

### SUPPORTING DOCUMENTS of 6.3.3

#### I) STATA and SPSS workshop (Annual Report 2015-16 page No. 33)

Poster of the workshop:



#### Report of the Workshop

**Date:** 18th Sep, 2015

**Speaker:** Mr. Jay Dev Dubey

**Designation:** Consultant with Research and Information System for Developing Countries (RIS)

**Speaker:** Mr. Kapil Patidar

**Designation:** Research Officer, Department of Economic Affairs, Ministry of Finance, Government of India

**Topic:** An Introduction to STATA

The Department of Economics organized a statistical workshop *An Introduction to Stata* on September 18, 2015 to provide its students an insight into the use of available statistical software as well as to improve their efficiency of research work and analysis. Mr. Jay Dev Dubey, Consultant with Research and Information System for Developing Countries (RIS) and Mr. Kapil Patidar, Research Officer, Department of Economic Affairs, Ministry of Finance, Government of India, were invited to conduct the workshop. It commenced with lecture on prospects of STATA by each resource person. The speakers interacted with the students and explained to them the basics of data handling using the software "STATA". The session was conducted in the computer lab of the college with around 60 students participating in the workshop.

**Annual Report highlights of STATA and SPSS workshop (Annual Report 2015-16 page No. 33)**



**Department of Economics :** The Department of Economics organized a statistical workshop An Introduction to Stata on September 18, 2015 to provide its students an insight into the use of available statistical softwares as well as to improve their efficiency of research work and analysis. Mr. Jay Dev Dubey, Consultant with Research and Information System for Developing Countries (RIS) and Mr. Kapil Patidar, Research Officer, Department of Economic Affairs, Ministry of Finance, Government of India, were invited to conduct the workshop. It commenced with lecture on prospects of STATA by each resource person. The lectures were followed by practical sessions in computer labs.

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**II) Lab Skill Training Workshop for Laboratory Assistants/Attendants in the Chemical and Life Sciences from May 31- June 3, 2016 (Annual Report 2016-17, Page No.8)**

**Poster of the workshop:**

The poster is enclosed in a purple border and features the following text and logos:

 **SHIVAJI COLLEGE**  
NAAC Accredited "A" Grade  
UNIVERSITY OF DELHI 

*Organizes*

**Lab Skill Training Workshop  
for Laboratory  
Assistants/Attendants in the  
Chemical and life Sciences**

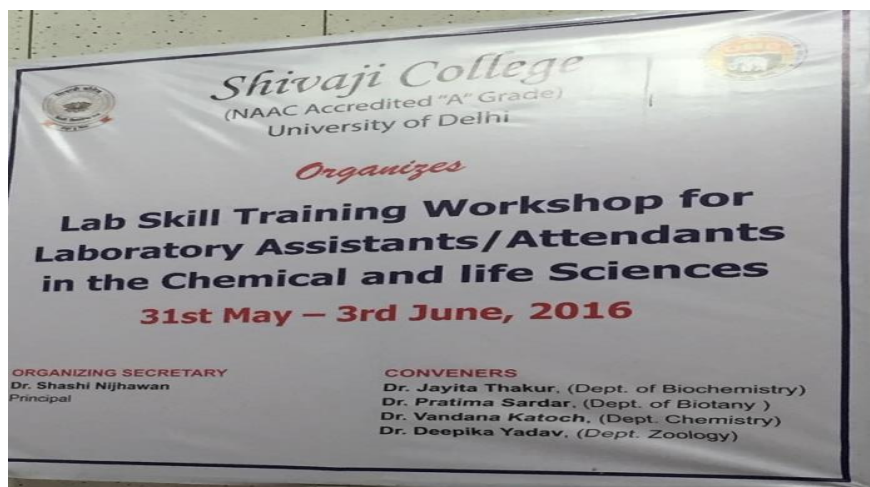
**31<sup>st</sup> May – 3<sup>rd</sup> June , 2016**

**ORGANIZING SECRETARY**  
Dr. Shashi Nijhawan  
Principal

**CONVENERS**

Dr. Jayita Thakur	(Dept. of Biochemistry)
Dr. Pratima Sardar	(Dept. of Botany)
Dr. Vandana Katoch	(Dept. Chemistry)
Dr. Deepika Yadav	(Dept. Zoology)

**Poster of “Lab Skill Training program for laboratory Assistant/Attendants in Chemical and Life Sciences” 31<sup>st</sup> May to 3<sup>rd</sup> June 2016:**



**Report “Lab Skill Training program for laboratory Assistant/Attendants in Chemical and Life Sciences” 31<sup>st</sup> May to 3<sup>rd</sup> June 2016**

To enhance the skills of laboratory staff members, a “Lab Skill Training program for laboratory Assistant/Attendants in Chemical and Life Sciences” was organised at Shivaji College, University of Delhi from 31<sup>st</sup> May to 3<sup>rd</sup> June, 2016 in collaboration with other science departments. As the holistic development of college depends on not only the contribution by, and achievements of the teaching staff; it also depends significantly on the contribution and expertise of the non-teaching staff, the training was conducted to update the knowledge and hone the skills of the laboratory staff.

**List of Participants:**

WORKSHOP FOR LABORATORY STAFF IN CHEMICAL AND LIFE SCIENCES, 2016					
S. No.	NAME	DESIGNATION	DEPARTMENT	COLLEGE	
1.	Mr. Ram Niwas	Laboratory Assistant	Chemistry	Acharya Narendra Dev College	
2.	Mr. Rajpal Singh	Laboratory Assistant	Chemistry		
3.	Ms. Lata	Laboratory Attendant	Biology	Bhagini Nivedita College	Lata
4.	Mr. Labh Singh	Laboratory Attendant	Chemistry		
5.	Mr. Vikas Rana	Laboratory Assistant	Chemistry	Dayal Singh College	
6.	Mr. Ali Mohammed	Laboratory Attendant	Chemistry		

7.	Mr. Vijaya Kumar	Laboratory Assistant	Botany	Miranda House College	
8.	Mr. Uday Kumar Chaudhary	MTS Laboratory	Zoology		
9.	Mr. Sonu Giri	MPS Laboratory Att.	Botany		
10.	Mr. S. C. Patra	Laboratory Assistant	Chemistry	Motilal Nehru College	
11.	Mr. S. Rommi Prakash	Laboratory Attendant	Chemistry		
12.	Mr. Surender Sharma	Lab. Attendant	Chemistry	Kirori Mal College	
13.	Mr. Jagtar Singh	Lab. Attendant	Zoology		
14.	Mr. Jaswant Singh	Laboratory Assistant	Zoology	Khalsa College	
15.	Mrs. Amarjit Kaur	Laboratory Assistant	Zoology		
16.	Mr. Prempal Singh	Technical Assistant	Biochemistry	Shaheed Rajguru College of Applied Sciences for Women	
17.	Mr. Satender Singh Rawat	Laboratory Assistant	Biology		
18.	Mr. Rishi Kumar	Laboratory Assistant	Biomedical Science		
19.	Mr. Prabhat Kumar	Laboratory Assistant	Biomedical Science		
20.	Mr. Ashok Rai	Laboratory Assistant	Instrumentation		
21.	Mr. Iqbal Qasim	Laboratory Attendant	Zoology	Zakir Hussain College	
22.	Mr. Suhail Ahmed	Laboratory Attendant	Zoology		
23.	Mr. Mohd. Waseem	Laboratory Attendant	Chemistry		
24.	Mr. Mohd. Asjad Tasleem	Laboratory Attendant	Chemistry		
25.	Mr. Mohd. Afzal	Laboratory Assistant	Botany		
26.	Mr. Mohd. Shamim	Laboratory Assistant	Botany		

27.	Pasveen Kr.	Laboratory Attid.	Chemistry	Shivaji College	J.K.M
28.	Suresh Shah	— do —	Chemistry	— do —	J.K.M
29.	Sandeep	— do —	Chemistry	— do —	J.K.M
30.	Dawinder Rai	— do —	Chemistry	— do —	
31.					
32.					



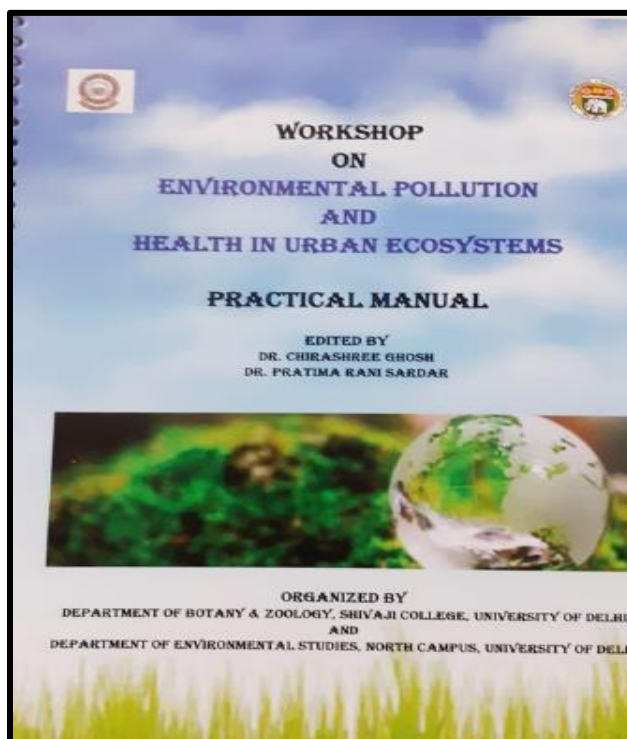
**Photograph of “Lab Skill Training program for laboratory Assistant/Attendants in Chemical and Life Sciences”**

**Annual Report highlights of “Lab Skill Training program for laboratory Assistant/Attendants in Chemical and Life Sciences” (Annual Report 2016-17, Page No.8)**

The departments of Sciences organized a “Labskill Workshop for the laboratory staff of Chemical and Life Sciences” from 31st May - 3rd June 2016, to keep the laboratory staff of the Science departments abreast with various aspects of laboratory maintenance.

