# PROGRESS REPORT BY COLLEGES SUPPORTED UNDER THE STAR COLLEGE SCHEME (BT/HRD/11/019/2012)

(2018 - 19)

# SUBMITTED TO DEPARTMENT OF BIOTECHNOLOGY GOVERNMENT OF INDIA



NIRMALA COLLEGE FOR WOMEN (AUTONOMOUS) Reaccredited with 'A' Grade by NAAC in the 3<sup>rd</sup> cycle with CGPA of 3.62 Awarded STAR status to the Departments of Botany, Chemistry and Zoology Supported by DST FIST at Zero level Redfields, Coimbatore – 641 018. Tamilnadu

**APRIL 2019** 



#### **ABOUT THE COLLEGE**

Nirmala College for women, situated in Redfields, Coimbatore-18 is run by the Congregation of the Franciscan Sisters of the Presentation of Mary. The College had its humble beginning as a second grade College in the year 1948. The founder Msgr.Oubagarasamy,D.D., the Bishop of Coimbatore, with a missionary zeal and farsighted vision worked to contribute his mite to the tremendous task of developing women's education for the development of free India. He sent a proposal to the University of Madras requesting permission for the Coimbatore Diocese to start a college for women in Coimbatore. Thus Nirmala College came into being on the first of July 1948. The college has now emerged as one of the premier institutions of learning, propagating higher values of education and learning, with hopes and dreams to achieve her goal, "*Knowledge purifies, Charity Enhances*".

In recognition of the high academic performance and service the college was accredited with "**A**" **grade** by NAAC during the academic year 2003-04 and was conferred Autonomous status in the year 2007.

The enhancement and sustenance of quality led to the reaccreditation with "A" Grade in the academic year 2010-2011. The UGC Expert committee visited the college on  $22^{nd}$  and  $23^{rd}$  April, 2014. In the year 2016 the college was once again reaccredited in the III cycle of NAAC to 'A' Grade with a score of 3.62 on a 4 point scale. Having secured 'A' Grade in all three cycles and with a CGPA score above 3.5, NAAC has extended the accreditation period to seven years. In view of the above achievement, UGC has extended the Autonomous Review to a period of 10 years. The science departments are also strengthened under DST – FIST at zero level.

#### AIM

Nirmala College for Women aims to equip young women with quality education and life skills, personal skills and social skills that ensure productivity and confidence to take the rightful place in all areas of life, public and private.

#### **OBJECTIVES**

#### In pursuit of this aim, Nirmala College for Women seeks

- To nurture in the students intellectual curiosity, a quest for knowledge and the ability to translate their knowledge to creative use.
- To develop in the students a capacity to identify their own potential and form a holistic personality.
- 4 To mould the students into morally upright and spiritually enlightened human beings
- To sensitize students to be socially committed, to awaken their conscience and enable them to emerge as active agents of social change.
- **4** To ever promote National Integration.

#### PROFORMA FOR THE SUBMISSION OF THE PROGRESS REPORT (2018-19)

1.	Name of the College	: Nirmala College for Women, Coimbatore
2.	2. Name of Departments : Zoology, Botany, Chemistry supported	
	Name of Coordinator	: Dr.Pawlin Vasanthi Joseph
	Designation	: Associate Professor and Head
	Address	: Department of Zoology
		Nirmala College for Women (Autonomous),
		Red fields, Coimbatore
	Phone number.	: +91 9655513364

## 3. Number of regular faculty

Department	No. of regular faculty	With PhD	With M. Phil
Zoology	10	8	2
Botany	10	8	2
Chemistry	9	7	2

4. List of courses (B.Sc./M.Sc./ PG diploma, certificate etc) run by different participating Departments:

Department	Courses offered
	B.Sc., Zoology (Aided)
	M.Sc., Zoology (Self Financing)
	M. Phil in Zoology
Zoology	Ph. D in Zoology
Zoology	COP in Vermitechnology – (UGC Funded)
	Certificate
	Diploma
	Advanced Diploma
	B.Sc., Botany (Aided)
	M.Sc., Botany (Self Financing)
Dotony	M.Sc. Bioinformatics-UGC Sponsored
Botany	Innovative Course
	Research programmes:
	M.Phil in Botany

	Ph.D in Botany	
Certificate course: UGC Sponsored		
Floriculture and Bonsai		
	Medicinal Botany	
	B.Sc., Chemistry (Aided)	
	M.Sc., Chemistry (Self- Financing)	
Chemistry	Research programmes:	
	M.Phil and Ph.D. (Self-Financing)	

# 5. Cut off % for admission in different courses in participating departments, positions in University, % result in 2018-19 academic sessions

Department	Total strength of students		Cut off Percentage for admission	Positions in University	% of results /Nov2018
	I-B.Sc	45			100%
Zoology	II-B.Sc	43	60% and Above	Autonomous	95%
	III-B.Sc	32			98%
	I-B.Sc	46	60% and Above	Autonomous	97 %
Botany	II-B.Sc	40			98 %
	III-B.Sc	45			98 %
	I-B.Sc	33	60 % and Above		84.38 %
Chemistry	II-B.Sc	34		Autonomous	90.96 %
	III-B.Sc	28			95.24 %

6a. List of projects undertaken by students, industrial visits by students, summer training in last one year:

Department	List of Projects	No/. of Students		
	(Topics)	(under the Project)		
	Study of the ant diversity in the college campus	7		
	A comparative study of vermicompost production using	7		
	cow dung and goat dung			
	Efficacy of Moringa oleifera_L. (Family: Moringaceae),			
	seed as a larvicidal agent against Dengue fever mosquito,			
	AedesL. (Diptera: Culicidae)			
	Comparative analysis of mixed fruit wastes and leaf litter	6		
	vermicompost using the earthworm Eisenia foetida			
	Influence of frozen period on the proximate composition			
	and microbial population of commercial marine fishes			
	collected from Coimbatore fish market, Tamilnadu, India			

Zoology	Efficacy of compost application in potting media derived from different organic wastes on the biometric parameters and flowering constitution of Mari gold ( <i>Tagetes consta</i> L)	7
	and flowering capacity of Mari gold ( <i>Tagetes erecta</i> L.) Present status on public health and hygiene condition of retailers at wholesale fish market in Coimbatore, Tamilnadu.	7
	Bioconversion of water hyacinth into vermicompost and its effect on the plant growth.	7
	A comparative study of vermicompost production using parthenium weed and leaf litters and its effect on plant growth.	7
	Comparison of proximate composition of shrimp and crab shell wastes and its utilization of fish feed formulation.	7
	Study on prelimnary phytochemical and biochemical analysis of Couroupita guianensis, Aubl.,	4
	An ethanobotanical survey of medicinal plants used by the tribals of Allandurai village, Siruvani, Coimbatore District, Tamilnadu.	5
Botany	Preliminary phytochemical analysis of <i>Santalam album</i> Linn. Leaves using various solvent extracts.	9
	Ethnomedicinal plants of Western Ghats of Coimbatore District for the treatment of Kidney stone.	9
	Study on the medicinal plants for the treatment of liver damage	8
	A Review on Sacred Grooves in and around Coimbatore District.	9
	Handmade soap making using natural ingredients	6
	Corrosion inhibition of mild steel using <i>Albizzia lebbeck</i> in acid medium	3
	A study of eco-friendly natural products as corrosion inhibitor in acid media	3
Chemistry	Evaluation of the chemical constituents and in vitro antimicrobial screening of <i>Echinopsis calochlora</i>	3
	Investigation on bioactive chemicals and pharmacological assay of <i>Sansevieria cylindrica</i>	3
	Assessment and water quality treatment of metro air compressor	5
	Comparative study on the antibacterial activity of <i>Benkara</i> malabarica	5

Department	Date	Industrial Visit	No/. of Students and Class
	03.09.18 to 06.09.18	Mangalore Dairy Unit and Central Marine fisheries Institute, Mangalore	II UG (44) students
Zoology	26.09.18	Visit to Integrated fish farming unit, Kanuvai	III UG (32) students
	26.09.18	Gauss Museum, Forest College Coimbatore	I UG (48) students
	12.10.18	Visit to sericulture unit, Udumalpet	I UG (48) students
	23.01.19	Visit to Sakthi Sugars, Erode	III UG (32) students
	05.02.19	Ayurveda Medical Research Laboratory and Digital X-ray Unit	III UG (32) students
	09/08/2018	Botanical Survey of India, TNAU, Coimbatore	74 students
	12/09/2018	Plant collection trip to Maruthamalai, Coimbatore	74 students
	15/09/2018	Plant collection trip to Perumaalmudi Hills, Pollachi, Coimbatore	68 students
Botany	26/09/2018- 30/09/2018	Educational trip to Mysore and Bangalore	40 students
	14/12/2018 & 15/12/2018	Tour to Pulicat Lake, Pichavaram and Pondicherry	69 students
	18/12/2018	Field trip to Ramya Nursery, Thadagam	71 students
	28.2.2019	Sugarcane Breeding Institute, Coimabtore	96 students
	28.08.18	Regional Science Centre, Coimbatore	II B.Sc (33) students
	15.09.18	Aavin, Erode,	III B.Sc. (28) students
	15.09.18	Arya plastics Sipcot, Perundurai	III B.Sc. (28) students
Chemistry	15.09.18	Unifront process, Sipcot, Perundurai	III B.Sc. (28) students
	06.10.18	Field trip: Ko desam, Pollachi	III B.Sc. (28) students

