

# **Progress Report of DBT Star College Scheme**

**(Second Year 2019-2020)**

**Submitted to**

**Department of Biotechnology**

**Government of India**

**By**



*Mula Education Society's*

**Arts, Commerce & Science College, Sonai**

Tal- Newasa, Dist- Ahmednagar – Pin - 414105

Maharashtra



1) Name of the College: **Mula Education Society's  
Arts, Commerce and Science College, Sonai  
Dist. - Ahmednagar, 414105, Maharashtra**

2) Name of Departments supported:  
Name of Coordinator, designation, address, phone nos.

**Overall Coordinator & :  
Member Secretary**

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**Departmental Coordinators:**

**A) Department of Chemistry:**

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Arts, Commerce & Science College, Sonai



**PRINCIPAL**  
Mula Education Society's  
Arts, Commerce & Science College  
Sonai, Tal. Newasa, Dist. Anagar  
Pin - 414105

**3) No. of regular faculty with Ph.D. in each department:**

Name of Department	No. of regular faculty	No. of regular faculty with Ph.D.
Chemistry	15	01
Botany	08	04
Geography	06	01

**4) List of courses run by different participating departments:**

Name of Department	Under Graduate	Post Graduate	Certificate/Diploma
Chemistry	B.Sc. Chemistry	M.Sc. Organic Chemistry M.Sc. Analytical Chemistry	1. Certificate course in Soil and Water Analysis 2. Diploma in Soil and Water Analysis
Botany	B.Sc. Botany	M.Sc. Botany	1. Certificate course in Medicinal and Aromatic Plants 2. Diploma in Medicinal and Aromatic Plants 3. Advanced Diploma in Medicinal and Aromatic Plants
Geography	B.Sc. Geography B.A. Geography	M.Sc./ M.A. Geography	1. Certificate course in Travel and Tourism 2. Diploma in Travel and Tourism

**5) Cut off percentage for admission in different courses in participating departments, positions in University, percentage of result during previous academic session (2018-19):**

**A) Cut off percentage for admission in different courses**

Name of Department	Name of Course	Cut off percentage for admission
Chemistry	F.Y.B.Sc.	61%
Botany	F.Y.B.Sc.	61%
Geography	F.Y.B.Sc. F.Y.B.A.	61% 46%

**B) Positions in University**

Name of Department	Degree obtained	Positions in University
Chemistry	B.Sc.	--
Botany	B.Sc.	--
Geography	B.Sc. B.A.	-- --

**C) Percentage of results**

Name of Department	Course	Percentage result
Chemistry	B.Sc.	63%
Botany	B.Sc.	75%
Geography	B.Sc. B.A.	82% 73%

**6) List of projects undertaken by students, industrial visits by students, summer training in last one year:****List of Projects undertaken by Students****A) Department of Chemistry**

Sr. No.	Name of Project	Name of Student	Class	Name of Guide
1	A Study of Vilsmeier Haack Reaction on Various Substituted Acetophenones	1. Mr. Harshad B. Bhore 2. Mr. Kiran B. Vane 3. Mr. Sanket V. Bhawar 4. Mr. Sagar A. Dhale	S. Y. B. Sc. S. Y. B. Sc. S. Y. B. Sc.	Mr. V. R. Phatake
2	Study of Washing Action of various Detergent brand available in market.	1. Mr. Sachin M. Unawane 2. Mr. Arpit B. Marade 3. Mr. Mangesh B. More	S. Y. B. Sc. S. Y. B. Sc. S. Y. B. Sc.	Mr. B. L. Shinde
3	A Study of Physico-chemical parameter of Water Sample Around College Campus.	1. Miss. Kalyani D. Gadekar 2. Miss. Archana S. Kadam 3. Miss. Pratiksha Falake G.	T. Y. B. Sc. T. Y. B. Sc. T. Y. B. Sc.	Mr. S. A. Najan
4	A Study Physico-chemical parameter of Soil Sample Around College Campus.	1. Mr. Ashutosh V. Devkar 2. Mr. Abhiji S. Devkar 3. Mr. Sachin A. Bachkar 4. Mr. Vilas B. Bachkar	S. Y. B. Sc. S. Y. B. Sc. S. Y. B. Sc. S. Y. B. Sc.	Mr. M. S. Jangale
5	A Study O and N alkylation reaction of aromatic compounds	1. Mr. Akshay N. Kadam. 2. Mr. Ajit S. Kale 3. Mr. Pramod N. Lohakare 4. Mr. Darandale Mukul S.	T. Y. B. Sc. T. Y. B. Sc. T. Y. B. Sc. T. Y. B. Sc.	Mr. Y. B. Salve
<b>Total</b>	<b>05</b>	<b>18</b>		