**III) Workshop on Environmental Pollution and Health in Urban Ecosystems  
(EPHUE-2016) (Annual Report 2015-16 Page No. 6)**

**Manual of “Workshop on Environmental Pollution and Health in Urban Ecosystems  
(EPHUE-2016):**



**Report of Workshop on Environmental Pollution and Health in Urban Ecosystems  
(EPHUE-2016)**

Workshop on Environmental Pollution and Health in Urban Ecosystems (EPHUE-2016) held at Department of Environmental Studies, North Campus, New Delhi, on 23rd June 2016 organized by Department of Botany & Zoology, Shivaji College, in collaboration with Department of Environmental Studies, University of Delhi

**Speakers:**

- i. Dr. B.C. Sabata, Dept. of Environment, Government of NCT of Delhi.
- ii. Dr. Faiyaz Ahmad Khudsar, Yamuna Biodiversity Park.
- iii. Dr. Anshu Sharma, Seeds Network,

iv. Dr. Mayank Tiwari, Department of History, Satyawati College

**List of Participants: 34 (across the India faculties and Research Scholars) :**

EPHUE - 23 June 2016							
Lists of Participants							
	Name	College	Dept.	Profession	Draft	Signature	Union Bank
1	Dr. Sunita Gupta	Shivaji	Zoo	Teacher	Yes	<i>[Signature]</i>	277929
2	Dr. Renu Baweja	Shivaji	Bio Chem.	Teacher	RTGS		
3	Dr. Nupur Mondal	Shivaji	Botany	Teacher	Yes	<i>[Signature]</i>	College Not reached
4	Dr. Archana Singh	KMC	Botany	Teacher	Yes	<i>[Signature]</i>	Not reached
5	Dr. Prabhavati	Shivaji	Botany	Teacher	Yes	<i>[Signature]</i>	Q1760
6	Dr. Somdutta Sinha Roy	Miranda	Botany	Teacher	Yes	<i>[Signature]</i>	5619
7	Dr. Seema Talwar	Shivaji	Botany	Teacher	Yes	<i>[Signature]</i>	489640
8	Anuj Kumar Garg	SSV College, Hapur	Chemistry	Hon. Lecturer	Yes	<i>[Signature]</i>	731906
9	Dr. Gaurav Sharma	ZHC	EVS	Asst. Prof	Yes	<i>[Signature]</i>	440256
10	Nimita Kant	Shivaji	Zoology	Teacher	RTGS	<i>[Signature]</i>	Q1760
11	Pramod Kumar	DDU	EVS	Teacher	Yes	<i>[Signature]</i>	933675
12	Dr. Nisha Vashista	Miranda	Zoology	Teacher	Yes	<i>[Signature]</i>	673913
13	Akhilesh Kumar Yadav	DDU	Botany	Teacher	Yes	<i>[Signature]</i>	933616
14	Prabhat Kumar Tanwar	IP Univ.	EVS	Research Scholar	Yes	<i>[Signature]</i>	933617
15	Dr. Kiran Bamel	Shivaji	Botany	Teacher	RTGS	<i>[Signature]</i>	Q1762
16	Sandeep Kausheek	Ramjas		Teacher	Yes	<i>[Signature]</i>	477080
17	Dr. Ashish Kr. Choudhary	Dept. of Botany	Botany	Research scholar	Yes	<i>[Signature]</i>	477079
18	Dr. Vijay Kumar	Shivaji	Botany	Teacher	Yes	<i>[Signature]</i>	001774
19	Dr. Suresh Kumar	Ramjas	Botany	Teacher	Yes	<i>[Signature]</i>	835477
20	Dr. Saloni Bahri	Miranda	Botany	Teacher	Yes	<i>[Signature]</i>	489641
21	Shailendra Kumar	Dept. of Env. Studies	EVS	Research Scholar	Yes	<i>[Signature]</i>	067282
22	Akshay Shankar	Dept. of Env. Studies	EVS	Research Scholar	Yes	<i>[Signature]</i>	067283
23	Guncha Sharma	Dept. of Env. Studies	EVS	Research Scholar	Yes	<i>[Signature]</i>	067284
24	Arun Kr. Yadav	Dept. of Env. Studies	EVS	Research Scholar	Yes	<i>[Signature]</i>	067285
25	Dr. Pallavi Saxena	JNU		Young Scientist	Yes	<i>[Signature]</i>	202262
26	Neena Wadhwa	Shivaji College	Biochem	As. (cheque)	Yes	<i>[Signature]</i>	005599
27	Arvind Tiwary	Jamia	Modern	Research			
28	Dr. Jaspreet Kaur	Maitreyi	History	Scholar	Yes	<i>[Signature]</i>	264053
29	Palak Baliyan	400/-	Zoology	Teacher	Yes	<i>[Signature]</i>	067286
30	Dr. Anita Rani	Dayal Singh	Botany	Teacher	Yes	<i>[Signature]</i>	477142
31	Sandeep	DDU	Botany	Teacher	Yes	<i>[Signature]</i>	264051
32	Simran Luthra	Miranda	Zoology	Teacher	Yes	<i>[Signature]</i>	264051
33	Anuradha Mal	Shivaji	Botany	Teacher			Cash
34	Anita Kapur	Shivaji	Botany	Teacher			



**Photograph of Workshop on Environmental Pollution and Health in Urban Ecosystems (EPHUE-2016)**

**Annual Report highlights of Workshop on Environmental Pollution and Health in Urban Ecosystems (EPHUE-2016) (Annual Report 2015-16 Page No. 6)**

Department of Botany organized a workshop on “Environmental Pollution and Health in Urban Ecosystems (EPHUE-2016)”, in collaboration with Department of Zoology, Shivaji College and Department of Environmental Studies, North Campus, University of Delhi, 23rd June 2016.



IV) Faculty Development programme on Research Methodology and data analysis  
(Annual Report 2016-17 page No. 7)

Brochure of Faculty Development Program on “Research Methodology and Data Analysis”

**FACULTY DEVELOPMENT PROGRAMME  
ON  
RESEARCH METHODOLOGY  
&  
DATA ANALYSIS**

A programme for teachers,  
academicians and researchers  
21st- 26th November, 2016



**Organized by**



**Shivaji College**  
(Accredited 'A' Grade by NAAC)  
University of Delhi  
Raja Garden, New Delhi-110027

**GUIDELINES FOR PARTICIPATION**

registration shall be made on "first come, first serve" basis. Please note that no refund of fees shall be made later on.

- Any correspondence regarding participation can be done through email only at shivaji.commerce@gmail.com.
- Participants are required to bring their own laptop for practical sessions.
- The participation fee is Rs.4000 (Rs four thousand only) which includes course kit, lunch, tea, snacks and professional fees.
- The College shall assist outstation participants in arranging accommodation in nearby hotels/ guesthouses on payment basis

**PAYMENT MODE:**

- Cheque/draft in favour of "THE PRINCIPAL, SHIVAJI COLLEGE" payable at Delhi
- Online transfer (NEFT) to  
**PRINCIPAL SHIVAJI COLLEGE,**  
A/c No.: 3222985619,  
Central Bank of India,  
Shivaji College Branch.  
IFSC Code: CBIN0283942.

**CERTIFICATE OF PARTICIPATION**

A certificate of participation shall be given to participants on successful completion of the program.

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**ABOUT THE ORGANIZER**

A well-known name in University of Delhi, Shivaji College is a co-educational institution that imparts education in various subjects at both undergraduate and post-graduate levels. The College, founded in 1961, runs under the trusteeship of Delhi Administration. The mission of Shivaji College is aptly reflected in the college motto "Amritam tu vidya" (Education is eternal or a never ending process). Rigorous pursuit of academic excellence, emphasis on all round development of students, illustrious faculty and well maintained green campus are some of the key features of the College which have contributed towards earning an 'A' grade NAAC accreditation.

We strive hard to provide an environment conducive to overall growth of an individual and enriched learning experience. The college frequently organises various academic programs on contemporary subjects and latest technology for the development of students, staff and faculty.

Strategically located at Raja Garden on ring road, the College has close proximity to prime shopping centres, metro station and bus stops. It is also well connected to Delhi airport and railway station.

<p><b>Patron</b> <b>Dr. Shashi Nijhawan</b> Principal Shivaji College</p>	<p style="text-align: right;"><b>Coordinator</b> <b>Suman Kharbanda</b> Associate Professor Department of Commerce</p>
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With increasing integration of industry and education in modern times, there has been a continuous emphasis on quantitative research and its application. Research scholars and academicians, therefore, need to acquaint themselves with new tools and techniques that help them understand data, scientifically analyse it and develop the art of drawing meaningful conclusions or results. The six day workshop on "Research Methodology and Data Analysis" at Shivaji College aims to address this need and provide knowledge of statistical techniques and sophisticated software to researchers and academicians in Economics, Finance and Management

Following topics shall be covered  
(Detailed program schedule shall be sent to registered participants)

- Questionnaire Designing
- Scale of Measurement
- Data Preparation
- Data Analysis
  - o Basic Statistics
  - o Hypothesis Testing
  - o Parametric and Non-parametric test
  - o ANOVA
- Factor Analysis
- Multiple Discriminant Analysis
- Multiple Regression Analysis
- Logit and Probit
- SEM

## Poster of Faculty Development programme on Research Methodology and data analysis

The poster is a blue rectangular graphic with white text and logos. At the top left is the Shivaji College logo, and at the top right is the University of Delhi logo. The text is centered and reads: 'SHIVAJI COLLEGE NAAC Accredited 'A' Grade (University of Delhi) DEPARTMENT OF COMMERCE Welcomes you to National Level FACULTY DEVELOPMENT PROGRAMME on Research Methodology and Data Analysis (21 to 27 November, 2016) Chief Guest: Prof. Muneesh Kumar (Dean, Faculty of Commerce and Business Studies, University of Delhi) Resource Persons Professor C P Gupta (Department of Financial Studies, University of Delhi) Professor Y P Gupta (Dr Tariq Ashraf, South Campus Library) Coordinator Mrs. Suman Kharbanda (Deptt of Commerce) Patron Dr. Shashi Nijhawan (Principal, Shivaji College) Venue : Library Reading Hall'.

