DBT STAR College Activities- 2017-18

DBT has launched a scheme for improving critical thinking and 'hands on' experimental work at undergraduate (college) level in sciences as well as to encourage, more students to take up higher education in science.

Following are the Academic activities conducted by all the supported departments in the academic year 2017-18

1.Students Projects-

Department	Projects allotted	Beneficiaries	Total Projects
Zoology	18	59	
Chemistry	08	18	64
Botany	07	20	
Physics	31	31	

The students were allotted research projects under the star college scheme to encourage and inspire them for higher education and to inculcate research culture amongst the students.

2. Visits:

Department.	Place visited	Date
Zoology	• Visit to Central bee research Institute(CBRTI), Shivajinagar Pune.	24/07/2017
	• Visit to Indian Institute of Science Education and Research (IISER), Pune	1/02/2018
	• . A visit to Zoological survey of India (ZSI), Pune	28/08/2017
	• Visit to Science CSIR exhibition, NCL, Pune	16/09/2017
	• Visit to National Aids Research Institute (NARI), Pune.	28/02/2018

Department.	Place visited	Date
Chemistry	 Visit to Sewage water treatment plant, Akurdi, Pune. 	11/09/2017
	 Visit to CSIR Platinum Jubilee Mega Exhibition NCL, Pune 	23/08/2017
	• Visit to IISER, Pune	01/02/2018
	Visit to Sugar Industry, Maval	06/01/2018

Department.	Place visited	Date
Botany	• PCMC Nursery (Nigdi) Pune	29/08/2017
	• Lotus Garden.Pimpri-Pune	26/09/2017
	Kisan Exhibition Moshi-Pune	14/12/2017
	• IISER, Pune	01/02/2018
	Agriculture college, Shivaji Nagar- Pune	03/02/2018

Department.	Place visited	Date
Physics	• Visit to Science Park, Pune	01/09/2017
	• Visit to Sugar Industry, Maval	06/01/2018
	• Indian Institute of Science Education and Research (IISER) Pune	01/03/2018
	 BARC-Exhibition and seminar- PCCOE, Ravet, Pune. 	26/12/2017

3. Workshops conducted for students:

Department	Title	Date
Zoology	 A one-day workshop on Bee keeping. One-day workshop on Bioinformatics. 	20/7/2017 16/09/2017

Department	Title	Date
Chemistry	Workshop on Lab safety 1) General chemical laboratory safety and Fire extinguisher 2) Hazards of chemicals, Handling of chemicals and Glassware and disposal of chemical waste.	21/08/2017

Department	Title	Date
Botany	1.Nurturing Native trees	09/10/2017
	2. Remote sensing	09/12/2018
	3. Bonsai Making	23/03/2018

Department	Title	Date
Physics	1.Telescope Making	25/02/2017
	2.To design and build power supply	09/12/2017

4.Hands-on Training:

Department	Title	Date
Zoology	Basics of Microscopy- Compound Microscope, Inverted Microscope, Phase Contrast Microscope,	13/1/2018
	Hands-on training on Basics of Histological techniques	14/1/2018

Department	Title	Date
Chemistry	1.Analysis of the compound by HPLC	9/02/2018
	2.Elemental Analysis by AAS	9/3/2018

Department	Title	Date
Botany	Grafting, Budding and Layering	29/08/2017

Department	Title	Date
Physics	Mobile Repairing	2/02/2018- 3/02/2018

5. Guest lectures:

Zoology: In association with Scientist from NARI- Pune

S.N	Topic	Date	Resource Person
1	Medical and clinical aspects of Parasitology	14/07/2017	Dr. Sangeeta Kulkarni, Scientist D
2	Various Instruments used in Pharma and Biotech Industry	15/07/2017	Dr. Abhijeet Kadam Scientist C
3	Basics of Molecular Biology and its application	15/07/2017	Dr. Vijay Nema Scientist E
4	Good Laboratory Practices and Microscopy	18/07/2017	Dr. Aarti Mane Scientist D
5	Basic Immunology and techniques	18/07/2017	Dr.Ashwani Shete Scientist D
6	Cell cycle and its checkpoints	19/07/2017	Dr. Hariom Singh Scientist E
7	Career opportunities in Basic sciences	12/12/2017	Dr. A.A.Natu IISER Pune

Chemistry:

