH**  
UGC & INSA Sponsored National Level Seminar  
"Animal Diseases: Impact on Human Health and Control Issues"  
30<sup>th</sup> & 31<sup>st</sup> August, 2016

Name: .....  
Designation: .....  
Organization: .....  
Address (Office): .....  
Mobile: .....  
E-mail: .....

**Category (Please Tick):**  
☐ Faculty  
☐ Research Scholar  
☐ Student

Whether Presenting Paper in the Seminar (Please Tick):  
☐ Yes ☐ No. If Yes, Oral/Poster:  
Title of the paper: .....

Accommodation Requirement (Please Tick):  
☐ Yes ☐ No

**Details of Registration Fee:**  
Demand Draft No. ....  
Amount Rs. .... /- Dated: .....  
Drawn on Bank: .....

Date : ..... Signature: .....

**REGISTRATION DETAILS**

i. Registration fee:  
☐ Faculty: Rs. 800/-  
☐ Research Scholar: Rs. 400/-  
ii. An additional amount of Rs. 500/- will be charged for publication of the selected papers in the Seminar Proceedings with ISSN.  
iii. Registration Fee may please be sent through Demand Draft drawn in favour of "Principal, MCM DAV College for Women", payable at Chandigarh.  
iv. The duly filled form and the demand draft should be sealed in an envelope and addressed to the Organizing Secretary, National Seminar on "Animal Diseases: Impact on Human Health and Control Issues", MCM DAV College for Women, Sector 35-A, Chandigarh-160036.  
v. On the spot registration can be done through cash payment also.  
vi. Photocopy of the registration form may be used.

2. Rajiv Gandhi national Institute of Youth Development, Regional Centre, Chandigarh in Collaboration with Department of Food Science, MCM DAV College for Women organized a **“Workshop on Novel Food Product Development- Way Forward to Skill India”** from 13-17 October, 2016







## Rajiv Gandhi National Institute of Youth Development

Regional Centre, Chandigarh  
in collaboration with  
**MCM DAV College for Women**  
Sector 36, Chandigarh

### Workshop on Novel Food Product Development - Way forward to Skill India

Date: October 13-17, 2016

Venue: RGNIYD, RC, Chandigarh

#### Programme Schedule

Day 1 Thu., Oct. 13, '16	Programme / Sessions	Resource Persons
09:00-09:30 am	Registration and Welcome/RGNIYD Film/Felicitation of the dignitaries/Inauguration About the Workshop	<b>Mr. Stanzin Dawa,</b> <b>Dr. Nisha Bhargava</b> <b>Dr. Geeta Mehra</b>
09:30-10:00 am	Inaugural Address	<b>Dr. S. S. Marwaha,</b> <b>former CEO, PBTI,</b> <b>Mohali, Chief guest</b>
10:00-10:30 am	Keynote address	<b>Prof. U. S. Shivhare,</b> <b>SSBUICET, PU</b>
10:30-11:00 am	Special lecture on Food Safety	<b>Prof. Amarjeet Singh,</b> <b>PGIMER, Chandigarh</b>
	Vote of thanks	<b>Ms Kamalpreet Kaur</b>
11:00-11:30 am	Tea Break	

11:30-12:00 noon	Ground Norms and Responsibility Sharing	<b>RGNIYD Team</b>
12:00-01:00 pm	Ice-breaking and Team Building Games	<b>RGNIYD Team</b>
01:00-02:00 pm	Lunch	
02:00-03:00 pm	IPR	<b>Mr. Gurharminder Singh, PSCS&amp;T, Chd</b>
03:00-04:00 pm	Sensory Evaluation: Threshold Value detection	<b>Mrs. Sonu</b>
04:00-04:30 pm	Tea	
<b>Day 2</b> <b>Fri., Oct. 14, '16</b>	<b>Programme / Sessions</b>	<b>Resource Persons</b>
09:30-10:00 am	Recap	
10:00-11:00 am	Pathogens Detection using advanced molecular techniques for Food Safety	<b>Dr Shet Masih, Director, MDRL</b>
11:00-11:30 pm	Tea Break	
11:30-12:30 pm	Agri-Food Business: Opportunities galore	<b>Dr. Geeta Mehra</b>
12:30-01:00 pm	Lunch	
01:00-02:00 pm	Food Product Development – Ketchups, Sauces, Pickles, etc.	<b>Mr. Jaswinder Singh, Mr. Sunil Arya</b>
02:00-03:00 pm	Food Product Development – Ketchups, Sauces, Pickles, etc.	<b>Mr. Jaswinder Singh, Mr. Sunil Arya</b>
03:00-04:00 pm	Bio-active extraction using greener technologies with holistic wholistic approach;  My Entrepreneurial Journey	<b>Mr. Pawan Kamra, Chandigarh Agritech Pvt. Ltd.;</b> <b>Mrs. Charanjeet Kaur, Pal Soya Foods</b>
04:00-05:00 pm	Tea	
<b>Day 3</b> <b>Sat., Oct. 15, '16</b>	<b>Programme / Sessions</b>	<b>Resource Persons</b>