**SHIVAJI COLLEGE**  
NAAC Accredited 'A' Grade  
(University of Delhi)

**DEPARTMENT OF COMMERCE**  
*Welcomes you to*

**National Level  
FACULTY DEVELOPMENT PROGRAMME**  
on  
**Research Methodology and Data Analysis**  
(21 to 27 November, 2016)

**Chief Guest: Prof. Muneesh Kumar**  
(Dean, Faculty of Commerce and Business Studies, University of Delhi)

**Resource Persons**

Professor C P Gupta  
Department of Financial Studies  
University of Delhi

Professor Y P Gupta  
Dr Tariq Ashraf  
South Campus Library

**Coordinator**  
Mrs. Suman Kharbanda  
Deptt of Commerce

**Venue : Library Reading Hall**

**Patron**  
Dr. Shashi Nijhawan  
Principal, Shivaji College

### Report on Faculty Development Program on “Research Methodology and Data Analysis”

The Department of Commerce, Shivaji College organised a week long National Level Faculty Development Program on “Research Methodology and Data Analysis” from November 21 to 27, 2016. This rigorous academic workshop was attended by academicians and research scholars from fields of Commerce, Economics, Management and humanities. There was a diverse mix of participants not just from University of Delhi but from across India including IIM Kashipur, Kashmir University, Sonapat, JNU and IP University.

Chief guests, Professor Muneesh Kumar, (Dean Faculty of Commerce and Business Studies and Head Department of Financial Studies) and Professor Kavita Sharma (Head, Department of Commerce, University of Delhi) graced the inaugural session with their presence. Professor C P Gupta, department of Financial Studies, the main resource person in this FDP was also present on this occasion.

They were extended a very warm welcome by the Principal Dr. Shashi Nijhawan and FDP Coordinator, Suman Kharbanda. The guests gave very thought provoking ideas to the participants and expressed that such workshops are very vital for the growth of academic fraternity. Their motivating words and best wishes set the ball rolling for this week long academic workshop.

While the main focus of the work shop was on data analysis and econometric techniques using softwares like SPSS and E views, the participants were also given exposure on subjects like orienting oneself to research and taking on the path ahead, use of E-resources and creating Bibliography using latest softwares.

A galaxy of experts and professors were resource persons for this FDP. These included Prof. C P Gupta, department of Financial Studies, Professor Y P Gupta, Professor Surender Kumar, Department of Economics, Professor Pankaj Sinha , faculty of Management studies, University of Delhi, Professor Kaushik from National Institute from Financial Management , Faridabad and Dr. Tariq Ashraf , Deputy librarian, south Campus.

The participants derived a great value from this rigorous academic program. They attended the sessions with unbounded enthusiasm every day from 9.30 am to 6 pm. and always had lot of questions to ask, especially from Prof C P Gupta, who answered these very patiently. His sole objective was to satisfy the participants' quest for knowledge!

The FDP ended with a vibrant Valedictory session in which professor Suresh Aggarwal Dean Research (Prof. & Head, Deptt. Of Business Economics, Chairman, Board of Research Studies and Dean, Faculty of Applied Social Science and Humanities) and Professor Muneesh Kumar, addressed the august gathering, blessed the participants and awarded them with certificates.

Sharing their experiences and feedback on the FDP, the participants were highly appreciative of the arrangements of the program and expressed that they not only gathered immense knowledge on the discipline but also learned from the mentors the art of being good teachers in class. The FDP had an additional benefit in the form of networking and bonding amongst participants, which certainly leads to creation of discussion platforms and fertilization of ideas across academia.

### List of Participants:

S.no.	Date of Registration	Name	Designation	Institution/College/University	E-Mail	Mobile No.	Fee Payment	Fee payment Details
1	10/13/2016	Dr. Chanchal Chopra	Associate Professor	Janki Devi Memorial College Department of Humanities & Social Sciences, MNNIT Allahabad	chanchalchopra59@yahoo.co.in	9811669670	Online transaction	SBIN416287667386 NEFT
2	10/17/2016	Iftaqar Ahmad	Research Scholar	Shri Ram College of commerce du	iftaqar.ahmed@gmail.com	9651852008	Online transaction	VLIBH16291080523
3	10/20/2016	Poonam	Assistant professor		Sawariya.poonam@yahoo.com	9716701221, 9911676169	Online transaction	IRA9173151

4	10/21/2016	Yashpal	Assistant Professor	SRCC, DU	yash0772@yahoo.com	7827557401	Online transaction	629518647623
5	10/21/2016	Yogesh garg	Guest lecturer	Delhi University	gargyogesh1909@gmail.com	9891839139	Online transaction	1121428
6	10/22/2016	Sarita gautam	Assistant professor	Shri ram college of commerce	saritakaushal.gautam@gmail.com	9650492133	Online transaction	RRNO. 629518647684
7	10/20/2016	SURENDER SINGH	Assistant Professor	PGDAV College (M), D.U.	sss727@gmail.com	9891794727	Cheque	52603 Central bank
8	10/28/2016	NIKHIL YADAV	Research Scholar	Department of Humanities and Social Sciences Motilal Nehru National Institute of Technology	nikhilsinghyadav87@gmail.com	9621393066	Online transaction	15523897
9	10/29/2016	Namita Mathur	Assistant Professor	Indraprastha College For Women, University of Delhi	namitamathur@hotmail.com	9891358939	Online transaction	P16102959431354
10	10/24/2016	Arif Hussain Haidary	Assistant Professor	ZHDC (M), D.U.	arifh99@gmail.com	8860431106	Cheque	945174
11	10/31/2016	Urvashi Sahitya	Assistant Professor	Shivaji College	Urvashisahitya@gmail.com	9891088599	Cheque	
12	11/2/2016	Deepika Mehta	Research Scholar	School of foreign languages,IGNOU,Delhi.	mdeepica@gmail.com	9717907494	Cheque	702829
13	11/4/2016	MEGHNA SINGH	ASSISTANT PROFESSOR	JANKI DEVI MEMORIAL COLLEGE	meghnasinghdse@gmail.com	9811626184	Online transaction	P16110464370340
14	11/4/2016	ANURADHA GOEL	ASSISTANT PROFESSOR	JANKI DEVI MEMORIAL COLLEGE	anuradhagoel89@gmail.com	9868800909	Online transaction	P1611046436512
15	11/4/2016	Neha Bhatnagar	Research Scholar	Faculty of Management Studies, University of Delhi	nehabhatnagar07@yahoo.com	9999985442	Online transaction	N309160203264120
16	11/5/2016	Charu Goyal	Assistant professor	SRCC, DU	charu.goyal89@gmail.com	9999977092	cheque	950463
17	11/4/2016	Bhumika Bhavnani	Assistant professor	Shivaji College, University of Delhi	bhumika.hingorani@gmail.com	9811047340	Online transaction	630919893925
18	10/14/2016	Sartaj Hussain	Research Scholar	Department of Commerce, Delhi School of Economics	sartaj.hussain@gmail.com	9906664559	Online transaction	872734774
19	10/14/2016	Khalid UI Islam	Research Scholar	Department of Commerce, Delhi School of Economics	khalidulislam3@gmail.com	9711584548	Online transaction	872758214
20	11/7/2016	Neetu Dhayal	Assistant Professor	Shriram college of commerce	dhayal.neetu15@gmail.com	9654448690	Online transaction	UTRSBI416312874239
21	11/7/2016	Manu Jain	Ph.D scholar	The NorthCap university	manu.jain1105@gmail.com	9811956303	Online transaction	1075623691
22	11/7/2016	Mahima Anand	Ph.D scholar	The NorthCap university	mahima.anand94@gmail.com	9716847589	Online transaction	1075631018