	04.01.19	Tamilnadu Agricultural University, Insect Museum Department of Environmental hemistry, Soil Science and Agricultural Chemistry Coimbatore	I B.Sc. (31) students
(	09.01.19	Sakthi Sugars Ltd, Aappakudal, Erode	III B.Sc. (27) students
	10.01.19	Forest College and Research Institute, Tamilnadu Agricultural University, Mettupalayam	I B.Sc. (33) students

## **6c.** Summer training

Department	Date	Summer training	Number of
			students
Zoology	11.12.18 To 16.12.18	Hands on training in Molecular biology and biotechnology, Centre for Biotechnology and Nanoscience Research, Coimbatore	32
Botany	20.02.2019 Biodiversity internship programme		11
	03.9.18 to 09.9.18	High -Rate Bioreactors for the Treatment of Industrial Wastewater, Department of Bio technology, PSG College of technology, Coimbatore	2
Chemistry	12.12.18 to 15.12.18	Water Analysis and Good Laboratory Practices, M/S Sri Gomuki Tex Chem Private Ltd, Analytical Technology Laboratory, Mylampatti, Coimbatore.	5
	19.12.18 to 22.12.18	HPLC- Mass Technology, Karunya Institute of technology and sciences, Coimbatore.	5

# 7. Training received by faculty from participating Departments:

Department	Date	Training	No/. of faculty
	22.06.18 & 23.06.18	Outcome Based Education	4
		Training programme in Apiculture	1 faculty and
			1 Lab Assistant

	24.09.18	Workshop on demonstration on Fold scope	9
	08.10.2018	Training programme in Apiculture	1
	13.10.18	Outcome based Eductaion (OBE)	9
	01.10.18	Orientation Programme "NAAC accreditation and All India Ranking 2019 (NIRF), Joint Directorate's Office, Coimbatore	1
Zoology	28.09.18	STEM Teacher Training Workshop on Research, Pune	1
Zoology	08.10.18	India International Science Festival -2018, Lucknow	1
	15.10.18 & 16.10.18	Hands on training in bacteriology and textile dye biodegradation	2
	11.12.18 To 16.12.18	Hands on training in Molecular biology and biotechnology	1
	27.11.18	Google Doc's KAHOOT Apps and Online Book Publishing, Department of Mathematics, Nirmala College for Women - Coimbatore	1
	01.02.19 to 03.02.19	Ecological Festival of Western Ghats, Sri Krishna College of Arts and Science	1
	11.01.19	Workshop on Silk reeling	3
	02.02.19	Workshop on "Intellectual Property Rights, Patent and Copyrights"	10
	21.02.19	Workshop on "LINUX, Department of Computer Science, Nirmala College for Women - Coimbatore	1
	21.03.18 & 22.03.18	Workshop on Multimedia	1
	17.05.2018 to 13.06.2018	Orientation Programme, Bharathiyar University, Coimbatore	2
	22.06.18 & 23.06.18	Outcome Based Education	2
	18.09.18	Women's Convention on 'Dismantling the glass ceiling: A Paradigm to sensitise, untrammeland empower'	2
Botany	27.11.18	Google docs, online book publishing and Kahoot apps	2
	14.12.18	Statistical Analysis using SPSS	6
	05.10.18	Workshop - Plant Taxonomy	2
	09.10.18	Workshop - Mushroom Cultivation Technology	1
	21.02.19	Workshop on LATEX	3

	04.03.19	Google docs, QR code generating, online book	1
		publishing and Kahoot	
	22.06.18	Outcome based education	4
	& 23.06.18		
	04.07.18 to	Refresher Course in Chemistry	1
	24.07.18.		
	14.09.18	High Resolution Transmission Electron Microscopy,	2
	and	Scanning Electron Microscopy and Scanning Probe	
	15.09.18	Microscopy	
	22.09.18	Field Emission scanning electron microscope	2
	11.10.18 &	Science Academies' Lecture Workshop "Frontiers in	2
	12.10.18	Spectroscopy"	
	13.10.18	Outcome based Eductaion (OBE)	7
	27.10.18	Revised Assessment and Accreditation Framework of NAAC	1
Chemistry	09.11.18	Open Access E-resources for Research and INFLIBNET resources	5
	24.11.18	Field Emission scanning electron microscope	2
	07.12.18	Workshop on Innovations at frontier areas of	1
		Chemistry organized by School of Chemistry,	
		ISER, Trivandrum, Vithura. Kerala	
	12.12.18 to	Internship Training and NABL Certified in "Water	1
	15.12.18	Analysis and Good Laboratory Practices- Analytical	
		Technology Laboratory, Coimbatore	
	19.12.18 to	Training Course in "HPLC- Mass Technology	1
	22.12.18	organised by Karunya Institute of technology and	
		sciences, Coimbatore	
	27.11.18	FDP programme on "Hands on Training on Google	2
		Doc's, Kahoot apps and Online Book Publishing	
	14.12.18	FDP on "Statistical Analysis using SPSS	1
	02.02.19	Workshop on "Intellectual Property Rights, Patent	8
		and Copyrights"	
	04.03.19	FDP programme on "Hands on Training on Google	1
		Doc's, Kahoot apps and Online Book Publishing	
	07.03.19-	International conference on Chemical Sciences and	1
	09.03.19	Nanomaterials organized by Vellore Institute of	
		Technology	

Department	Date	Seminar /workshop topic	Level	Resource persons	No of participant s
Zoology	19.09.18 to 20.09.18	Advances in Biological Sciences Research	National Seminar	<ul> <li>Dr. S.Muralidharan,</li> <li>Senior Principal Scientist,</li> <li>Salim Ali Centre for</li> <li>Ornithology and Natural</li> <li>History, Coimbatore.</li> <li>Dr. Manjula Sritharan,</li> <li>Professor, Department of</li> <li>Life Sciences, University</li> <li>of Hyderabad, Telengana</li> <li>Dr. Zaibin A.P, National</li> <li>Post Doctoral Fellow,</li> <li>Kerala Forest Research</li> <li>Institute, Thrissur, Kerala</li> <li>Dr. G. Kumaresan,</li> <li>Professor, Department of</li> <li>Genetics, Madurai</li> <li>Kamaraj University,</li> <li>Madurai</li> <li>Dr. Deepa Subramanyam,</li> <li>Principal Investigator,</li> <li>National Centre for Cell</li> <li>Sciences, University of</li> </ul>	460
	03.08.18 to 04.08.18	Separation of DNA/ Protein using Electrophoretic methods	Workshop	Pune, Ganeshkind, Pune Yaazh Xenomics	65

	24.09.18	Demonstration on Fold scope	Workshop	Miss Roshan Jabeen, Research fellow Department of EEE, Sri Ramakrishan college of engineering.	All staff and Students 189
	24.09.18 to 25.09.18	Bioinformatic tools and its applications in Biology	Workshop	Dr. Sivasankri, Assistant professor, Department of Bioinformatics, Nirmala college for women	32 UG III year Students
	11.01.19	Silk reeling	Workshop	Dr. Senguttavan. M Associate Professor and Head Department of Zoology PSGCAS	47 UG II year Students
Botany	01.02.19 02/02/19	Complementary and alternative Indian system of medicine	National Seminar	Dr.T.Sivakumar, IIS Assistant Director Field Outreach Bureau Office, Govt. of India, Puducherry Prof. Dr. A.John Christopher National General Secretary, Bharateeya Naatu Vaidhya Samithee Mr. Joseph Clement Professor and Head (Rtd.), Department of Botany, Government Arts College, Coimbatore-18. Mr. A.S. Suresh Kumar Managing Partner Adhithya Herbal Coimbatore.	200

				Dr.A.Rajalingam Parambariya Varma Maruthuvar Yogamaya Natural Health Care, Coimbatore. Mr. Maharajapillai Parambariya Siddha Vaidhyar Nagarkoil.	
	10.07.18 & 11.07.18	Lecture Workshop- Recent Scenario in Plant and Microbial Technology'	Lecture Workshop	Dr.D.J.Bagyaraj INSA Honorary Scientist & Chairman, Center for Natural biological Resources and Community Development, Bangalore.	150
Botany				Dr.K.Veluthambi Professor (Rtd) UGC- BSR Faculty Fellow, Department of Plant Biotechnology, Madurai Kamaraj Univerity, Madurai.	
				Dr. Harini Kumar Professor, Dept. of Biotechnology, Univerisity of Agricultural Sciences, Bangalore – 560065	
				Dr.U. Sivakumar Professor, Dept. of Agricultural Microbiology, TNAU, Coimbatore	