09:30-10:00 am	Recap	
10:00-11:00 am	Indian Food Licensing and registration system	<b>Mr. Sukhwinder Singh, Food Safety Cell</b>
11:00-11:30 am	Tea Break	
11:30-01:00 pm	Motivational lecture on Entrepreneurship	<b>Dr. Paramjeet Singh</b>
01:00-02:00 pm	Lunch	
02:00-03:00 pm	Food Product Development – Jams, Jellies and Marmalade.	<b>Mr. Ashish Nikhanj, IHM, Bathinda</b>
03:00-04:00 pm	Food Product Development – Squashes and Cordials.	<b>Mr. Ashish Nikhanj, IHM, Bathinda</b>
04:00-04:30 pm	Tea	
<b>Day 4 Sun., Oct. 16, '16</b>	<b>Programme / Sessions</b>	<b>Resource Persons</b>
09:30-10:00 am	Recap	
10:00-11:00 am	Food Safety and Standards	<b>Dr. Bharat</b>
11:00-11:30 am	Tea Break	
11:30-01:00 pm	Bakery Workshop	<b>Mr. Jaswinder Singh &amp; Mr. Vinod Siddu</b>
01:00-02:00 pm	Lunch	
02:00-03:00 pm	Bakery Workshop	<b>Mr. Jaswinder Singh &amp; Mr. Vinod Siddu</b>
03:00 pm onwards	Cultural Evening	<b>RGNIYD Team</b>
<b>Day 5 Mon., Oct. 17, '16</b>	<b>Programme / Sessions</b>	<b>Resource Persons</b>
09:30-10:00 am	Recap	
10:00-11:00 am	Project Writing/IPR	<b>Dr. Anil Angrish, NIPER, Mohali</b>

11:00-11:30 pm	Tea Break	
11:30-12:00 noon	Tie up/Evaluation Forms/Appreciation Cards	<b>RGNIYD Team</b>
12:00-01:30 pm	Felicitation of Dignitaries,  Valedictory Address  Closing Ceremony, Vote of Thanks	<b>Mr. Stanzin Dawa, Dr. Nisha Bhargava  Mayor Mr. Arun Sood  RGNIYD Team, MCM team</b>
01:30-02:30 pm	Lunch	

3. Workshop on “Awareness generation and dissemination of knowledge and skills about recent advances in nutrition and food safety” from 22-26 November, 2016 Catalysed and supported by Rastriya Vigyan Evam Prodyogiki Sanchar Parishad, DST, New Delhi and organized by School of Public Health, PGIMER, Chd in Collaboration with Dept. of Food Safety & Standards, Chd Administrative, Chd. The workshop was organized at Visawakarma Mandir Sabha, Mani Majra, Chandigarh.





#### Press note

DST Workshop – Street food vendors' training on Food Safety organized by PGIMER

@ Vishwakarma Mandir Sabha, Mani Majra, Chandigarh (Nov. 22-23, 2016)

Govt. of India has taken an initiative to ensure food safety in the country by formulating a new legislation Food Safety and Standards Act (FSSA) 2006. Food Safety and Standards Authority of India (FSSAI) has also been established and Food Safety and Standards Regulations (FSSR) 2011 have been promulgated. However, there are many stumbling blocks in its implementation, e.g. training of food handlers to make them aware about the safe cooking practices

With the felt need of such training in mind Dr Amarjeet Singh, Department of School of Public Health, PGIMER, is organizing a DST sponsored workshop on Food safety, "Awareness Generation and Dissemination of Knowledge and Skills about Recent Advances in Nutrition and Food Safety for empowering the stakeholders in North India". The workshop is being held on Nov. 22-23, 2016 in collaboration with Chandigarh Administration. Venue is Ganga Devi Dharamshala, Opp. Panna Sweets, Main Bazar, Mani Majra, Chandigarh. The trainees are street food vendors of the area. The medium of instruction is Hindi. It will be followed by another 3 such workshops over next two years. Its co-investigator is Dr Sukhpal Kaur. This idea for this project was generated from Dr. Puja's Ph.D thesis work on food safety related training of food handlers in eating establishment of PGIMER, Chandigarh.

Also, a field visit, in 2 batches, has been arranged on Nov. 25 & 26 to expose the trainees to the food safety aspects of packaged water factory and an ice-cream factory of Industrial Area.

Mr. Sukhwinder Singh, Designated Officer, from UT Chandigarh Food Safety Cell is the main resource person for the workshop, besides assistance from Mr Baljinder Singh, Food Safety Officer, Mr Jatinder & S Jasmer Singh. Other resource persons are - Dr. Geeta Mehra, Head, Microbial & Food Technology, MCM DAV College, Sector 36, Chandigarh, Dr Sukhpal Kaur & Lt.Col.(Dr.) Puja Dudeja. She highlighted the guidelines issued by FSSAI for ensuring Food Safety of street food. FSSAI IEC material is also being used in the workshop.

More than 100 participants are being trained in the workshop. They were provided with study material on food safety. A short film made by Mr. Ravinder Kumar, Rudra Theatre group on food safety was also screened. Workshop activities will be co-ordinated by Ms Kamal Chahal, project associate with help from Ms Ishwarpreet Kaur, Dr Neha, Dr Risha, Dr Alka and Dr Amudeep. Students of MCM DAV College, Sec. 36, Chandigarh demonstrated the home level tests for detecting Food Adulteration to the participants under the supervision of Dr. Geeta Mehra.



Mehr Chand Mahajan  
DAV College for Women  
Sector 36-A, Chandigarh (U.T.)



Progress Report for Star College Scheme  
(Session 2016-17)

Submitted to

Department of Biotechnology  
Ministry of Science and Technology, Govt. of India