23	11/8/2016	Dr. Poonam Sharma	Associate Professor in Geography	Shaheed Bhagat Singh College, University of Delhi	poonamsharma299@gmail.com	9818104394	Cheque	12912
24	11/7/2016	Harmanpreet Kaur	Assistant Professor	Shivaji College, University of Delhi	kaur.harmanpreet01@gmail.com	9650748401	Cheque	020882
25	11/10/2016	Shweta	Assistant Professor	Shivaji College, University of Delhi	shweta.shweta.gautam@gmail.com	9899877092	Cheque	15747
26	11/10/2016	Dr.chhavi sharma	Assistant Professor	Shivaji College, University of Delhi	chhavisharmarg@yahoo.co.in	9871498375	Cheque	33031
27	11/10/2016	Monika	Assistant Professor	Shivaji College, University of Delhi	monikasharma0009@gmail.com	9717171499	Cheque	16764
28	11/10/2016	Rajesh kumar	Assistant Professor	Shivaji College, University of Delhi	rajesh.commerce@yahoo.co.in	9911001613	Online transaction	137901078
29	11/10/2016	Vanitha chawla	Assistant Professor	Shivaji College, University of Delhi	vanitha_2182@yahoo.co.in	9899030045	Cheque	29225
30		Iti dandona	Assistant Professor	Shivaji College, University of Delhi	itisaurabh@yahoo.co.in			
31		Dr Rajinder Singh	Assistant Professor	Shivaji College, University of Delhi	rajindersingh.du@rediffmail.com	9711375578	cheque	028570
32	11/13/2016	Aparna Jindal	Research Assista	Delhi University, DFS	jindal.aparna92@gmail.com	9899714950	NEFT	N318160206272105
33		Manisha Rani	Assistant Professor	Shivaji College, University of Delhi	dimple.manisha15@gmail.com	8586924433	Cheque	000043
34	11/14/2016	Ekta Kharbanda	Assistant Professor	Maharaja Surajmal Ins	ekta.kharbanda1989@gmail.com		Online transaction	UTR: 631918230742
35	11/14/2016	Preeti Bedi	Assistant Professor	Maharaja Surajmal Ins	preetibedi90@gmail.com	8860553949	Online transaction	UTR: 631922246967
36	11/16/2016	Manab Chakarborty	Senior Fellow	IIM , Kashipur. Uttrakhand	manabc@gmail.com	91-9560107700	Online transaction	IMPS-632119173634
37	11/17/2016	Madhulata	Research Schola	BPSMV, KHANPUR	madhulata.bmiet@gmail.com	9416538148	transaction	16322285008
38	11/17/2016	Jyoti	Research Schola	BPSMV, KHANPUR	jyotigulia1900@gmail.com	8816892566	Online transaction	632216484090
39	11/21/2016	Abhimanyu	Assistant Profes	Shivaji College			Cheque	032531
40	11/21/2016	Rachna mahalwala	associate profes	Bhagini Nivedita Colle	rachna21097@yahoo.co.in	9818461760	Cheque	
41	11/21/2016	Madhu Bala	associate profes	Bhagini Nivedita Colle	madhubala1100@yahoo.com	9810584769	Cheque	057428
42	11/21/2016	Mangal cherring	Assistant profes	College of Vocational	mangal.cherring@gmail.com	9459313871	Cheque	977372

Payment made by the following but needs to be refunded

1	10/26/2016	Dr. Anuja Soni	Assistant Profes	Deen Dyal Upadhyay	30.anuja@gmail.com		NEFT	AXMB163004107664
2	10/27/2016	Sujata Khatri	Assistant Profes	Deen Dyal Upadhyay	khatri.sujata@gmail.com		NEFT	AXMB163014393888
3	11/5/2016	Shweta Wadhera	Asst. Professor	Deen Dayal Upadhyay	shweta.du@gmail.com	-9971188138	Online trans	Transaction Reference Num
4	11/7/2016	Rekha Kumari	Assistant Professor	I.P. College for Women, D.U.	<a href="mailto:rekha_kashyap16@rediffmail.com">rekha_kashyap16@rediffmail.com</a>	9873128699	Cheque	602952
9	10/20/2016	Dr. Ashima	Assistant Professor	Shaheed Bhagat Singh College, D.U.	phjashi1@gmail.com	9953626949	Online transaction	IMP500013797500 SBI

Account details for refund of payment

1	Anuja soni	Ac/no: 52012010004110 A/c holder name: anuja soni IFsC code: to. ORBC0105201 Micr code: 110022167: 004110
2	Sujata Khatri	Account no. 52012010004190 MICR. 110022167 IFC. ORBC0105201
3	Rekha Kumari	Account No. 8458101004871 IFSC Code:- CNRB0008458 Canara Bank, I.P.College for women, Sham Nath Marg, Delhi-54.



Photograph of Faculty Development Program on  
“Research Methodology and Data Analysis”

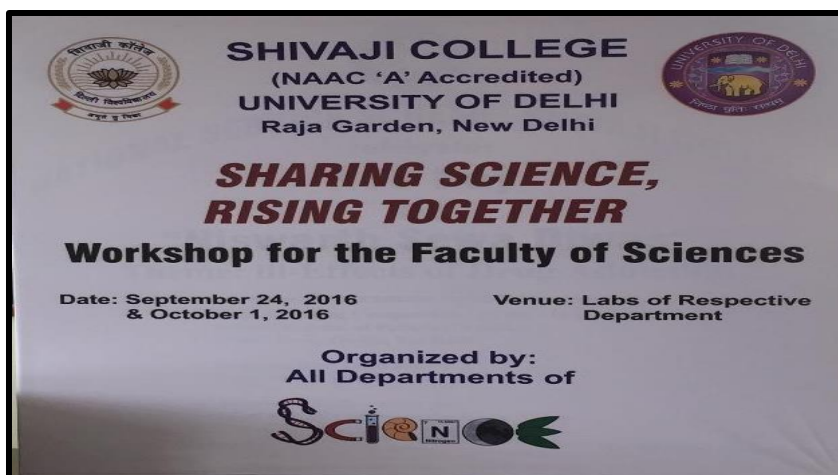
**Annual Report highlights of Faculty Development Program on “Research Methodology and Data Analysis” (Annual Report 2016-17 page No. 7)**

Department of Commerce organized a week long National Level Faculty Development Programme on “Research Methodology and Data Analysis”, November 21st - 27th, 2016.

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**V) Interdisciplinary workshop on Sharing Science Rising together (Annual Report 2016-17 page No. 25)**

**Poster of Interdisciplinary workshop on Sharing Science Rising together**



**Report Sharing Science Rising together on 24<sup>th</sup> September and 1<sup>st</sup> October, 2016**

Sharing Science Rising together an interdisciplinary workshop for science faculty organized by Shivaji College on 24<sup>th</sup> September and 1<sup>st</sup> October, 2016. All science department faculties enthusiastically participated in this exchange of knowledge.



**Photographs of Interdisciplinary workshop on Sharing Science Rising**

**Annual Report highlights of Interdisciplinary workshop on Sharing Science Rising  
(Annual Report 2016-17 page No. 25)**

Sharing Science, Rising Together - An Interdisciplinary Workshop for the Faculty of Science Departments of Shivaji College” organised on 24th September and 1st October, 2016

**VI) Lab Skill Training Workshop (Annual Report 2017-18 Page No.9)**

**Report:** To enhance the skills of laboratory staff members, a Lab Skill Training Workshop for Laboratory Attendants/Assistants of Chemical and Life Sciences” under Internal Quality Assurance Cell (IQAC) was organised at Shivaji College, University of Delhi from July 10-14, 2017 in collaboration with other science departments. As the holistic development of college depends on not only the contribution by, and achievements of the teaching staff; it also depends significantly on the contribution and expertise of the non-teaching staff, the training was conducted to update the knowledge and hone the skills of the laboratory staff.



## Lab Skill Training Workshop

**Shivaji College**  
NAAC Accredited 'A' Grade  
(University Of Delhi)

### Department of Botany

Lab Skill Training Workshop for Laboratory Assistants/ Attendants In  
the Chemical and Life Sciences

10<sup>th</sup> July- 14<sup>th</sup> July, 2017

**Organizing secretary**  
Dr. Shashi Mishra  
Principal

#### Conveners

Dr. V. Prabhavathi (Dept. of Botany)  
Dr. Sumita Singh (Dept. Biochemistry)  
Ms. Nimika Kant (Dept. Zoology)  
Dr. Manjula Singh (Dept. Chemistry)  
Dr. Rakesh Yadav (Dept. Computer Science)

#### Resource Person

Dr. Anuradha Mal  
Dr. Anita Kapur  
Dr. Vijay Kumar  
Dr. Prakrma Rani Sardar  
Dr. Prabhavathi V  
Dr. Smrta Tripathi  
Dr. Kiran Kamel  
Dr. Mihla Yadav  
Dr. Seema Talwar  
Dr. Anurag Maurya

### List of participants of Lab Skill Workshop 2017

S.No.	Name	College	Department	Designation
1	Mr. Vinod Prajapati	Shivaji College	Zoology	MTS Laboratory
2	Mr. Ramesh Solanki	Deshbandhu College	Department of Chemistry	Lab Assistant
3	Mr. Subhash Chander	Deshbandhu College	Department of Biochemistry	Lab Assistant
4	Mr. Mahender Kumar	Deshbandhu College	Department of Zoology	MTS Laboratory

5	Ms. Aarti Galati	Desaihandim College	Department of Zoology	MTS Laboratory
6	Mr. Anil Kumar	Daulat Ram College	Department of Zoology	Lab Attendant
7	Mr. Chirangi Lal	Daulat Ram College	Department of Zoology	Lab Assistant
8	Mr. Anil Kumar	Shivaji College	Department of Botany	Lab. Attendant
9	Ms. N. Kamala Kanta Singha	Institute of Home Economics	Department of Biochemistry	Lab Attendant
10	Mr. Dharmesh	Lady Irwin College	Zoology/Life Sciences	Lab Attendant
11	Ms. Usha Devi Yadav	Lady Irwin College	Zoology/Life Sciences	Lab Attendant
12	Mr. Kapileshwar Sah	Lady Irwin College		Lab Attendant
13	Mr. Jasbir Singh	Maitreyi College	Botany	MTS Laboratory
14	Mr. Anil Chhillar	Maitreyi College	Zoology	LTS Laboratory
15	Mr. Aman Kumar	Maitreyi College	Chemistry	MTS Laboratory
16	Mr. Jitendra Kumar	Institute of Home Economics	Department of Biochemistry	Lab. Assistant
17	Mr. Sheo Ram	Sri Anurobindo College	Department of Zoology	Lab Assistant
18	Mr. Narash Giri	Shaheed Rajguru College of Applied Sciences for Women	Department of Biomedical Sciences	MTS Laboratory
19	Mr. Rohit Kumar	Shaheed Rajguru College of Applied Sciences for Women	Department of Chemistry	MTS Laboratory
20	Mr. Ram Karan	Kirori Mal College	Department of Chemistry	Lab Attendant
22	Mr. Mahender Singh Maunral	Kirori Mal College	Department of Chemistry	Lab Assistant
23	Mr. Ramashankar Sah	Shivaji College	Department of Zoology	Lab Assistant
24	Mr. D. K. Malik	Sri Anurobindo College	Department of Chemistry	Lab Assistant
25	Mr. Amit Kumar Sharma	Shivaji College	Department of Zoology	MTS Laboratory

26.	Mr. Pavindra Kumar	Vallabhbhai Patel Chest Institute	Pathology	Lab. Attendant
27.	Mr. Labh Singh	Bhagini Nivedita College	Department of Chemistry	Lab. Attendant
28.	Mr. Avinash Kalyan	Shivaji College	Department of Botany	
29.	Mr. Anil Kumar	Shivaji College	Department of Botany	
30.	Mr. Raj Kumar	Shivaji College	Department of Zoology	Lab. Attendant



**Photographs of Lab Skill Training Workshop**

### **Annual Report highlights of Lab Skill Training Workshop**

Departments of Sciences Organized “3 rd Lab Skill Training Workshop for Laboratory Attendants/Assistants of Chemical and Life Sciences” under Internal Quality Assurance Cell (IQAC) from July 10-14, 2017 in Shivaji College, University of Delhi.