	12.10.18	Botany Fiesta 2018 – Interbotany Collegiate Competitions- Rangoli, Vegetable Carvings, Mehandi, Cookery and Flower arrangement	Inter collegiate Competition	Dr.Poornima, Asso Prof. (Rtd.) (Alumni – served as judge) Dept. of Botany, PSGR Krishnammal College for Women, Coimbatore. Dr.W.Suganya, Asst.Prof in Botany, Government Arts College, Coimbatore – 18	80
	29.10.18	Orientation Workshop in Chemistry for National Level Competitive Exams	Workshop	Dr.L. Emmanuvel Assistant Professor, Department of Chemistry, Karunya Institute of technology and Science, Coimbatore	107
	15.12.18	Workshop on Microtomy	Workshop	Dr. P. Megalingam Assistant Professor of Botany, V.H.N.S College, Virudhunagar.	75
Botany	20.12.18	Workshop on Mushroom Technology	Workshop	Dr. Kathiravan, Assistant Professor of Biochemistry, Kongunadu Arts and Science College, Coimbatore	60
	08.01.19	Workshop on Permanent Slide preparation	Workshop	Dr. Poornima, Associate Professor (Retd) PSGR Krishnammal College for Women	63
	22.01.19	Hands on training- Artificial Jewellery Making	Hands on training	Ms. P.J. Bhuvaneswari Assistant Professor Department of Bioinformatics Nirmala College for Women, Coimbatore.	90

				Dr. Sincy Joseph Assistant Professor	
				Department of Bioinformatics Nirmala College for	
	07.03.20 19 to 09.03.20 19		Hands on training programme on Hydrophonics	Women, Coimbatore Dr.Periasamy, Ramya nursery, TVS Nagar, Coimbatore.	60 Self help group
				Mr.Vincent, NGO, Tree growers Association, Coimbatore.	
				Dr.Kalyana Sundaram, Associate Professor, Department of Plant pathology, TNAU, Trichy.	
	04.10.18	National Seminar	Contemporary Research Fields	1.Dr.V.Alex Ramani Associate Professor of Chemistry St.Joseph college, Trichy.	
			in Chemistry- CRC-18	2.Dr.A.Peter Pascal Regis Associate Professor of Chemistry, St.Joseph College, Trichy	400
Chemistry				3.Dr.A.V.Ramana Reddy Ex-Head, Analytical Chemistry Division, Bhabha Atomic Research Centre, Mumbai.	
				4.Dr.N.Ponpandian Professsor & Head Departmnet of Nanoscience and Technology Bharathiar University Coimbatore.	

	15.10.18	Hands on		Mr. S.T. Vincent,	72
	to	Training	Hands on	Proprietor,	
	16.10.18	Programme for	Training	Universal Scientific Co	
		Handling	e	Coimbatore	
		Electrical			
		Instruments			
	29.10.18	Orientation		Dr. L. Emmanuvel	107
		workshop in	Workshop	Assistant Professor	
		Chemistry for	1	Department of	
		National Level		Chemistry	
		Competitive		Karunya Institute of	
		Exams		Technology and Science	
				Coimbatore	
	12.12.18	Workshop on		Mr.N.Adaikkalam	73
		Handling of	Workshop	Service Engineer	
		UV-	1	Science World	
		Spectrometer		Coimbatore	
	10.01.19	Workshop on		Mr.D.Kingston Raj	34
		Handling and	Workshop	Service Engineer	
		Practical Usage	1	R&V System	
		of melting point		Coimbatore	
		devices.			
Chemistry	19.01.19	FDP	Tuning	Dr.B.Jebasingh	30
			Academic	Associate Professor of	
			Research for	Chemistry	
			Potential	Karunya Institute of	
			Funding	Technology and	
			Opportunities	Sciences	
				Coimbatore	
	23.01.19	Intercollegiate		Dr. G. Vivekanandan	230
		Chemistry	Chem flair-19	Associate Professor and	
		Student Meet		Head	
				AVC College	
				Mayiladuthurai	

	06.02.19	Workshop	Hands on Training	Mr. Manjunatha Rao Sinsil International	55
			Programme on	Bangalore	
			Electrochemica		
			1 Workstation		
	14.02.19	Workshop	Hands on	Mr.G.Natarajan	62
			Training in	Service Engineer	
			using Water	Systronics India Ltd	
			Analysis	Chennai-29	
Chemistry			equipments like		
			Turbidity		
			meter, P <sup>H</sup> meter		
			and Flame		
			Photometer		
	22.02.19	FDP	Techniques for	J. Senophiyah Mary	25
			Safe	Department of	
			Laboratory	Environmental	
			Handling	Engineering,	
				Government College	
				of Technology	
				Coimbatore	

# 9. Name, designation, host institute of guest faculty invited

Department	Date	Name and Designation of Resource	Торіс
		person	
	12.07.18	Dr. Honnavalli Kumara, Scientist, Salim Ali Centre for Ornithology and Natural History, Annaikatty, Coimbatore	Conservation Biology
	17.07.18	Dr. Clara Gunapoorani Sargunar, Associate Professor, Government Arts College, Cbe	Extermophiles
Zoology	28.08.18	Dr.P.A Saravanan Department of Entomology Tamilnadu Agricultural University, Coimbatore	Life secrets of honey bees and bee keeping Management
	04.09.18	Mr. Badraswamy Former District Forest Officer, Nilgiris Division	Save Elephants
	04.09.18	Dr. Riddhika ramesh,	Wild life week celebration-
	&	Scientist, Department of Environmental	Intercollegiate
	05.09.18	Impact Assessment, Salim Ali Centre for	competitions
		Ornithology and Natural History,	
		Annaikatty, Coimbatore	

	27.09.18	Dr.S.Somasundram, Assistant Professor, NGM College, Pollachi.	Conservation of sea turtles
	05.10.18	Dr. Riddhikaramesh, Scientist, Department of Environmental Impact Assessment, Salim Ali Centre for Ornithology and Natural History, Annaikatty, Coimbatore	Scaling up the conservation value of lesser known mammals of India
	10.10. 18	Dr. IonaAverel, Associate professor and Head Department of Zoology, Holy Cross College, Trichy.	Monoclonal antibody production technology has revolutionized biotechnology
	11.12.18	Mr. Sreedhar Ramasamy Founder of Nature Consultancy 360°	Environmental Challenges and mitigation
	10.01.19	Dr. Raja, Assistant Professor, Department of Zoology, Kongunadu Arts and Science college, Coimbatore	Global Scenario - Utilization and impact of microplastics
	09.01.19	Dr. T.MuraliSankar Assistant professor Department of Zoology Bharathiar University, Coimbatore	Sustainable Aquaculture Management
Zoology	31.01.19	Dr. Navaneethan Research Consultant, SACON	Special focus on conservation of wild animals in MP Landscape
	22.01.19	Dr. N. Geetha, Assistant professor, Department of Zoology, PSG College of Arts and Science, Coimbatore- 14	Global Environmental Changes
	05.02.19	Dr. N. Suja Assistant professor Department of Microbiology Hindusthan College of Arts and Science Coimbatore- 28	Bioprospecting
	12.02.19	Mr. Laxminathan Technical Head Puliakulam Rd Coimbatore – 641045	Clinical Management of Infectious Diseases and Future Direction in Care
	26.02.19	Dr. P.Thangavel Assistant Professor Department of Environmental Sciences, Periyar Univeristy	Influence of climatic changes on faunal resources