### B) Department of Botany

Sr. No.	Name of Project	Name of Student	Class	Name of Faculty guide
1.	Total fungal counts in soil samples taken from three different crops	1. Miss. Sonawane Pooja 2. Miss. Madhuri S.Sukalkar 3. Miss. Dhere Vrushali	T.Y.B. Sc. T.Y.B. Sc. T.Y.B. Sc.	Dr. B.J. Apparao
2.	Assessment of bore-well and canal water for pH, EC, TDS and hardness	1. Miss. Rutuja B. Chaudhari 2. Miss. Priti B. Jare	T.Y.B. Sc. T.Y.B. Sc.	Dr. B.J. Apparao
3.	A survey of trees species of Sonai College campus	1. Mr. Prashant V. Lokhande 2. Mr. Jadhav Prashant R.	T.Y.B. Sc. T.Y.B. Sc.	Dr. S.L. Laware
4.	Effect of liquid organic fertilizer on seed germination in mungbean	1. Miss. Chaitali P. Kshirsagar 2. Miss. Neeta R. Darade 3. Miss. Sukanya D. Vidhate	T.Y.B. Sc. T.Y.B. Sc. T.Y.B. Sc.	Dr. S.L. Laware
5.	Study of Pollen diversity in Dicotyledonous plants of College Campus	1. Miss. Vaishnavi P. Dhere 2. Miss. A.Kadam Mayuri 3. Miss. Priyanka B. Kale	S.Y.B.Sc. S.Y.B.Sc. S.Y.B.Sc.	Dr. A. R. Tuwar
6.	Study of pH, EC and WHC of soil samples from Sonai village	1. Mr. Abhijit S. Devkar 2. Mr. Ashitosh V. Devkar 3. Mr. Akshay P. Kale	S.Y.B.Sc. S.Y.B.Sc. S.Y.B.Sc.	Dr. V. E. Darandale
7.	Preparation of organic Formulation for Livestock	1. Miss. Punam S.Damale 2. Miss. Priyanka A. Kurhe	T.Y.B.Sc. T.Y.B.Sc.	Mr. D. A. Tuwar
8.	Effect of some wild plants extract on weeds	1. Miss. Vaishnavi N. Sonawane 2. Miss. Suvarna R. Kurhe	T.Y.B.Sc. T.Y.B.Sc.	Mr. D. A. Tuwar
9.	Preparation of Flora of the College Camps	1. Mr. Nitin B. Mhasrup 2. Mr. Nitin Rajendra Kurhe	T.Y.B. Sc. T.Y.B. Sc.	Mr. D. A. Tuwar
10.	Study of antifungal effect of <i>Bauhinia tomentosa</i>	1. Miss. Pooja S. Lokhande 2. Miss. Rupali G. Dhumal	T.Y.B. Sc. T.Y.B. Sc.	Miss. S. S. Sase
<b>Total</b>	<b>10</b>	<b>24</b>		

### C) Department of Geography

Sr. No.	Name of Project	Name of Student	Class	Name of Faculty guide
1	Application of Dumpy level in drainage for rural planning	1. Mr. Pramod B.Gore 2. Mr. Vshal B.Hapse 3. Miss.Komal R.Tambe 4. Miss.Swati V.Telore	S.Y.B.A. S.Y.B.A. S.Y.B.A. S.Y.B.A.	Dr. R.V. Wagh
2	Application of watershed	1. Miss.Manisha R.Auti 2. Miss.Vrushali	S.Y.B.Sc. S.Y.B.Sc.	Mr. S.Z. Fakir

	Management for water and soil conservation	A.Chaudhari 3. Miss.Rutuja S.Dahatonde 4. Miss.Shweta K.Tale	S.Y.B.Sc. S.Y.B.Sc.	
3	Geographical study of river Koutuki with the help of GIS	1. Mr. Tushar T.Bule 2. Mr. Abhijit R.Dafal 3. Miss. Shubhangi N.Belhekar 4. Miss.Priyanka D.Gaikwad	S.Y.B.A. S.Y.B.A. S.Y.B.A. S.Y.B.A.	Mr. S.K. Auti
4	Role of technology in Agricultural development	1. Mr. Shrikrushna S.Gadakh 2. Mr. Sudarshan B.Gadakh 3. Mr. Niketan D.Dhaktode 4. Mr. Sanket K.Avhad	S.Y.B.Sc. S.Y.B.Sc. S.Y.B.Sc. S.Y.B.Sc.	Mr. A.S. Darandale
<b>Total</b>	<b>04</b>	<b>16</b>		