VII) Two-day Faculty Development Program on the topic of “CBCS Pathyakram: adhyayan ke sandarbh evam paddhtiyan” (Annual Report 2017-18 page No. 12)

Poster of Two-day Faculty Development Program on the topic of “CBCS Pathyakram: adhyayan ke sandarbh evam paddhtiyan



शिवाजी कॉलेज  
NAAC द्वारा 'ए' श्रेणी मान्यता प्राप्त  
(हिन्दी विश्वविद्यालय)  
हिन्दी विभाग  
द्वारा आयोजित

**संकाय सवर्धन कार्यक्रम**  
(Faculty Development Program)

**सी.बी.सी.एस. पाठ्यक्रम: अध्ययन के संदर्भ एवं पद्धतियाँ**  
दिनांक: 19-20 जनवरी 2018  
स्थान: सभागार, शिवाजी कॉलेज

<p>दिनांक: 19 जनवरी 2018, शुक्रवार समय: 9:00 से 10:00 बजे- पंजीकरण उद्घाटन एवं प्रथम सत्र समय: 10:00 से 1:00 बजे अपराह्न हिन्दी भाषा: विकास के नए संदर्भ - प्रो० मोहन, प्रो० भरत सिंह हिन्दी नाटक और रंगमंच: परंपरा एवं नवीन प्रयोग - प्रो० रमेश गौतम भोजनावकाश: दोपहर 1:00-2:00 बजे द्वितीय सत्र अपराह्न: 2:00 से 4:30 बजे तक भक्तिकालीन मूल्य एवं वर्तमान संदर्भ - प्रो० रमेश चन्द्र मिश्र ऐतिहासिक साहित्य की प्रासंगिकता - प्रो० पूर्णचंद्र टंडन आधुनिक हिन्दी कविता: परंपरा और आधुनिकता के नए संदर्भ - प्रो० सत्यकेतु सांकृत</p> <p>डॉ० वीरेंद्र भारद्वाज प्रभारी, हिन्दी विभाग</p>	<p>दिनांक: 20 जनवरी 2018, शनिवार तृतीय सत्र समय: 10:30 से 1:00 बजे अपराह्न कथा साहित्य: कथ्य और शिल्प के नए प्रयोग - नासिरा शर्मा अस्मितामूलक साहित्य: विविध संदर्भ - डॉ० अजय नावरीया (दलित/ आदिवासी/ स्त्री विमर्श के संदर्भ में) भोजनावकाश: दोपहर 1:00-2:00 बजे चतुर्थ सत्र अपराह्न: 2:00 से 4:00 बजे तक हिन्दी जेनेरिक इमेंकिटव पाठ्यक्रम: नए संदर्भ - प्रो० सुधीश पचौरी (किसी एक पर विस्तृत चर्चा) - (लोकप्रिय साहित्य/ हिन्दी सिनेमा/ रचनात्मक लेखन/ हिन्दी का वैश्विक परिदृश्य एवं भाषा शिक्षण आदि) कौशल संवर्धन कार्यक्रम - प्रो० कुमुद शर्मा (किसी एक पर विस्तृत चर्चा) - (विज्ञापन/कम्प्यूटर/ अनलाइन/ सोशल मीडिया/ कर्पोरलवी हिन्दी/ भारतीय और पारंपारिक काव्यशास्त्र) समय 4:00-4:30 बजे समापन एवं प्रमाणपत्र वितरण समारोह</p> <p>डॉ० शशि निझावन प्राचार्या</p>
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**Report:**

Two-day Faculty Development Program organized on the topic of “CBCS Pathyakram: adhyayan ke sandarbh evam paddhtiyan” on January 19-20, 2018. Eminent speakers like Prof. Ramesh Gautam, Prof. Sudhish Pachauri, Smt. Nasira Sharma, Prof. Bharat Singh, Prof. P.C Tondon, Prof. Ramesh Chandra Mishra, Prof. Sudha Singh, Prof. Satyaketu Sankrit, and Dr. Ajay Navriya shared their views with faculty members of different colleges.

**Certificate of Two-day Faculty Development Program on the topic of “CBCS Pathyakram: adhyayan ke sandarbh evam paddhtiyan**



**Annual Report highlights of Two-day Faculty Development Program on the topic of “CBCS Pathyakram: adhyayan ke sandarbh evam paddhtiyan (Annual Report 2017-18 page No. 12)**

Department of hindi organized two-day faculty development: Program on the topic of “CBCS Pathyakram: adhyayan ke sandarbh evam paddhtiyan” on January 19-20, 2018. Eminent speakers like Prof. Ramesh Gautam, Prof. Sudhish Pachauri, Smt. Nasira Sharma, Prof. Bharat Singh, Prof. P.C Tondon, Prof. Ramesh Chandra Mishra, Prof. Sudha Singh, Prof. Satyaketu Sankrit, and Dr. Ajay Navriya shared their views with faculty members of different colleges.

## VIII) Teachers Enrichment Workshop on Algebra and its Applications

(Annual Report 2019-20 page No. 137)



The poster is green with a dark green border. It features logos for Shivaji College (University of Delhi), the University of Delhi, and TIFR. The text is centered and reads: 'SHIVAJI COLLEGE (UNIVERSITY OF DELHI) Organises TEACHER'S ENRICHMENT WORKSHOP on Algebra and its Applications under the aegis of National Centre for Mathematics A joint Centre of IIT Bombay and TIFR, Mumbai Advance Training in Mathematics Schools Date: May 6 - May 11, 2019 Venue: Reading Hall, Library'. Below this, it lists four speakers: Prof. Geetha Venkataraman (Ambedkar University Delhi), Prof. Shanta Laishram (Indian Statistical Institute, Delhi), Prof. Amit Kulshreshtha (IISER, Mohali), and Prof. Anuradha Sharma (IIT, Delhi). It also lists the Organising Committee (Prof. Geetha Venkataraman, Dr. Aparna Jain, Dr. Jeetendra Aggarwal) and the Patron (Dr. Shashi Nijhawan, Principal). At the bottom, it provides a URL for details: <https://www.atmschools.org/school/2019/TEW/aia>.

### List of Participants:

S.No.	Name of the Participant	Position	Affiliation
1	Dr. Gunjan Khurana	Assistant Professor	Indraprastha College for Women, University of Delhi
2	Ms. Apeksha	Assistant Professor	Miranda House, University of Delhi
3	Ms. Priyanka Tomer	Assistant Professor	SGSITS, Indore
4	Dr Dimple Singh	Assistant Professor	Amity University, Manesar, Gurugram
5	Dr. Jagbir Singh	Assistant Professor	Department of Mathematics, Maharshi Dayanand University, Rohtak
6	Mr. Gaurav Tyagi	Assistant Professor	Mahamana Malviya Degree College, Baghpat
7	Dr. Manish Garg	Assistant Professor	The LNMIIT, Jaipur

8	Dr. Deepti Kaur	Assistant Professor	Maitreyi College, University of Delhi
9	Ms. Teena Kohli	Assistant Professor	Janki Devi Memorial College, University of Delhi
10	Mr Ashesh Kumar Jharwal	Assistant Professor	Shivaji College, University of Delhi
11	Ms. Seema Gupta	Assistant Professor	Bhagini Nivedita College, University of Delhi
12	Dr. Kavita Devi	Assistant Professor	Zakir Husain Delhi College, University of Delhi
13	Mr. Vinod Kumar	Assistant Professor	Govt. College for Women, Karnal, Haryana
14	Dr. Sushil Yadav	Assistant Professor	Maharaja Agrasen College, University of Delhi
15	Ms. Sonia	Assistant Professor	Janki Devi Memorial College, University of Delhi
16	Dr. Bhavneet Kaur	Assistant Professor	Lady Shri Ram College for Women, University of Delhi
17	Dr. Shilpi Verma	Assistant Professor	Shivaji College, University of Delhi
18	Dr. Megha Agarwal	Assistant Professor	Ramanujan College, University of Delhi
19	Dr. Vandana	Assistant Professor	Shivaji College, University of Delhi
20	Dr. Sarika Goyal	Assistant Professor	Bennett University Greater Noida
21	Dr. Nisha Gupta	Assistant Professor	Lakshmbai College, University of Delhi
22	Dr Neetu Rani	Assistant Professor	Shivaji College, University of Delhi
23	Dr. Jaspreet Kaur	Assistant Professor	St. Stephen's College, University of Delhi
24	Mr. Jitendra Singh	Assistant Professor	Shivaji College, University of Delhi
25	Ms Bhawna Barsal Gupta	Assistant Professor	Miranda House, University of Delhi
26	Mr Umesh Chand	Assistant Professor	MS college, Saharanpur
27	Mr. Nitesh Kumar	Assistant Professor	Shivaji College, University of Delhi
28	Dr. Ruchi Arora	Assistant Professor	SGTB Khalsa College, University of Delhi
29	Dr. Aparna Vyas	Associate Professor	Manav Rachna University, Faridabad