	30.07.18	Dr. N.Kamaraj, Associate Prof. in Biotechnology, Addis Ababa Science and Technology University of Ethiopea	Molecular markers in plant genetic engineering
	29.08.18	Mr.Syed Samiullah, Head operations, Professional infotech, Coimbatore.	Health care and its opportunities
	20.09.18	Dr.R.Rekha Warrier, Principle Scientist, Department of Institute of forest genetics and Tree Breeding, Coimbatore.	Plant Tissue Culture Techniques
	11.10.18	Dr.S.Usha, Assistant Professor, Department of Bioinformatics, Bharathiar university, Coimbatore	"Basics of Bioinformatics and gene prediction of Gene in Eukaryotes and Prokaryotes"
	15.10.18	Ms.Ann Rose Thattil, Professional Makeup Artist, Ann Rose Creations, Coimbatore.	Health and Beauty Care
	29.10.18	Dr.Sivasankari, Assistant Professor, Department of Bioinformatics, Nirmala College for Women, Coimbatore.	Gene prediction in Eukaryotes and Prokaryotes
Botany	29.10.18	Dr.Sudhakar, Assistant Professor, Department of genetics and plant Breeding, TNAU.	Basics of Genetics
	05.12.18	Dr.S.P.Periasamy Retd.Assistant Lecturer, Agricultural College, Coimbatore	Horticulture Techniques
	10.12.18	A.Sheikdeen External Faculty, Southern region Petroleum Conservation Research Association under ministry of petroleum and Natural gas.	Govt.of India Water Conservation and LPG Usage
	14.12.18	Dr. Gnanambal, Assistant Professor, Department of Biochemistry, Bharathiar University, Coimbatore.	Avenue's in Biotechnology
	11.01.19	Dr. T. Muthukumar, Assistant Professor, Department of Botany, Bharathiar University, Coimbatore.	The Secret Life of Plants: Intelligence
	23.01.19	Mr. Sundhar, BE	Terrace Gardening
	11.02.19	Mrs. Jayapriya. S Assistant Professor and Head,	Fabric Enrichment techniques

		Department of Costume design and	
		Department of Costume design and	
		Fashion, Nehru College of Arts and	
	10.07.10	Science, Coimbatore	
	10.07.18	Dr.J. Mallika,	Group theory
		Assistant Professor in Chemistry,	
		PSG CAS, Coimbatore	
	24.07.18	Dr. Rama subbu,	Partition functions
		Associate Professor of Chemistry,	
		Government Arts College, Coimbatore	
	27.07.18	Dr. T. Selvaraju,	Trends and Challenges in
		Associate Professor of Chemistry,	Chemical Sciences
		Bharathiar University, Coimbatore	
	30.07.18	Dr. Sethu Ramalingam,	Sustainable Energy
		Assistant Professor,	
		Karpagam College of Engineering	
		Coimbatore.	
	09.08.18	Dr.N.Muthulakshmi Aandal	Abatement of
	0,100,10	Assistant Professor of Chemistry	Environmental Pollution
		PSGR Krishnammal College	
		Coimbatore	
	11.09.18	Dr.J.Ravichandran	Thermodynamics II
	11.07.10	Associate Professor of Chemistry (Retd.)	Thermodynamics if
		SRMV CAS, Coimbatore	
	14.09.18		Electrophomistry
Chemistry	14.09.18	Dr.J.Ravichandran,	Electrochemistry
Chemistry		Associate Professor of Chemistry(Retd.),	
	25.00.10	SRMV College, Coimbatore	
	25.09.18	Dr.A.Muthusamy	Dye Chemistry
		Assistant Professor of Chemistry	
	15 10 10	SRMV CAS, Coimbatore	
	15.10.18	Dr.K. Parameswari.	Challenges for Chemists to
		Associate Professor of Chemistry,	Solve
		Karunya Institute of Technology and	
		Science, Coimbatore	1
	11.12.18	Dr.S.Ponnuswamy	<sup>1</sup> H-NMR Spectroscopy
		Associate Professor of Chemistry	
		Government Arts College Coimbatore	
	18.12.18	Dr.P.Lalitha	Nano Chemistry
		Associate Professor of Chemistry	
		Avinashilingam University, Coimbatore	
	20.12.18	Dr.R.Prabhakaran	Basic Concepts in
		Assistant Professor in Chemistry	Chemical bonding
		Bharathiar University, Coimbatore	
	20.12.18	Dr.T.Selvaraju	Catalysis
		Associate Professor of Chemistry	
		Bharathiar University,	
		Coimbatore	
		Company	

	21.01.19	Dr.P.Lalitha	Green Chemistry
		Associate Professor of Chemistry	
		Avinashilingam University	
		Coimbatore	
	23.01.19	Dr. G. Vivekanandan	Perspectives in Chemistry
	20.01.17	Associate Professor & Head	r enspectives in chemistry
		Department of Chemistry	
		AVC College	
		Mayiladuthurai	
	24.01.19	Dr.V.G.Vasudha	Mass Spectroscopy
	24.01.17	Former Professor & Head	Mass Specifoscopy
		Department of Chemistry	
		Nirmala College for Women	
		Coimbatore	
	01.02.19 &		Climpos of NMD and Mass
	01.02.19 & 02.02.19	Dr.S.P. Rajendran Professor (Retd.)	Glimpse of NMR and Mass
	02.02.19		Spectroscopy-A Problem
Chemistry		Department of Chemistry	Solving Approach
Chemistry		Bharathiar University	
	12.02.10	Coimbatore	
	12.02.19	Dr.M.Dhandapani	Solid state Chemistry
		Associate Professor of Chemistry	
		SRMV College,	
	2602.10	Coimbatore	
	26.02.19	Dr. J. Kamalraja,	Name Reactions, Pericyclic
		Assistant Professor (DST-INSPIRE),	Reactions and CSIR
		Department of Chemistry,	Coaching
		Pondicherry University,	
		Kalapet, Puducherry	
	26.02.19	Mr.M.S.Muthusamy,	Biogas plant and its
		Managing Director,	utilisation
		MSM Energy enterprises,	
		Coimbatore	
	01.03.19	Dr.C. Gomadurai	An Insight in to Energy
		Associate Professor,	
		Department of Chemical Engineering	
		Kongu Engineering College, Erode	
	02.03.19	Dr.S.K. Kavitha	Chemistry-Evolution and
		Assistant Professor	Revolution
		Department of Chemistry	
		Vellalar College for Women, Erode	

## **CELEBRATION OF IMPORTANT DAYS ORGANIZED**

Department	Date	Торіс	Resource Person (designation with complete official address)	No. of Students
Zoology	04.09.18 & 05.09.18	Wild life week celebration - Inter collegiate competitions	Dr.Riddhika Ramesh, Scientist, Department of Environmental Impact Assessment, Salim Ali Centre for Ornithology and Natural History, Annaikatty, Coimbatore	157 students
Botany	19/07/2018	Global Tiger day	Mr.N.I.Jalaluddin President Nature Conservation Society Coimbatore Dr.R.Aravinth Karthikeyan President Rotary Mettupalayam Coimbatore Mr.D.Boominathan Landscape Coordinator WWF – India Mr.S.Saravanan Coordinator Education WWF – India	120 students
Chemistry	28/02/2019	National Science Day "Plastic Pollution and Environmental Management" In Commemoration of "National Science Day" the department conducted	Dr. P. Siddhuraju Professor and Head Department of Environmental Sciences School of Life Sciences Bharathiar University- 641 046	96 students

Essay
Competition and
Drawing
Competition for
Students and
Prizes were
distributed.

## STUDENT PARTICIPATION IN TRAINING PROGRAM

Department	Date	Торіс	Seminar/ Conference/ Workshop/	National/ Inter national	Organized by	No. of Students Attended
	03.09.18 & 09.09.18	High rate bioreactors for the treatment of industrial waste waters	training Gain Course, MHRD	Regional	PSG Technology, Coimbatore	3
	08.10.18	Training program in Apiculture	Hands on training	Regional	Tamilnadu Agriculture University, Coimbatore	33
Zoology	15.10.18 & 16.10.18	Bacteriology and textile dye biodegradation	Hands on training	Regional	Centre for Biotechnology and Nanoscience Research Coimbatore	43
	11.12.18 to 15.12.18	Animal and Medical Biotechnology	Hands on training	Regional	Centre for Biotechnology and Nanoscience Research Coimbatore	32
	06.12.18	Nirmala Annual Research Congress	Conference NARC 18'	Regional	IQAC, Nirmala College for women	11

	9/10/18	Mushroom	Workshop	Regional	Kongunadu	
	<i>J</i> /10/10	Cultivation	workshop	Regional	Arts and	
		Technology			Science	
		recimology			College,	39
					Coimbatore	39
Botany	05/10/18	Workshop on	Hands on	Regional	NGM	
Dotally	to	Plant		Regional	College,	50
	06/10/18		training		Pollachi	30
	29.08.18	Taxonomy	Seminar	National		
	29.00.10	Writing	Seminar	level	Department of Commerce	
		Seminar, Research		level		
					with	
Chemistry		Proposal and			Professional	
		Thesis			accounting , VLB	
						1
					Janakiammal	
					College of	
					Arts and	
					Science,	
					Kovai pudur,	
	6.00.19	T	Construction	N 1	Coimbatore	
	6.09.18	Innovations in	Seminar	National	Department	
	&	Chemical		level	of	
	7.09.18	sciences and			Chemistry,	
		Green			PSGR Kaishaanaal	20
		Technology			Krishnammal	
					College for	
					Women,	
	00.10.10		T ( 11 ) (	D 1	Coimbatore.	
	09.10.18	Chem Fusion	Intercollegiate	Regional	Department	
		2018	competition		of	11
					Chemistry,	11
					SRMV CAS,	
	00 11 10			C 11	Coimbatore	
	09.11.18	Open Access	Orientation	College	Department	
		E-resources for	Workshop		of Library	
		Research and			and	
		INFLIBNET			Information	10
		resources			Science	10
					Nirmala	
					College for	
					Women,	
					Coimbatore	