			Resource person
S.N	Topic	Date	•
1	Innovation in Chemistry	15/09/2017	Dr. Ramkrishna Bhat
			IISER, Pune
2	Material science	15/09/2017	Dr. V.C.Anand
			IISER, Pune
3	Redox reaction Reagents in	10/01/2018	Dr. V.D. Avasare, Asso.
	organic Synthesis- H ₂ , Pt, Pd,		Prof. S.P. college, Pune
	LiAlH ₄ ,NaBH ₄ , K ₂ Cr ₂ O ₇ ,		
	KMnO ₄		
4	Beyer Viliger, Feviski, Woulf	11/01/2018	Dr. Preeti Choudhari
	Rearrangement Reaction-		Women scientistIISER
5	Atomic Structure- Bohr's theory	11/01/2018	Dr. Sunil Kulkarni, Asso
			Prof. S.P. Colloege, Pune
6	Free Energy and Equilibrium	17/01/2018	Dr.Ujwala Patil, Asst Prof
			Fergusson College Pune
7	Molecular Spectroscopy	07/02/2018	Dr. Anil Markandey,
			Asso.Prof.Fergusson
			College Pune
8	Steriochemistry	12/09/17	Dr. Sushma Katade,
			Asst. Prof.
			Modern college Pune
9	Rearrangement Reaction	15/02/2018	Dr.Sangita Jagtap,
			Asso Prof
			Baburaoji Gholap college
			Sangavi

Botany:

S.N	Topic	Date	Resource person
01	Biodiversity of Past, Present and	02/08/2017	Dr. Sachin Punekar, NGO-
	Future w.r.t. Western Ghats		Ecosphere
			Retd. Scientist BSI,Pune
02	Plant Resources used by the	04/08/2017	Dr. Prakash Diwakar
	Tribes of Andaman & Nicobar		Retd. Director ARI,Pune
	Islands		
03	Medicinal Botany in Herbal	04/08/2017	Dr. Gurumurthi Hegde,
	Industry.		Scientist, Omniactive Pvt
			Ltd.,Pune

0.4	Plant Taxonomy in a Changing	5/08/2017	Dr.
04	World.		Riteshkumar Choudhary,
			Scientist C- ARI Pune
0.5	Nurturing	09/10/2017	Dr. Vinaya Ghate, Emeritus
05	Native Plants		Scientist ARI,Pune
0.6	History of Botany in India and	09/12/2017	Dr.Mayur Nandikar,
06	Opportunities in the subject		Scientist, Godrej Research
			Centre, Pune
0.7	Enhancement of Career Altitude	26/03/2018	Prin.Dr. Zunzarrao,
07	in Botany		Principal Modern College,
			Pune
00	Careers in Botany	10/2/2018	Dr. Sayyed Illiyas, Asst
08			Prof. Poona College, Pune

Physics:

S.N	Topic	Date	Resource person
1.	Introduction to Nanomaterials	12/08/2017	Dr. Manish Shinde,
			ScientistA;
			CMET,Pune
2.	Absorption emission	12/08/2017	Dr Ravindra Sonawane,
	Spectroscopy		Scientist C;
			CMET, Pune
3.	Fundamentals of Microscopy	14/08/2017	Prof. Mahendra More, Dept
			of Physics,
			SPPU-Pune
4.	Application of Radiations for	14/08/2017	Prof. Sanjay Dhole, Dept of
	Society		Physics, SPPU-Pune
5	Application of Nanomaterials	09/01/2018	Dr Sunil Kandalkar, Asso.
			Prof. Rajashree Shahu
			College of Engenering, Pune
6	LASER	09/01/2018	Dr Sonali Kale,
			Asst.Prof. PCCOE, Pune

6. Workshops/Training received by Faculty from participating departments:

Department	Title	Date
Zoology	One-day workshop on handling of UV-Vis spectrophotometer & Gel electrophoresis	17/01/2018
Chemistry	1.Doctoral and postdoctoral research facilities in South Korea Dr. Amalnerkar D.P-Brain Pool Invited Scientist.	29/03/2018
	2.Training on Nanodrop spectrophotometry	5/4/2018
Botany	Workshop on Remote sensing	09/02/2018
Physics	Solar Panel Installation	28/3/2018

7. Exhibition:

- Intercollege science exhibition and poster competition was organized on 12/12/2017.
- Students from 13 colleges participated in this exhibition.
- Around 550 students were benefited.