30	Mr. Mukesh Kumar	Assistant Professor	Shivaji College, University of Delhi
31	Dr. Dinesh Kumar	Assistant Professor	Deen Dayal Upadhyaya College, University of Delhi
32	Ms. Krishna Babbar	Assistant Professor	Lady Shri Ram College for Women, University of Delhi
33	Dr. Arti Sharma	Assistant Professor	Janki Devi Memorial College, University of Delhi
34	Ms. Monika Yadav	Research Scholar	Indraprastha Institute of Information Technology Delhi
35	Mr. Sandeep Sharma	Research Scholar	Indraprastha Institute of Information Technology Delhi
36	Ms. Akansha Arora	Research Scholar	Indraprastha Institute of Information Technology, Delhi
37	Mr Harshit Mathur	Research Scholar	Department of Mathematics, University of Delhi
38	Dr. Santosh Kaushik	Assistant Professor	Bhagini Nivedita College, University of Delhi
39	Ms. Soni	Assistant Professor	Shivaji College, University of Delhi
40	Mr. Suresh Kumar Yadav	Assistant Professor	Ramjas College, University of Delhi
41	Dr. Chirag Garg	Assistant Professor	Deshbandu College, University of Delhi
42	Mr. Jayanta Biswas	Assistant Professor	Dyal Singh College, University of Delhi



**Photographs of Teachers Enrichment Workshop on Algebra and its Applications**



**Annual Report highlights of Teachers Enrichment Workshop on Algebra and its Applications (Annual Report 2019-20 page No. 137)**

Teachers Enrichment Workshop on “Algebra & its applications” held at “Shivaji College, University of Delhi from May 06-11, 2019, organised by National Center for Mathematics.

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**IX) Intra-college Laboratory Skill Training Program  
(Annual Report 2019-20, Page No. 15)**

**Poster of Intra-college Laboratory Skill Training Program**

	<b>SHIVAJI COLLEGE</b> NAAC Accredited “A” Grade UNIVERSITY OF DELHI	
<b>Under DBT Sponsored Star College Scheme Organizes</b>		
<b>LABORATORY SKILL TRAINING PROGRAMME</b>		
<b>for Assistants/Attendants in the Chemical and Life Science Laboratories</b>		
<b>May 20 – 24, 2019</b>		
<b>Dr. Darshan Malik</b> Coordinator		<b>Dr. Shashi Nijhawan</b> Principal
<b>Dept. of Biochemistry</b>	<b>CONVENERS</b>	<b>CO-CONVENERS</b>
<b>Dept. of Botany</b>	<b>Dr. Renu Baweja</b>	<b>Dr. Jayita Thakur</b>
<b>Dept. of Chemistry</b>	<b>Dr. Anuradha Mal</b>	<b>Dr. Pratima R. Sardar</b>
<b>Dept. of Zoology</b>	<b>Dr. P. K. Sahu</b>	<b>Dr. Nand Gopal Giri</b>
	<b>Dr. Deepika Yadav</b>	<b>Ms. Nimita Kant</b>

**Report:** Under the DBT sponsored Star College Scheme, Department of Biochemistry along with Department of Botany, Chemistry and Zoology successfully organized Laboratory Skill Training Programme from May 20-24, 2019.

Department of Biochemistry conducted the training programme under the supervision of Dr. Rashmi Wardhan, Dr. Darshan Malik, Dr. Jayita Thakur, Dr. Renu Baweja, Dr. Sunita Singh and Ms. Usha Yadav on the following major topics:

- Sterilization Techniques: Autoclave, Operating the laminar hood. Hands on practice for operating oven, incubator & microwave for laboratory work.

This practice familiarized them with the handling, working and maintenance of basic Biochemistry laboratory instruments.

- Dialysis and Ion exchange chromatography.

- Preparation of gels for electrophoresis.

Electrophoresis and chromatography are the two major routinely practiced techniques.

This exercise helped them in better understanding of the two and appreciate their importance.

This five day training program was devised with the objective to impart specialized laboratory skills through hands on training to the assistants and attendants of biological and chemical laboratories. Through this program the laboratory assistants/attendants would be better equipped to carry out various lab based duties efficiently.

The training program ensured better understanding of various sterilization techniques, handling of common laboratory equipments, dialysis, preparation of electrophoretic gels. Handling media and pouring plates for microbiological work, making chemicals for various experiments and maintaining museum.

Preparation of stains, microscopy applications and maintenance, to measure and deliver accurate volume of liquid using pipettes and micropipettes, slide preparation and centrifugation handling. Handling chemicals, preparation of solutions (with defined normality and molarity) and to maintain apparatus and instruments properly.

## List of Participants:

**Laboratory skill training program**  
**May 22, 2019**  
**Day 3**  
**Attendance Sheet**

S. No.	Name	Department	Signature	
			Morning	Evening
1	Mr. Soraj Singh	Biochemistry		IV
2	Mr. Ashok Kumar	Biochemistry	Soraj Singh Ashok	IV
3	Mr. Pawan Kumar	Biochemistry	Pawan Kumar	IV
4	Mr. Anil Kumar	Botany	Anil	IV
5	Mr. Avinash Kalyan	Botany		
6	Mr. Vikesh Mahto	Botany	Vikesh	IV
7	Mr. Bache Singh	Chemistry	Bache Singh	IV
8	Mr. Vijay	Chemistry	Vijay	II
9	Mr. Rohit Passi	Chemistry	Rohit Passi	II
10	Mr. Parveen Kumar	Chemistry	P.K.M	II
11	Mr. Suresh Shah	Chemistry		
12	Mr. Sandeep	Chemistry		
13	Mr. Davinder Rai	Chemistry	Davinder Rai	II
14	Ms. Jyoti	Chemistry	Jyoti	II
15	Mr. Sachin Kumar	Physics	Sachin Kumar	I
16	Mr. Praveen Chachau	Physics	Praveen Chachau	<del>II</del> I
17	Mr. Praveen Singh	Physics	Praveen Singh	I
18	Mr. Shiva Yadav	Physics	Shivayadav	I
19	Mr. Santosh Kumar	Computer science	Santosh	III
20	Mr. Jaideep Singh	Geography	Jaideep Singh	III
21	Ms. Vinod Prajapati	Zoology	Vinod	III
22	Ms. Anil K. Sharma	Zoology	Anil	III
23	TARUN	Chemistry	Tarun	III
24	Roop Chaudhary	Computer Science	Roop	III



**Photographs of Lab Staff Skill Workshop**

**Annual Report highlights of Lab Staff Skill Workshop (Annual Report 2019-20, Page No. 15)**

Department of Biochemistry organised an Intra-college Laboratory Skill Training Programme for Assistants/Attendants in the Chemical and Life Science laboratories under the DBT Sponsored Star College Scheme from May 20-24, 2019, along with the Department of Botany, Chemistry, and Zoology, Shivaji College.

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**X) One Week Faculty Development Program on "Research Methodology and Data Analysis using SPSS/R" (FDP 17) (November 14-20, 2019), organized by Shivaji College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre (MHRDC), Hansraj College, University of Delhi, under the scheme of MHRD Pandit Madan Mohan Malviya National Mission on teachers and teaching (PMMMNTT). (Annual Report 2019-20 page No. 94)**

# Brochure of FDP on “Research Methodology and Data Analysis using SPSS/R”





## Shivaji College

UNIVERSITY OF DELHI

*In Collaboration with*

### Mahatma Hansraj Faculty Development Center (MHRFDC)

*presents*

### One Week Interdisciplinary Faculty Development Programme

*on*

### Research Methodology and Data Analysis Using SPSS/R

*Under the scheme of:*

Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT)

( November 14-20, 2019 )

Library Reading Room, Shivaji College

*Organized by:*

Dept. of Commerce (Shivaji College)

&

MHRFDC (Hansraj College)



**2**

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*“Research is to see what everybody else has seen, and to think what nobody else has thought.”*

*—Albert -Szent-Gyorgyi*

**REGISTRATION**

There is **NO REGISTRATION FEE**.

- Pre-registration to the programme is through online mode only.
- Interested participants are required to fill the online pre-registration form available at the following link **latest by 31st October 2019**.
- Registration Link: <https://bit.ly/3RAG1eUS>
- MHRFDC Webpage: <https://www.mhrfdc.in>
- Shivaji College Webpage: <https://www.shivajicollege.ac.in/>
- Selected participants will be informed by 2nd November, 2019.
- Accommodation/TA shall be provided/reimbursed to outstation participants as per university rules.

**WHO SHOULD ATTEND?**

The programme must be attended by Faculty members, Research scholars and academicians from Interdisciplinary field.

**CERTIFICATE OF PARTICIPATION**

A ‘Certificate of Participation’ will be awarded to every participant on the successful completion of the Faculty Development Programme.

**MHRFDC TEAM**

Convener: Prof. Rama, Principal, Hansraj College

Dr. Jyoti Bhole, Coordinator

Dr. Lokesh Chandra Mishra, Deputy Coordinator

Mr. Ashutosh Yadav, Deputy Coordinator

**FDP ORGANIZING COMMITTEE**

Patron: Dr. Shashi Nijhawan, Principal, Shivaji College

Dr. Ramesh Malik, Coordinator FDP

Dr. Rajinder Singh, Deputy Coordinator

Mrs. Vanitha Chadha, Member

Ms. Shweta, Member

**PEDAGOGY**

A mix of pedagogical tools will be used such as interactive lectures, discussions, experiential exercises, live projects, hands on training, presentations, study content and evaluation tests.