	11.10.18	Frontiers in	Science	National	PG and	
	&	Spectroscopy	Academies'	level	Research	
	12.10.18	specifoscopy	Lecture	level		
	12.10.18				Department	
			workshop		of Cluster	
					Chemistry,	
					Kongunadu	
					Arts and	1
					Science	-
					College,	
					Coimbatore	
	04.12.18	Nirmala	Seminar	College	IQAC	
		Annual			Nirmala	
		Research			College for	20
		Congress			Women	
		NARC-2018			Coimbatore	
	28.12.18	Frontiers in	Seminar	International	Department	
		Nanotechnology			of	
		and			Chemistry,	
		Computational			Sri GVG	
		chemistry			Visalakshi	8
		chennsu y			College for	
					U	
					Women,	
-	24.01.10	Futuristic	Conference	National	Udumalpet	
			Conference	National	Department of	
		Intricate			Botany and	
	25.01.19	Stratagems in			Bioinformatics,	9.6
		Computational			Nirmala	26
		Genomics			College for	
		CGEN -2019			Women,	
					Coimbatore	
	25.01.19	Recent	Conference	National	SNS College	
		Trends and			and	
		Advances in			Technology,	7
		Greener			Coimbatore	
		Synthesis				
	01.02.19	Recent	Conference	National	Department	
	to	Trends in			of Chemistry	
	02.02.19	Chemistry			Sri	
	0017	2			Ramakrishna	
					Mission	
					Vidhyalaya	14
					College of	
					Arts and	
					Science,	
					Coimbatore	

01.02.19 to 02.02.19	Complementary and alternate Indian system of medicine	Seminar cum medicinal plant exhibition	National	Department of Botany and Bio informatics, Nirmala College for Women and Bharatheeya Nattuvaidhya samithy, Trivandrum	2
19.02.19	Innovations in Chemical Sciences- 2019 ICICS	Conference	International	Department of Chemistry Kongunadu Arts and Science, Coimbatore	6

#### **MENTORS MEETING**

Department	Date	Activity	Resource Person	Funded under
Zoology	10/08/18	Mentor	Dr.Iona Averel, Associate	DBT Star College
		Meeting	Professor, Department Of	Scheme
			Zoology, Holy Cross	
			College, Trichy	
Botany	11/12/2018	Mentor meeting	Dr.Latha,	
			Associate Professor,	
			Dept.of Biochemistry & Co-	DBT Star College
			ordinator-DBT,	Scheme
			Srivenkateswara College,	
			University of Delhi.	
	02/02/2019	Mentor meeting	Dr.V.S. Ramachandran	
			Professor (Rtd.)	
			Department of Botany,	DBT Star College
			Bharathiar University,	Scheme
			Coimbatore – 46.	
Chemistry	10/08/18	Mentor's	Dr.C. Suresh Reddy,	
		Meeting	Professor of Chemistry, Sri	
			Venkateswara University,	
			Tirupathi,	DBT Star College
			Andhra Pradesh.	Scheme
	23/02/19	Mentor's	Dr.C. Suresh Reddy,	Scheme
		Review	Professor of Chemistry, Sri	
		Meeting	Venkateswara University,	
			Tirupathi, Andhra Pradesh.	

10. Date of Advisory committee meeting: Nil

11. List of New Practical's/ demonstrations introduced in different departments in last one year:

Department	Class	List of new practical introduced
	I-B.Sc	Sericulture Practicals
		1. Estimation of Shell Ratio
		2. Estimation of Denier
Zoology		3. Estimation of Renditta
	II-B.Sc	1.Most probable number (for identification of quality testing of water)
		2. Detection of Coliphage from water / sewage
	III-B.Sc	1. Isolation of Genomic and Plasmid DNA
		2. Agarose Gel Electrophoresis
		3. Separation of protein-SDS PAGE
		4. Isolation and Estimation of DNA/RNA from animal tissues
		5. Demonstration of Blotting techniques
	I Year	1. Individual Experiment - Water quality test using water sample
		collected from various ponds in and around Coimbatore District
		2. Demonstration on Algal culture.
	II Year	1. Microtome sectioning and preparation of permanent slide.
_		Isolation of DNA
Botany	III Year	2. Demonstration of HPLC, Blotting techniques, PCR & RT PCR.
		3. Anatomy – Permanent slide preparation
		4. Demonstration on milky and Oyster mushroom production.
	I B.Sc	Estimation of pH and turbidity of water samples
Chemistry	II B.Sc	Colorimetric Estimation of Copper ion.
	III B.SC	Estimation of Na and K ions using flame photometry

#### 12. Details of equipment purchased in each department from DBT grant.

#### 12a. Non Recurring Expenditure (2018-19)

Department	Items	No. Purc hased	Cost	Date of order placed	Purchase/ installation
	Revolutionary high speed centrifuge	01	40850.00	09.07.18	24.07.18
	24 x 1.5 ml Angle Head	01	9500.00	09.07.18	24.07.18
	24 x 50 ml Angle Head	01	16150.00	09.07.18	24.07.18
Zoology	24 x 15 ml Angle Head	01	13300.00	09.07.18	24.07.18
	GST		14364.00		
	Rotary vacuum evaporator	01	80000.00	09.07.18	24.07.18
	GST		14400.00		
	Deep freezer	01	26000.00	09.07.18	24.07.18

	GST		7280.00		
	Trinocular research microscope	01	84650.00	09.07.18	24.07.18
	GST		15237.00		
	Double distillation unit	01	30000.00	09.07.18	24.07.18
	GST	_	5400.00	09.07.18	24.07.18
	Microprocessor visible spectrophotometer	01	31000.00	01.07.18	20.07.18
	GST		5580.00		
	Acer computer desktop	01	22457.62	25.07.18	09.08.18
	Laser printer cannon	01	13771.18	25.07.18	09.08.18
	Projector Espson S41	01	23242.18	25.07.18	09.08.18
	Laptop Hp 15	01	20800.16	25.07.18	09.08.18
	Laptop back bag	01	810.00	25.07.18	09.08.18
	CGST	01	8459.42	23.07.10	07.00.10
	SGST		8459.42		
	Weswox HL – 55A monocular microscope	10	129800.00	05.08.18	20.08.18
	Haemocytometer	10	12862.00	05.08.18	20.08.18
	Haemoglobinometer	10	12862.00	05.08.18	20.08.18
	Stage micrometer	05	3894.00	05.08.18	20.08.18
	Ocular micrometer	05	1475.00	05.08.18	20.08.18
77 1	GST 18%	00	24543.00	00100110	20.00.10
Zoology	Compound microscope	10	39000.00	19.08.18	03.09.18
	Cyberscan pH tutor	03	48000.00	19.08.18	03.09.18
	Horizontal electrophoresis	03	14700.00	19.08.18	03.09.18
	Vertical electrophoresis	03	19500.00	19.08.18	03.09.18
	Medox Bio power supply	06	31800.00	19.08.18	03.09.18
	Cyclo mixer model	01	4200.00	19.08.18	03.09.18
	Laminar flow horizontal	01	40000.00	19.08.18	03.09.18
	Incubator	01	14500.00	19.08.18	03.09.18
	GST 18%	-	32166.00		
	Rotary microtome	01	38500.00	12.09.18	27.09.18
	Induction stove	01	3500.00	12.09.18	27.09.18
	GST	-	7560.00		
	BP apparatus	1	2500.00		25/10/2018
	Glucometer	2	3600.00		25/10/2018
	Personal weighing machine	1	1500.00		25/10/2018
	Micro pipette- variable volume	5	16000.00		25/10/2018
	Micro pipette 2- 20µl	5	16000.00		25/10/2018
	Micro pipette 0.2- 20 µl	5	16000.00		25/10/2018
	Electronic bunsen burner	10	28500.00		25/10/2018
	Soxhlet apparatus 250 ml	1	1850.00		25/10/2018
	Round bottomed flask	1	200.00		25/10/2018
	Extractor soxhlet	1	1020.00		25/10/2018
	Condenser medium	1	710.00		25/10/2018