#### D) Inter-Disciplinary Projects

Sr. No.	Name of Project	Name of Student	Class	Name Guide
1	Waste Plastic Management for College Campus	1. Miss. Shweta Burhade 2. Miss. Rupali Bankar	T.Y.B.Sc. T.Y.B.Sc.	Mr. M.S. Jangale
2	Study of Mosquito Attracting Fragrances	1. Miss. Vrushali Chaudhari 2. Miss. Pranali Kardile	S.Y.B.Sc. S.Y.B.Sc.	Mr. M.S. Jangale
3	Assessment and Monitoring of Waste Generated in College Campus	1. Miss. Chaitali P.Kshirsagar 2. Miss. Nikita P.Kale 3. Miss. Payal B. Sangale	T.Y.B.Sc.	Dr. S. L. Laware
4	Preparation and Analysis of Protein Rich Cookies	1. Miss. Rupali S.Zirpe 2. Mr. Vaibhav S.Pawar	S.Y.B.Voc. S.Y.B.Voc.	Mr. A.S. Jadhav
5	Preparation and Analysis of Iron Rich Beet Root	1. Mr. Rushikesh R.Lawande 2. Miss.Vidya B.Sadre	S.Y.B.Voc. S.Y.B.Voc.	Mr. A.S. Jadhav
6	Preparation and Analysis of Gauva Juice with Rose Flavor	1. Miss. Mrunal A.Vaje 2. Rutuja S.Athae	F.Y.B.Voc. F.Y.B.Voc.	Miss. S.S. Phaktkar
7	Collection and classification of data from Sonai Village	1. Mr.Kohale 2. Miss. Prajakta Salunke	S.Y. BBA (CA) T.Y. BBA (CA)	Mr. LiyakatSa yyad
8	To prepare a plan for data collection to collect qualitative of a village	1. Miss. Rutuja Borude 2. Mr. Rama Bhakare	S.Y. BBA (CA) T.Y. BBA (CA)	Dr. Shankar Laware Mr. Sagar Tarde
9	Collection of	1. Miss. Sonali Aagle	S.Y. BBA	Mr.

	information on Vanjarwadi village and validation of data through interview	2. Mr. Akshay Gore 3. Mr. Annasaheb Kadam	(CA) T.Y. BBA (CA)	LiyakatSa yyad Dr. S. S. Darade
10	To prepare and plan parameters to collect data for developing a village website	1. Mr. PankajDharmjidnyasu 2. Mr. AkshayKute	S.Y. BBA (CA) T.Y. BBA (CA)	Mr. LiyakatSa yyad Mr. Sagar Tarde
11	Data collection and Classification for website development for Village-Shiregaon	1. Miss. Khushi Sharma 2. Mr. MukindaPatore 3. Mr. SurajNimse	S.Y. BBA (CA) T.Y. BBA (CA)	Dr. Shankar Laware Mr. Satish Ghugarkar
<b>Total</b>	<b>11</b>	<b>24</b>		

## **Industrial/Field visits by students:**

### **A) Department of Chemistry (Report)**

One day field visit was organized at Sahyadri Farms and Sula Vineyards at Nashik by Dept. of Chemistry and B.Voc. (Food Processing) Department on 17 Jan. 2020. In the morning session faculty and students visited Sahyadri Farm Nashik. This was a big group of farmers who cultivate and process different fruits and vegetables. The group observed the various processes carried out on fruits and vegetables. In the afternoon session we visited the Sula Vineyards at Nashik. It produces wines from grapes and other fruits. Here we observed the fermentation tank, fermentation process, distillation of ferment liquid, etc. In this visit students learnt about various processes that takes place in industry, which will be beneficial to them for future. Total 45 students participated.

### **B) Department of Botany (Report)**

An Excursion Study tour was arranged by Department of Botany at Vani and Saputara on 28 January 2020. For this tour 29 students were involved including 05 boys and 24 girl participants. Dr. Darandale V.E., Tuwar D. A., Miss. Wable M. A. and Miss. Sase S. N. were the faculty members with students. Vani is located in Nashik District, Maharashtra, India. Vani hills are situated on the top of the hill range. The study area is located between latitude  $20^{\circ} 23'05''$ -  $20^{\circ} 23'55''$  and longitude  $73^{\circ} 54'05''$ -  $73^{\circ} 54'30''$  and comes within the topo-sheet no. 46H/15 allocated by the Survey of India. Saputara is located in Dang district of Gujrat, India. The geographical location of Saputara was latitude  $20^{\circ} 45'59.99''$ N and longitude  $73^{\circ} 28'59.99''$  E. Vani and Saputara are suitable spot for the study and collection of plants as well as for studying ecology. These places have suitable

climatic conditions for plant as well as animal diversity. Students observed and studied various plants with different families like Asteraceae, Bignoniaceae, Arecaceae, Caesalpinaceae, Papilionaceae, Mimosaceae, Verbinaceae, etc. with the help of faculty. At the place there was one huge pond, from where students collected Hydrophytes like *Hydrilla* and Algae like *Chara*, *Spirogira* etc. During excursion one *Zamia* species with male and female cones were observed and collected by students.