**3**

**ORGANIZING COMMITTEE**

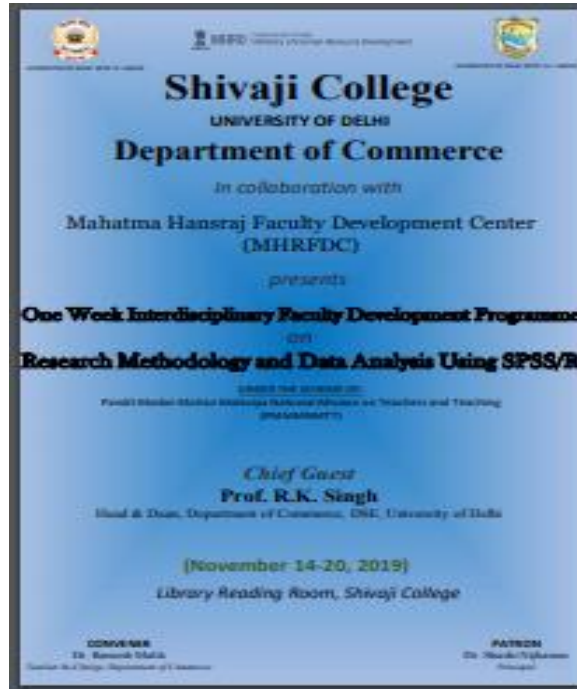
*For any query, contact us at:*

[fdn.hrc@gmail.com](mailto:fdn.hrc@gmail.com)

[commerce.dept@shivaji.du.ac.in](mailto:commerce.dept@shivaji.du.ac.in)

**4**

## Poster of FDP on “Research Methodology and Data Analysis using SPSS/R”



**Report:** The session on the first day started with an introduction of the participants, their designation and expectations from the workshop. The following sessions covered topics like Variable and Measurement, theory testing and building research, what is variable, types of variable like independent, dependent, categorical, continuous, moderator, mediator, active, attribute, qualitative, quantitative, continuous and discrete etc., with proper description on the interaction of one variable with other and relation between them.

The second day of the faculty development program on Research Methodology and Data Analysis using SPSS/R started with a lecture on the importance of review of literature. The lecture stressed on scholarly communication, published record of research and indexed research databases. Other important sessions were on the basics of statistics to understand the level of knowledge of participants as there were participants from different streams. The programme also informed about research types, questionnaire preparation and sampling techniques using live examples from our daily life.

The week-long programme concluded with a session on the process of writing and publication of research paper, and information about various journals in the field of finance, marketing and multidisciplinary which are SCOPUS indexed or in UGC Care list.

**MAHATMA HANSRAJ FACULTY DEVELOPMENT CENTRE  
UNDER PANDIT MADAN MOHAN MALAVIYA MISSION ON TEACHERS AND  
TEACHING  
HANSRAJ COLLEGE, UNIVERSITY OF DELHI-110007  
In  
Collaboration with Shivaji College, University of Delhi  
**FDP-16**  
**"Research Methodology and Data Analysis Using SPSS / R"**  
**14<sup>th</sup> - 20<sup>th</sup> November, 2019****

**ATTENDANCE SHEET**

**SESSION TOPIC:** \_\_\_\_\_ **DATE:** \_\_\_\_/\_\_\_\_/2019

**RESOURCE PERSON:** \_\_\_\_\_

**SESSION TIME:** \_\_\_\_\_

S.No.	Prof./Dr./ Mr./Ms.	Name of Participant	College /Institution	SIGNATURE
1	Ms.	Aditi Singh	Gautam buddha university	
2	Mr.	Ajay Pal Singh	Central University of Haryana	
3	Dr.	Ajeet Jaiswal	DEPARTMENT OF ANTHROPOLOGY, PONDICHERRY UNIVERSITY, PUDUCHERRY, INDIA	
4	Mr.	Amgad S. Khaled	NA	
5	Mr.	Amlesh Kumar	RIE (NCERT), BHUBANESWAR	
6	Dr.	Baljinder Singh	University of Delhi	
7	Ms.	Chhavi	Sh.L.N.Hindu College	
8	Mr.	Dewashish Kumar	Vinoba Bhave University	
9	Ms.	Diksha Gupta	S.B.S.Govt. College, Kotkapura	
10	Dr.	Divya Sharma		
11	Dr.	Dr Vinay Devlal	Govt. Degree College, Kotdwar Bhabar	
12	Dr.	Hema Gupta	Aditi mahavidalaya	
13	Ms.	Joycy Vungneihchoi	Anthropology	
14	Dr.	Junuguru Srinivas	GITAM UNIVERSITY	
15	Ms.	Jyoti	Shivaji college	
16	Ms.	Khushboo Gautam	Indian Institute of foreign trade	
17	Dr.	Kiran Bamel	Shivaji College	
18	Dr.	Kusum Lata	Govt PG College, Deoband, Saharanpur	
19	Mr.	Lalboi Chin Mangle	IGIPESS	

20	Ms.	Manisha Rani	Shivaji college	
21	Ms.	Meenakshi Kumari	DrRAM MANOHAR LOHIA NATIONAL LAW UNIVERSITY, LUCKNOW	
22	Mr.	Mohammad Faisal	Jamia Millia Islamia	
23	Mr.	Mohammed Samroodh T V	ALIGARH MUSLIM UNIVERSITY	
24	Mr.	Mohd Jawaid Naseem	Aligarh Muslim University	
25	Ms.	Monika	Shivaji College, University of Delhi	
26	Dr.	Naresh Sudhaveri	Centre for Economic and Social Studies	
27	Dr.	Neetu Rani	Shivaji College	
28	Dr.	Prabha Rani	Shyama Prasad Mukherji College ( For Women)	
29	Ms.	Pratiksha Jha	Gautam Buddha University	
30	Mr.	Praween Singh Kushwaha	Sahdev Chandravanshi B. ED. College, Bishrampur palamu jharkhand	
31	Mr.	Rajesh Chandra	CENTRAL UNIVERSITY OF GUJARAT	
32	Mr.	Ramesh Kumar	Hansraj College	
33	Mr.	Ravindra Kumar Thakur	Indira Gandhi National Tribal University	
34	Mr.	Ritesh Kumar	MLNCE	
35	Ms.	Saralakshmi R	Kamala Nehru College	
36	Ms.	Seema Ohri	Govt. Arya Degree College Nurpur	
37	Ms.	Shivani Yadav	Government college for Girls, Ballabgarh	
38	Ms.	Sneha Suman	Vinoba Bhave University	
39	Ms.	Suman Kharbanda	Shivaji College	



40	Ms.	Sundus Chishtii	Frank and Debbie Islam Management Complex	
41	Ms.	Surabhi	Gautam Buddha University	
42	Dr.	Suresh	St.Joseph University	
43	Ms.	Tanya Shaw	Central university of Haryana	
44	Dr.	Urmila Bharti	Zakir Husain Delhi College Evening	
45	Mr.	Utsav Krishan Murari	Central University of South Bihar	
46	Dr.	Vijay Vrat Arya	Shaheed Bhagat Singh College	




**Photographs of FDP on “Research Methodology and Data Analysis using SPSS/R”**

**Annual Report highlights of FDP on “Research Methodology and Data Analysis using SPSS/R” (Annual Report 2019-20 page No. 94)**


Attended one-week Faculty Development Programme on “Research Methodology and Data Analysis using SPSS/R” organised by Shivaji College, University of Delhi, in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi, from November 14- 20, 2019

XI) Shivaji College, University of Delhi in collaboration with Mahatma Hansraj faculty development centre under Pandit madan mohan malaviya mission on teachers and teaching hansraj college, university of delhi, Faculty Development Program - Biomathematics August 1-7, 2019, (Annual Report 2019-20 page No. 21)

### Poster of Faculty Development Program - Biomathematics



The poster features a light yellow background with a faint grid pattern. At the top left is the Shivaji College logo, at the top center is the Government of India emblem, and at the top right is the Mahatma Hansraj Faculty Development Center logo. The text is centered and reads: 'Ministry of Human Resource Development, Government of India', 'SHIVAJI COLLEGE UNIVERSITY OF DELHI (Accredited by NAAC with 'A' Grade) DELHI 110027', 'One Week Faculty Development Programme On Biomathematics (August 1-7, 2019)', 'In collaboration with Mahatma Hansraj Faculty Development Center (MHRFDC) Hansraj College, University of Delhi', 'Under the scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, (PMMNMTT) Ministry of Human Resource Development, Govt. of India', 'Organized by Department of Botany and Department of Mathematics Shivaji College (University of Delhi)'. Below this, two columns list the 'MHRFDC TEAM' and 'SHIVAJI COLLEGE TEAM (Under IQAC)' with their respective members. At the bottom is a photograph of the Shivaji College building, a large red-brick structure with a central entrance and a statue in front.

Ministry of Human Resource  
Development  
Government of India

**SHIVAJI COLLEGE**  
**UNIVERSITY OF DELHI**  
(Accredited by NAAC with 'A' Grade)  
DELHI 110027

**One Week**  
**Faculty Development Programme**  
On  
***Biomathematics***  
(August 1-7, 2019)

In collaboration with  
**Mahatma Hansraj Faculty Development Center (MHRFDC)**  
**Hansraj College, University of Delhi**

Under the scheme  
**Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, (PMMNMTT)**  
**Ministry of Human Resource Development, Govt. of India**

Organized by  
Department of Botany and Department of Mathematics  
Shivaji College (University of Delhi)

**MHRFDC TEAM**

Dr. Rama, Principal, Hansraj College, Chairperson  
Dr. Jyoti Bhole, Coordinator  
Dr. Lokesh Chandra Mishra, Dy. Coordinator  
Mr. Ashutosh Yadav, Dy. Coordinator

**SHIVAJI COLLEGE TEAM (Under IQAC)**

Dr. Shashi Nijhawan, Principal, Patron  
Dr. Kiran Bansal, Coordinator  
Dr. Neezu Rani, Coordinator



**Report:**

Shivaji College (University of Delhi) at Raja Garden organized a One week Faculty Development Program on “Biomathematics” from 1<sup>st</sup>–7<sup>th</sup> August, 2019 in collaboration with Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College, University of Delhi. It was coordinated by Dr. Kiran Bamel from Department of Botany and Dr. Neetu Rani from Department of Mathematics. It was attended by 40 faculty members from various colleges of the University of Delhi and NCR. The participants belonged to diverse disciplines like Mathematics, Zoology, Botany, Physics, Computer Science, Microbiology and Biochemistry. The aim of the program was to expand the horizons of the faculty regarding the application of mathematics in various biological organisms and processes, to use mathematical modeling to understand and give insights into biological processes like – plants growth, nerve impulse transmission, tumor growth etc.