	Condenser clamp	1	180.00		25/10/2018
	Rubber tube – 1mt	1	80.00		25/10/2018
	Stand	1	450.00		25/10/2018
	Soxhlet apparatus 6 test	1	8500.00		25/10/2018
	Round bottomed flask	1	1200.00		25/10/2018
	Extractor soxhlet	6	6120.00		25/10/2018
	Condenser medium	1	4260.00		25/10/2018
	Condenser clamp	6	1080.00		25/10/2018
	Rubber tube – 1mt	6	480.00		25/10/2018
	GST 18%		19841.00		
	Total		130071.00		
	Electronic balance (0.001g)	1	12800.00		30/10/2018
	Electronic balance (0.01g)	1	7000.00		30/10/2018
	Dry bath heating	1	24500.00		30/10/2018
	Moisture analyser	1	21500.00		30/10/2018
	Hot plate	2	9600.00		30/10/2018
	GST 18%		13572.00		
	Total		88972.00		
	Eprovite silk reeling unit	10	120000.00		10/11/2018
	GST 18%		21600.00		
	Total		141600.00		
	Compound microscope	7	38444.00		22/01/2019
	CGST		3459.96		
	SGST		3459.96		
	Total		45364.00		
	Autoclave vertical	1	43000.00		24/01/2019
	Hot air oven	1	24000.00		24/01/2019
	GST 18%		12060.00		
	Total		79060.00		
	Fume cupboard	1	69000.00		11/02/2019
	GST 18%		12420.00		
	Total		81420.00		
	Haemocytometer		2500.00		11/02/2019
	Ocular micro meter		750.00		
	GST 12%		300.00		
	GST 18%		135.00		
	Total		3685.00		
	GRAND TOTAL		1499997/-		
Botany	Compound Microscope	50	5250	10/08/2018	14/09/2018
	Dissecting microscope	50	2925	15/09/2018	23/10/2018
	Soxhlet 200ml	1	1683.00	17/10/2018	30/11/2018
	Soxhlet 400 ml	1	2435.00		

	Total		5,88,690.00		
	SGST		44,900.100		
-	CGST		44,900.100		
Chemistry	P <sup>H</sup> meter	1	6,500.00	12.09.2018	08.10.2018
	Colorimeter	15	1,68,750.00	12.09.2018	08.10.2018
	Conductivity meter	15	1,64,610.00	12.09.2018	08.10.2018
	Potentio meter	15	1,59,030.00	12.09.2018	08.10.2018
	Grand Total		s. 1500003.00/-	10.00.0010	00.10.2010
	Ton split AC with Inverter	1	24523.00	20/12/2018	13/03/2019
	Spares(SS engineering works)				
	Coir pot machine (SS engineering works) Coir pot machine Dyes and	1	85451.00 97450.00	20/12/2018	27/02/2019
	Digital Microscope				
	Incubator	1	30,680.00 47200.00	20/12/2018	13/03/2019
			,	07/12/2010	10/01/2015
	Rotary Microtome Muffle furnace 5"x5"x10"	1 1	<u> </u>	07/12/2018	10/01/2019
	Rotary Microtome	1	99828.00 99828.00	20/12/2018	08/01/2019
	Magnetic stirrer	1	12390.00		
	Colony Counter	2	17,700	10/12/2018	23.01.2019
	Hot plate 8"	1	3127.00	10/10/2010	22.01.2017
	Hot plate 10"x12"	1	4307.00		
	Induction Stove	2	4248.00		
Botany	B.OD.Incubator (505(W)x415(D)x830 (H)MM)	1	76,700.00		
	Muffle furnace 6"x6"x12"	1	37,760.00	07/12/2018	03/01/2019
	pH meter	1	12519.80		
	Spectro photo meter	2	75520.00	07/12/2018	17/12/2018
	Ganongs photometer	10	1075.65		
	Weighing balance	2	46453.25	28/11/2018	03/12/2018
	Rotary Shaker	1	37170		
	Haemocytometer	2	5310.00		
	Clevenger App.	1	1665.00		

Oil bath	1	12,873.25	13.08.2018	01.11.2018
CGST		1158.59		
SGST		1158.59		
Total		15,190.00		
Double beam UV vis	1	84,300.00	01.12.2018	07.12.2018
spectrophotometer		7587.00		
CGST		7587.00		
SGST				
Total	1	<u>99,474.00</u>	01 12 2019	10.12.2019
Automatic Eight position sample holder	1	51,200.00	01.12.2018	10.12.2018
CGST		4608.00		
SGST		4608.00		
Total		60,416.00		
Display unit and Wavelength Grating unit	1	45,400.00	01.12.2018	11.12.2018
CGST		4086.00		
SGST		4086.00		
Total		53,572.00		
Two si-photodiodes detector	1 set	83,600.00	01.12.2018	12.12.2018
CGST	1 500	7524.00	0111212010	
SGST		7524.00		
Total		98,648.00		
Melting point apparatus	15	53,550.00	29.11.2018	11.12.2018
CGST		4819.50		
SGST		4819.50		
Total		63,189.00		
μP based P <sup>H</sup> meter Labman Model: LMPH-10	2	28,000.00	21.12.2018	01.02.2019
CGST		2520.00		
SGST		2520.00		
Total		33,040.00		
Digital Nephelo/Turbidity meter Make: Systronics	2	46,200.00	21.12.2018	04.02.2019
CGST		4158.00		
SGST		4158.00		
Total		54,516.00		
$\mu$ Controller based Flame	1	58,650.00	21.12.2018	05.02.2019
photometer Make: Systronics with LPG cylinder	I	58,050.00	21.12.2010	05.02.2017
CGST		5278 00		
CGST SGST		5278.00 5278.00		

Renewable energy devices-	1	59,500.00	02.02.2019	07.02.2019
Biogas Accessories for 1 cubic				
plant				
CGST		1487.50		
SGST		1487.50		
Total		62,475.00		
Electrode for corrosion studies -	3	3300.00	15.02.2019	22.02.2019
Cu,Al and MS				
Gouy Balance – GMX-02, CA	1	74,843.00	11.02.2019	20.02.2019
44, Sample, & Hall Probe				
CGST		6735.87		
SGST		6735.87		
Total		88,315.00		
Gauss meter	1	59,532.00	11.02.2019	27.02.2019
CGST		5357.88		
SGST		5357.88		
Total		70,248.00		
Electromagnet EMU75T	1	65,272.00	11.02.2019	27.02.2019
CGST		5874.48		
SGST		5874.48		
Total		77,021.00		
Multi mantle with clamp – 3 test	1	14000.00	07.02.2019	23.02.2019
Burette Stand metal	25	8500.00	07.02.2019	23.02.2019
Water bath 12holes	1	11200.00	07.02.2019	23.02.2019
Magnetic Pellets	5	1100.00	07.02.2019	23.02.2019
CGST		3132.00		
SGST		3132.00		
Total		41,064.00		
Stop Clock	15	10,050.00	11.02.2019	27.02.2019
CGST		904.50		
SGST		904.50		
Total		11,859.00		
Magnetic Stirrer with hot plate	1	6730.00	26.02.2019	27.02.2019
Magnetic pellet	7	1554.70		
CGST		745.62		
SGST		745.62		
Total		9776.00		
Grand Total		Rs.15,00,000/-		

# 12b. Recurring Expenditure

Department	Date	Recurring grant	Amount (Rs.)
	12/07/2018	Guest Lecture- Conservation and	3050.00
		its importance	
	19/07/2018	Guest Lecture- Extremophiles	1110.00
	03/08/2018	Workshop- Separation of DNA /	21330.00
		protein	
	16/08/2018	Hindustan Scientific chemicals	57979.00
	23/08/2018	Guest Lecture- life & secrets of	3020.00
		Honey bees	
	04/09/2018	Guest Lecture- Save Elephants	2550.00
	06/09/2018	Training Programme in	1000.00
		Apiculture- TNAU	
	07/09/2018	Aquaculture visit to Aliyar Dam	8000.00
	19/09/2018 to	National seminar on Advances in	77294.00
	20/09/2018	<b>Biological Sciences Research</b>	
	24/09/2018 to	Workshop on Bioinformatic tools	4590.00
	25/09/2018	& its application	
	26/09/2018	Visit to integrated farming unit,	18540.00
		Kanuvai	
	27/09/2018	Guest Lecture- Conservation of	3155.00
Zoology		sea turtle	
Zoology	29/11/18	Student Group project	10000.00
	31/09/2018	Gian course - MHRD	3615.00
	03/10/2018	Jayam scientific chemicals	59421.00
	04/10/2018 to	Wildlife week celebration-	20294.00
	05/10/2018	intercollegiate competition	
	07/10/2018	Installation of six Apiary boxes	16500.00
	08/10/2018	Training Programme in	16500.00
		Apiculture- TNAU	
	12/10/2018	Sericulture visit to Udumalpet	22000.00
	15/10/2018 to	Hands on training in Bacteriology	16400.00
	16/10/2018	& Biodegradation of textile dyes	
	22/10/2018	Name boards for Apiculture	2400.00
	11/12/2018	Guest lecture- Environment	1500.00
		challenges & mitigation	
	12/12/2018	Community activity at Puthupathi	4000.00
	11/12/2018 to	Hands on training on Animal &	20800.00
	15/12/2018	medical Biotechnology	
	04/01/2019	Fish pond construction for	20000.00
		ornamental fishes	
	09/01/2019	Guest lecture- Sustainable	2000.00
		Aquaculture management	
	10/01/2019	Guest lecture- Global scenario-	2000.00
		utilization and impact of	