### **C) Department of Geography (Report)**

#### **Field Visit: 1**

One day field visit was organized on 3<sup>rd</sup> March 2020 in morning session. The location of this field work was at Shani- Shingnapur, Tal- Newasa, Ahmednagar. There were total 40 students participated in this field work. Student took training about the GPS technology and surveying. These students were trained about how to make latitude and longitude(coordinates) references with the help of GPS instrument. Shanishingnapur is holy place of the Lord Shani. GPS survey was useful for the location of the shops, hotels, restaurants, road connectivity etc. to prepare maps.

#### **Field Visit: 2**

In the afternoon session second field visit was organized on same day at Sonai.

There is a river named Kautuki, at about 2 Kms from the College campus. With the help of Dumpy level, it is possible to find out the slope of river. Drainage system of this region was studied with the help of Dumpy level. Student understood how to develop an area map with the large scale map. This field visit has helped the students to learn and develop ideas about rural planning. Students also understood the importance of leveling and the problems associated with the drainage system. Drainage network management is necessary to reduce the water pollution near the residential zone.

#### **Study Tour at Moraya Chinchore Village**

There is a village named Moraya Chinchore about 10km from college Campus. One day study tour was organized at this place on 20 January 2020 by Chemistry, Botany and Geography Departments. Total 82 students and 09 teachers participated. The Moraya Chinchore village is Ideal Village. This Village is adopted by our parent NGO, Yashwant Samajik Pratishthan, Sonai and performing different activities for its development such as, Tree plantation and nurturing, Water shed management, 'Paani Adva Paani Jirava', Swachata Abhiyan, etc. In this Study tour students learned how this activity giving benefits to the village and Society. All students are participated in tree plantation activity.



## 7) Training received by Faculty/Students from participating departments:

### A) Department of Chemistry

Sr. No.	Title of training programme	Venue	Date	Faculty participated
1	Teacher Enrichment Programme	New Arts, Commerce, and Science College Ahmednagar.	17 <sup>th</sup> & 18 <sup>th</sup> July 2019	Mr. Mahesh S. Jangale (Faculty)
2	Online Refresher Course in Chemistry for Higher education	Sri Guru Tegh Bahadur Khalsa College, Delhi University (ARPIT)	16 weeks 1 Oct. 2019 to 31 Dec. 2019	
3	Student Awareness Programme	Centre for Innovation, Incubation and Enterprise Dept., S.P.P.U. Pune at New Arts, Commerce and Science College Ahmednagar.	28th August 2019	Miss. Chaitali P. Kshirsagar (Student)

### C) Department of Geography

Sr. No.	Title of training programme	Venue	Date	Faculty participated
1	Online Refresher Course in Higher education	ARPIT, SWAYAM	12 Weeks Nov. 2019 to Feb. 2020	Mr. Shoukat Z. Fakir
2	Certificate Course in GIS	Knowhere Genomatics Pune	2 <sup>nd</sup> May 2019 to 1 <sup>st</sup> June 2019	Mr. Amol S. Darandale

## 8) List of exhibitions/seminars/training courses conducted by the college:

### i) Student Development Programme

A week long 'Student Development Programme' was organized in the college between 29/07/2019 to 03/08/2019 under the aegis of DBT Star College Scheme. In this programme 10 teachers and 118 students from Chemistry, Botany and Geography Departments participated. Principal Dr. S. L. Laware, Dr. A. R. Tuwar, Dr. V. E. Darandale Mr. S. Z. Fakir & Mr. M. S. Jangale delivered lectures and Dr. M. J. Shaikh coordinated the programme. During SDP, Star College scheme was explained, and students were made aware about usefulness of this scheme. In this programme students were provided with the latest developments in the subject and also acquainted with the

various activities to be conducted during Academic year 2019-2020 under DBT Star College Scheme. The mind doubts about implementation of theory, practical and hands on tools under the Star College scheme, running parallel to regular University Academics were cleared by all the three Departmental Coordinators.