The inaugural session was chaired by Prof. S. C. Bhatla, Chairman, Governing Body of Shivaji College and Dr Rama, Principal Hansraj College. Each day comprised of four sessions, for which speakers of eminence and extensive expertise were invited. Prof. Subhendu Ghosh, Head Department of Biophysics, DU; Prof. Ajay Kumar, Department of Mathematics, DU; Prof. Sudesh Srivastava, Dept. of Global biostatistics and Data science, Tulane University, USA, Prof. Sanjay Jain, Head, Department of Physics and Astrophysics, DU were amongst the distinguished speakers who delivered lectures during the program.

This FDP updated the teachers about the emerging trends in the field of Biomathematics and equipped them with tools and techniques required for analyzing their research findings. Some of the broad areas covered during this FDP were Biomathematics, Bioinformatics, Biostatistics and Computational Biology. This FDP empowered the participants to conceptualize phenomenon for applications of Biomathematics. Following were the course contents in the FDP-

- Basic Concepts and Applications
- Stochastic formalism of Biological systems
- Analytical and Computational approach
- Mathematical Models of Learning and Memory
- Collective behavior of Biological Molecules
- Mathematical regularities and models to understand Microbial growth

The 7 day program was brought to a close in the afternoon of 7th August by distribution of participation certificates by Dr. Shashi Nijhawan, Principal, Shivaji College, during the valedictory session.

**List of Participants:**

MAHATMA HANSRAJ FACULTY DEVELOPMENT CENTRE UNDER PANDIT MADAN MOHAN MALAVIYA MISSION ON TEACHERS AND TEACHING HANSRAJ COLLEGE, UNIVERSITY OF DELHI-110007 In Collaboration with Shivaji College, University of Delhi <b>FDP-12</b> <u>"Biomathematics"</u> 1 <sup>st</sup> August - 7 <sup>th</sup> August, 2019 <b>NAME VERIFICATION SHEET</b>				
S.No	Prof./Dr./ Mr./Ms.	Name of Participant	College /Institution	SIGNATURE
✓ 1	Dr.	Agam Kumar Jha	Kironi Mal College, University of Delhi	A. Agam
2	Mr.	Anil Kumar Rajak	ARSD College, University of Delhi	Anil
3	Dr.	Anita Rani	Dyal Singh College, University of Delhi	Anita Rani
✓ 4	Mr.	Asheesh Kumar Jharwal	Shivaji College, University of Delhi	Asheesh
5	Dr.	Bipin Singh Koranga	Kironi Mal College, University of Delhi	Bipin
6	Dr.	Brototi Roy	Maitreyi College, University of Delhi	Brototi
✓ 7	Mr.	Chandra Shekhar	Deshbandhu College, University of Delhi	Chandra
8	Dr.	Deepika Yadav	Shivaji College, University of Delhi	Deepika
9	Ms.	Deepti	Shivaji college, University of Delhi	✓
✓ 10	Ms.	Deepti Jain	Sri Venkateswara College, University of Delhi	Deepti
✓ 11	Ms.	Divya Singh	Maitreyi college, University of Delhi	Divya
✓ 12	Ms.	Geetan Manchanda	Maitreyi College, University of Delhi	Geetan
✓ 13	Dr.	Jayita Thakur	Shivaji College, University of Delhi	Jayita
✓ 14	Dr.	Jeetendra Aggarwal	Shivaji College, University of Delhi	Jeetendra
15	Mr.	Jitendra Singh	Shivaji College, University of Delhi	Jitendra
16	Dr.	Jyoti Singh	Maitreyi college, University of Delhi	Jyoti
17	Dr.	Jyoti Talwar	Miranda House, University of Delhi	Jyoti
18	Dr.	Kumar Shantanu	Deshbandhu College, University of Delhi	Kumar
19	Dr.	Kumari Priyanka	Shivaji College, University of Delhi	Priyanka
20	Mr.	Manish Kumar Meena	Shivaji College, University of Delhi	Manish

21	Dr.	Meenakshi Sridhar	Rajdhani college, University of Delhi	<i>Mishra</i>
22	Dr.	Misha Yadav	Shivaji College, University of Delhi	<i>(De) Misha</i>
23	Ms.	Nimita Kant	Shivaji College, University of Delhi	<i>OK - Nimita Kant</i>
24	Dr.	Pooja Baweja	Maitreyi College, University of Delhi	<i>Pooja</i>
25	Dr.	Pooja Gulati	Department of Microbiology, MDU, Rohtak	<i>Pooja</i>
26	Ms.	Pooja Gupta	Gargi College, University of Delhi	<i>Pooja</i>
27	Dr.	Prabhavathi	Shivaji College, University of Delhi	<i>Prabhavathi</i>
28	Mr.	Ramakant prasad	Gargi College, University of Delhi	<i>Ramakant</i>
29	Dr.	Ritu Arora	Keshav Mahavidyalaya, University of Delhi	<i>Ritu Arora</i>
30	Dr.	Sanjay Kumar	Maharshi Dayanand University Rohtak	<i>Sanjay Kumar</i>
31	Ms.	Sapna Malhotra	Gargi College, University of Delhi	<i>Sapna</i>
32	Mr.	Satish Kumar	SHIVAJI COLLEGE, Department of Mathematics, UNIVERSITY OF DELHI	<i>Satish Kumar</i>
33	Dr.	Seema Talwar	SHIVAJI COLLEGE, Department of Botany, UNIVERSITY OF DELHI	<i>Seema</i>
34	Dr.	Shilpi Verma	Shivaji College, University of Delhi	<i>Shilpi</i>
35	Dr.	Urvashi Arora	Rajdhani college, University of Delhi	<i>Urvashi</i>
36	Mr.	Uttam Kumar Sinha	Shivaji College, University of Delhi	<i>Uttam Kumar Sinha</i>
37	Mr.	MOHD. TURAB SUHAIL	Camarajyan, D. U	<i>M. Turab</i>
38	MS.	ANKITA AXORA	Dell Technological University (DTU)	<i>ANKITA</i>
39	Dr.	DEEP CHANDR MISHRA	Govt. P.G. College, Faridkot	<i>Dr. C. Mishra</i>
40				



Photograph of Faculty Development Program - Biomathematics

## Annual Report highlights of Faculty Development Program – Biomathematics

Department of Mathematics Organised a Faculty Development Program (FDP) on “Biomathematics” from August 1-7, 2019, along with Department of Botany, Shivaji College, in collaboration with Mahatma Hansraj Faculty Development Center (MHRFDC), Hansraj College, University of Delhi, under the scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, Ministry of Human Resource Development, Govt. of India. The objective of this FDP was to motivate the research and innovation of faculty in the emerging areas of Biomathematics. Teachers from Mathematical Sciences, Biological Sciences, Physics and Computer Science fields, participated in the FDP from all over the country.

## XII) Inter-College Laboratory Skill Training Programme

(Annual Report 2019-20 page No. 15)

### Poster of Inter-College Laboratory Skill Training Programme

**SHIVAJI COLLEGE**  
NAAC Accredited A Grade  
(UNIVERSITY OF DELHI)  
Under the Aegis Of DBT Star College Scheme

**LABORATORY SKILL TRAINING PROGRAMME**  
for  
**Laboratory Assistants/Attendants in the Chemical and Life Science Laboratories**

**27<sup>th</sup> November – 3<sup>rd</sup> December, 2019**

Please send the complete filled registration form to the given email Id  
[shivajiskilledvelopmentprogram@gmail.com](mailto:shivajiskilledvelopmentprogram@gmail.com)  
Limited seats available, last date for application is 25<sup>th</sup> November 2019

Convener:	Co-convener
Biochemistry: Dr. Renu Baweja	Dr. Jayita Thakur
Botany: Dr. Anuradha Mal	Dr. Pratima Rani Sardar
Chemistry : Dr. P. K. Sahu	Dr. Nand Gopal Giri
Zoology: Dr. Deepika Yadav	Ms. Nimita Kant

Principal  
Dr. Shashi Nijhawan

Coordinator  
Dr. Darshan Malik

**Report:** Inter-College Laboratory Skill Training Programme was organized for Assistants/Attendants in the Chemical and Life Science Laboratories from 27<sup>th</sup> November to 3<sup>rd</sup> December, 2019 under DBT sponsored Star College Scheme involving Department of Biochemistry, Botany, Chemistry and Zoology. The Lab Staff Training Workshop in chemistry helped in equipping lab staff (Assistants and Attendants) better to handle chemicals, to prepare accurate solutions (with defined normality and molarity) and also how to maintain apparatus and instruments properly.



**Photographs of Inter-College Laboratory Skill Training Programme**

**Annual Report highlights of Inter-College Laboratory Skill Training Programme: (Annual Report 2019-20 page No. 15)**

Inter-college Laboratory Skill Training Programme for Assistants/Attendants in the Chemical and Life Science laboratories under the DBT Sponsored Star College Scheme from November 27 to December 3, 2019, along with the Department of Botany, Chemistry, and Zoology, Shivaji College.