		microplastics	
	11/01/2019	Workshop on silk reeling	3000.00
	22/01/2019	Guest lecture- Global	2000.00
		environmental challenges	
	23/01/2019	Industrial visit to sakthi sugars,	20295.00
		Erode	
	28/01/2019	Books (Text and Reference)	11346.00
	28/01/2019	Apiculture visit & implements	800.00
	12/02/2019	Guest lecture	1500
	18/02/2019	Glass wares	9643
	22/02/2019	Eco trip to Topslip	20000
	25/02/2019	Guest lecture	1500
	25/02/2019	Glass ware	8778
	26/02/2019	Valedictory	2000
	01/03/2019	Glass ware	90
	Total		500,0000.00
	28/08/2018	Guest lecture	15,000/-
	10/12/2018	Guest lecture	10,000/-
	18/09/2018	Chemicals (Wintrack Scientific	16990/-
		Suppliers)	
	15/09/2018	Field trip	20,000/-
	04/10/2018	Intercollegiate competitions	20,000/-
	31/10/2018	Glasswares (The Precision	69,319/-
		Scientific Co.)	
	14/12/2018	Field trip	30,000/-
Botany	10/12/2018	Workshop	10,000/-
	02/01/2019	Innovative Practice (Kanmani	45,000/-
		garden Nursery)	
	10/01/2019	Workshop (Poornima mam)	3000/-
		Refreshment	257/-
	22/01/2019	Chemicals	1,08,013/-
	01/02/2019-	National Seminar	1,29,175/-
	02/02/2019		
	15/02/2019	Guest lecture	2,000/-
	18/02/2019	International workshop	20,000/-
	27/02/2019	Glasswares	1,246/-
		Grand Total	5,00,000/-

	17.07.18,04.09.18	Chemicals	1,74,785.00
	29.10.18,31.10.18		
	22.02.19,26.02.19		
	04.09.18, 05.09.18	Glasswares	71,349.00
	22.02.19, 27.02.19		
	07.08.18,15.09.18	Institute/Industry visit	60,138.00
	06.10.18, 04.01.19		
	09.01.19, 10.01.19		
	4.10.18, 15.10.18&	Seminar/ /Hands on Training	95,141.00
	16.10.18, 29.10.18	Program/ Workshop Organized by	
	12.12.18, 10.01.19,	the department	
	19.01.19, 23.01.19		
	06.02.19, 14.02.19		
	22.02.19		
Chemistry	09.08.18, 11.09.18	Guest Lectures	28,628.00
	14.09.18, 25.09.18		
	15.10.18,11.12.18,		
	18.12.18,		
	20.12.18,		
	21.01.19, 23.01.19		
	12.02.19, 26.02.19		
	03.09.18 to09.09.18	Workshop attended by	37,760.00
	12.12.18 to 15.12.1	Students	
	19.12.18 to 22.12.18		
	14.09.18 &15.09.18	Workshop attended by	8000.00
	22.09.18, 24.11.18	Staff	
	06.09.18, 07.09.18	Seminar attended by staff & Student	9749.00
	01.02.19, 19.02.19		
	07.03.19		
	11.09.18, 17.10. 18	Group Project –III B.Sc Students	3650.00
	23.02.19,24.02.19,	Student's publication	4300.00
	26.02.19	-	
	21.02.19	Extension Activity	250.00
	28.02.19	National Science day	6250.00
		Grand Total	Rs. 5,00,000/-

Department	List of Books	No. of copy	List of journals
Zoology	Fish & Fisheries, Pandey	2	College subscribes for
	Animal Behaviour, Natarajan	3	1. Indian Journal of Marine
	Embryology	3	Sciences
	Genetics	3	2. Journal of Science Education
	Ecology & Environment	3	3. Current Sciences
	Cell & Molecular Biology	3	4. Ecology, Environment and
	Outline of Dairy technology	3	Conservation
	Animal Behaviour	1	5. Asian Journal of
	Microbiology	2	Microbiology and
	Aquaculture	23	Biotechnology
	Bioinformatics	3	6. Indian Journal of
	Statistical Methods	2	Experimental Biology
			College subscribes for
			1. Journal of Biosciences
			2. Journal of Genetics
		-	3. Indian Journal of
Botany	Not purchased		Biochemsitry &
			Biophysics
			4. Indian Journal of
			Biotechnology
			5. Biology today
			College subscribes for
			1. Journal of Chemical Science
			2. International Journal of
Chemistry	Not purchased	-	Chemical Science
	L		3. Indian Journal of Chemistry
			Sec-A

13. Details of books & journals subscribed from DBT grant

#### 14. Qualitative improvements due to DBT support (please highlight (5 salient lines)

<b></b>	e improvemento dae to DDT support (preuse inginight (o suitent intes)
	1. 1ncreased Laboratory resources and practical techniques on an individualized
	basis have attracted more number of students for PG programmes and subsequent research.
	2. Sustained Field visits/Industrial visits/ Hands on training/ Workshops/Guest
	lectures have kept the students well exposed to real time happenings and
Zoology	motivated them to progress further.
	3. Number of students taking up National/State level competitive exams has
	increased.
	4. Provision of Recurring amount has helped the department to sustain all the
	activities in a dynamic manner.
	5. Group projects have held the scientific temper of young minds. Opportunity to
	present and publish their papers at the UG level.
	6. Extensive community and extension activites from lab to land has been executed

Botany	<ol> <li>Laboratory infrastructure is strengthened hence students can avail the laboratory facility and can perform the individual practical experiment.</li> <li>Student's exposure to industries, research institute, field visit, educational trip, more guest lectures, training programmes, seminars helps to improve the scientific and technical skill of the students and this leads to placement.</li> <li>Hands on training in instrumentation which improves the scientific temper of the students.</li> <li>Enthusiastic involvement of students in practical and project works motivate the students to go for higher studies and research.</li> <li>Bridging the gap between the schools and colleges leads to strengthening of life</li> </ol>
	science courses.
Chemistry	<ol> <li>Guest Lectures by Eminent persons in specialized fields enabled the students to have a better understanding of the subject and to know the latest development in the subject.</li> <li>Training on Handling of Instruments like "UV spectro photo meter, Electrochemical Workstation, Flame photometer, P<sup>H</sup> meter, Colorimeter, Turbidity meter and Conductivity meter" were conducted by technical persons from various Companies.</li> <li>Purchase of multiple numbers of Instruments help the students perform the experiments individually.</li> <li>Industrial visits, Institute visits, field trip and attending Conferences, Seminars and training Program facilitated the students to have better exposure and deep insight to the subject.</li> <li>Department infrastructure could be strengthened and students could take up the project work utilizing the available infrastructure.</li> </ol>

15. Problems faced, if any, in implementation of the programme and utilization of DBT grant (in Two-three lines)

Utilization of DBT grants could be recommended for the Post graduate course also.

16. Awards and Achievements

#### **Awards - Faculty**

Department	Date	Name of the faculty	Name of the Award	Organizing Committee
Botany	23/01/2018	Dr.M.Saradha	Best Women faculty	Nature Science Foundation
			award	

#### FACULTY AWARDED Ph. D

Department	Name of the Staff	Date of	Date of	Title	Name of the
		Registration	Viva-Voce		Supervisor
Zoology	Dr.D.Vigneshpriya	August, 2015	15.02.2019	Studies on removal of brilliant green dye using marine brown macroalgal biomass Sargassum wightii	Dr. N. Krishnaveni Professor & Head in Zoology Avinashilingam Institute for Home Science & Higher Education for Women, Coimbatore-43
Chemistry	Dr.K.Anbarasi	September 2012	12.07.2018	Corrosion inhibition and industrial application potential of <i>Cucurbita</i> <i>maxima</i> on mild steel and aluminium in acid, alkali and aqueous media	Dr.V.G.Vasudha Associate Professor & Head Department of Chemisty Nirmala College for Women, Coimbatore.
	Dr.S.Kulandai Therese	April, 2014	10.08.2018	Synthesis of fused O,N and S heterocycles and evaluation of their biological and photophysical properties	Dr.G.Geethamalika Associate Professor & Head Department of Chemisty Nirmala College for Women, Coimbatore.
	Dr. P. Dhivya	September, 2011	28.09.2018	Synthesis and exploration of diversified biological, photophysical and theoretical studies on novel heterocyclic scaffolds.	Dr. S. P. Rajendran Associate Professor Department of Chemisty Bharathiya University, Coimbatore.

#### Achievements:

Department Date		Name of the	Achievement	Organising Committee	
		student & Class	et an		
	08/10/18 to	Mangaiyarkarasi. R,	1 <sup>st</sup> Place, Weight Lifting,	Nirmala College for	
	09/10/18	I M.Sc	Power Lifting,	Women- Coimbatore	
	18/11/18 to		1 <sup>st</sup> Place, Hand ball	Nirmala College for Women	
	19/11/18			- Coimbatore	
	07/01/19 to		Silver Medal, 2 <sup>nd</sup> place,	CMS College of Arts and	
	08/01/19		Take Wondo	Science – Coimbatore	
	22/01/19 to		1 <sup>st</sup> Place, Hammer throw	Bharathiar University –	
	23/01/19		1 Place, Hammer unrow	Coimbatore	
	00/10/10/	Sowmiya. A, I M.Sc	1 <sup>st</sup> Place,		
	08/10/18 to		Best lifter Award, Weight	Nirmala College for	
Zaalaav	09/10/18		Lifting	Women- Coimbatore	
Zoology	18/11/18 to	_	1 <sup>st</sup> Place Gold Medal,	Nirmala College for Women	
	19/11/18		Hand ball	- Coimbatore	
	07/01/19 to	-	Bronze Medal, 3 <sup>rd</sup> place,	CMS College of Arts and	
	08/01/19		Take Wondo	Science – Coimbatore	
	22/01/19 to	_		Bharathiar University –	
	23/01/19 to		1 <sup>st</sup> Place, Hammer throw	Coimbatore	
	25/01/19			Indian Dance Festival -18,	
	15/01/18	R. Yasmin Banu	Performer Certificate		
	26/01/10/			Mamallapuram	
	26/01/19 to	Sini.G.Nath	Participation	Literary and Cultural Fest,	
	27/01/19		•	Gujarat	
	21/11/18 to		Participation	RDC, PSG College of Arts	
	30/11/18	-		& Science, Coimbatore	
	27/10/18 to		Participation	CATC-CUM-RDC Training Camp- I, kongu Engineering	
	05/11/18		i unicipation	College, Perundhurai, Erode	
		-		Group Song, NCC	
	17/10/10		Participation	Directorate, Tamilnadu,	
	17/10/18			pudhucherry, Andaman &	
				Nicobar	
				Group Dance- I, NCC	
	17/10/18		Participation	Directorate, Tamilnadu,	
	08/10/18 to		-	pudhucherry, Andaman &	
		Steffy Mary Thomas		Nicobar RDC, NCC Directorate,	
				Tamilnadu, pudhucherry,	
	17/10/18		Participation	Andaman & Nicobar, KPR	
				Institute of Technology	
				RDC Culturals, Nirmala	
	08/02/19		Participation	College for Women,	
				Coimbatore	

Competitive Exam	01/01/19 to 29/01/19		Representation	RDC, NCC Directorate, Tamilnadu, pudhucherry, Andaman & Nicobar at Annual NCC Republic Day Camp & Prime minister's Rally, New Delhi	
cleared		Aswathi PV	State Eligibility Test (2018)	State Govt	
		Anjali Narayanan	State Eligibility Test (2018)	State Govt	
		Sudha Priya	Tamil Nadu Public Service Commission (Group 4) (2018)	State Govt	
	2018	Ms.Athulya, M.Sc	Cleared UGC – NET JRF		
	15.02.2109 to J.Ramya, I B.Sc		Won III <sup>rd</sup> place & Received cash prize of Rs.50, 000/- For	Sports development authority of Tamilnadu held at Kancheepuram	
Botany	17.02.2018		representing Coimbatore District in State games for chief Minister's trophy in Ball badminton		
	05.03.2019	J.Deepa &Sree Poornima, II B.Sc	Won I prize in Poster presentation contest as a part of Swacchta Pakhwada	ECOCLUB of Sardar Vallabhai patel International School of Textiles and Management, Coimbatore	
	14.07.18	K.Veena of II B.Sc chemistry	II prize, Hindustan Arts and Science College, Coimbatore		
	23.07.18	Mrinalini J.Shah of II B.Sc Chemistry	I prize with cash award of Rs.5000	PSGR krishnammal College for Women,Coimbatore	
	07.09.18	Sindhu.M, Project Fellow, DST-SERB project	II Prize, Department of Chemistry	PSGR Krishnammal College for Women, Coimbatore	
Chemistry	08.10.18	Anandhi.K of II B.Sc Chemistry	I Prize, Chetna Women Cell,	Nirmala College for Women, Coimbatore	
	08.10.18	Hari Gayathri.L of I M.Sc Chemistry	III Prize, Chetna Women Cell	Nirmala College for Women, Coimbatore	
	08.10.18	Meghaladevi.K of I B.Sc Chemistry	I Prize, Chetna Women Cell,	Nirmala College for Women, Coimbatore	

08.10.18	A. Reni Joyce of I	III Prize, Chetna	Nirmala College for
	M.Sc Chemistry	Women Cell, Nirmala	Women, Coimbatore
		College for Women,	
		Coimbatore	
24.01.19&	Pinky Mahur of III	Paper Presentation,	Department of Botany and
25.01.19	B.Sc chemistry	I Prize	Bioinformatics, Nirmala
			College for Women,
			Coimbatore
24.01.19&	Suganya.R	Paper Presentation	Department of Botany and
25.01.19	of II M.Sc	III Prize	Bioinformatics, Nirmala
	chemistry		College for Women,
			Coimbatore
21.02.19 &	V.Kavitha	Poster Presentation	Department of
22.02.19	Research Scholar	II Prize	BioChemistry, Bio and
22.02.19	Research Scholar		Bioinformaticstechnology,
			Avinashilingam
			University, Coimbatore

#### **EXTENSION ACTIVITIES**

Department	Date	Activity	Place	No of Beneficiaries	
	9/7/18 to 20/7/18	Blood grouping & Haemoglobin Testing	Nirmala College for Women, Coimbatore	50 (Staff & Students)	
Zoology		<ol> <li>Haemoglobin &amp; Blood group testing</li> <li>Establishment of vermicomposting unit</li> <li>Awareness on honey bee keeping</li> </ol>	Kangayampalayam village	75 children & 132 adults	
Botany	11/08/18	<ol> <li>Mushroom cultivation</li> <li>Face pack preparation</li> <li>Hair oil preparation</li> </ol>	Kangayampalayam village	30 adults	
Chemistry	25/08/18	1. Detergent making 2.Created awareness about the energy consumption and Food habits	Kangeyampalayam Village	50	
	21/02/19	Awareness programme on "Ban PlasticSave Earth" In this programme, the environmental impact of Plastics on Human beings and	Nirmala Matriculation Higher Secondary School, Red fields, Coimbatore	150	

Ecc	- systems were
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## **BEST PRACTICES**

Department	DATE	ACTIVITY	Amount/ Number
	23/06/18- 09/07/18	Harvesting of vermicompost	870kgs (2018-19)
Zoology	03/09/18	Ornamental Fish Culture	Maintaining Black and White Molly, Platy and Gold fish.
	08/10/18	Installation of Apiary Box: Species: <i>Apis Cerena indica</i> . In collaboration with Mr.Vivek, Agriculturist, Sree Gopala Honey and oil Products	6 boxes
Botany	Annual maintenance	Medicinal Garden	90 species
	20/12/2018	Organic farming	Sold for Rs1300/-
Chemistry	13/02/19	Installation of Bio-Gas Plant (Wealth from waste) Biogas –The way of the future. A non-polluting source of energy generated from food waste which is used to provide heat or generate electricity and yields organic fertilizer as a byproduct. Mr.M.S.Muthusamy, Managing Director, MSM Energy enterprises, Coimbatore	1

Department	Date	Name of the faculty	Торіс	Funding Agency	Amount (Rs.)	Sanctioned/ Ongoing/ Completed
Botany	2019	Dr.T.Anitha	Comparison in yield of oyster +mushroom using biodegradable waste as substrate paddy straw,sugarcane baggasse and Coir waste	TNSCST	7,500/-	Sanctioned
	2019	Dr.Sivasankari	TFdb-A database for transcription factors involved in Human diseases	TNSCST	7,500/-	Sanctioned
Chemistry	2018	Dr. P. Kalaivani	Ruthenium sandwich complexes with N,S donor ligands: DNA/Protein binding, DNA cleavage, Antioxidant activity and Cytotoxicity	Science and Engineering Research Board (DST- SERB), New Delhi Start-up Research Grant (Young Scientists)	24,26,000/-	Completed
	2019	Dr. C. Subha	Investigation of newly synthesized polyamides as corrosion inhibitors	TNSCST	7,500/-	Sanctioned

#### **RESEARCH PROJECT AWARDS MAJOR/ MINOR PROJECTS**