## **ii) National Science Day Programme**

On the occasion of National Science Day, on 28<sup>th</sup> February 2020, a Seminar was conducted in the College, for the enrolled students under DBT Star College Scheme. The Chief Guest was Dr. G. M. Pondhe, Associate Professor and Head, Department of Environmental Science, P.V.P. College, Pravaranagar. The programme was chaired by Principal Dr.S.L. Laware. During the speech, the chief guest discussed about Advances in Chemical and Life Sciences and how in future inter-departmental courses will be beneficial to students. As many as 96 students and 12 faculty members attended the programme.

## **iii) Training Programs**

### **Interview technique, Skills required for QC, QA and R & D work, future in chemical and pharmaceutical industry:-**

A training programme on Interview techniques, Skill required for Quality Control, Quality Assurance and Research & Development work and future in chemical and pharmaceutical industry, was organized on 30<sup>th</sup> November 2019 in the Seminar Hall at 10.00am. Total 47 students participated in the programme. Dr. Kishor S. Rajdeo (Assistant Manager, Research & Development, Apcotex Industries Ltd., Gujarat India.), trained the students and explained how to prepare CV for interview, how to face interview, etc. He also explained importance of skills in handling instruments like HPLC and IR, required for QC, QA and R & D work. All the participating students actively participated. For this programme Dr. S.L. Laware (Principal), Dr. Tuwar A.R. (Vice, Principal) Prof. V.R. Phatake (HOD Chemistry Dept.), Mr. V.M. Pawar, Mr. Y.B. Salve, and other faculty were present. This programme was organized by Department of Chemistry, and coordinated by Mr. M.S. Jangale.

### **Guest lecture on IPR - Converting Idea to Patent**

The guest lecture on IPR - Converting Idea to Patent was organized in the college on 23/12/2019. Dr. Amol Potgantwar and Dr. Vinodkumar Pathade from Sandip University Nashik, delivered lectures and offered their valuable guidance. For this programme Dr. S.L. Laware (Principal), Dr. Tuwar A.R. (Vice, Principal), Mr. V.R. Phatake, Mr. B.L. Shinde, Mr. S.A. Najan, Mr. M.S. Jangale, Mr. V.M Pawar, Mrs. M.B. Lande, and 10 other teachers, 42 students of Chemistry Dept. and 60 students of other departments actively participated in lecture.

### **Hands on training on skill development:**

One day workshop on Flower arrangement and Bouquet preparation was organized by Department of Botany on 09/01/2020. About 78 students of different classes of B.Sc.

participated in this workshop. This workshop was conducted by Prof. Tuwar D. A. Different types of flower arrangements and usefulness of these flowers to make an attractive Bouquet was explained by the resource person. All the students were divided into 12 groups and a competition was arranged to make the Bouquet by them.

### **Bridging the Gap between Traditional knowledge and current technologies**

So far we have been following the traditional system of teaching using lecture method. Today's student is well versed with the current technologies like use of mobile and internet technologies. He is much faster in learning as compared with his teacher who is still following the traditional chalk and talk technology. Today, information is stored not only in books, but also digitally and can be retrieved 24/7. In order to bridge this gap we have adopted current technologies like digital class rooms, equipped with computers, internet facility, LCD projector, Interactive boards and other audio-visual facilities. This addition to the traditional system has enabled the students to have good understanding of the subject.

Financial assistance from DBT has enabled us to purchase the audio-visual equipment and set up digital class rooms. The college, at present has 2 such digital class rooms.

Many scientific concepts, which students have learned in the class rooms, following the traditional teaching methods, remained incomprehensive to students, as they could not be tested in the laboratory, personally. We tried to bridge this gap by providing hands on training to students in way of project work and add on practicals.

Faculties are attending online faculty training programs. This replaces the traditional system of attending program in person with in closed room. This has resulted in utilizing free time effectively. So far three faculty members have attended and successfully completed online faculty training programs in this current academic year.

The nearby sister institute, 'College of Pharmacy, Sonai' has advanced instruments such as IR, HPLC, and UV-visible Double Beam Spectrophotometer. Training was given to our faculties of Chemistry and Botany Departments about handling, working and applications of these instruments.

### **Workshop on Data Input and Data collection from villages**

A Two-Day Workshop on Data Input and Data collection from villages on 14-15 September 2019 was conducted. In this workshop Mr. Sagar Tarade and Mr. Satish Ghugarkar Viewtech Software Pune, worked as trainers. Inauguration has done with the auspicious hands of Dr. Shankar Laware. During this workshop students were trained how to collect data on various aspects including social, cultural, health, nutrition and environmental. How the information is validated based on facts.

Outcome of the Workshop as below: Students learnt how to make a plan for collection of data and what should be the parameters. They also learnt how to consult the villagers for getting correct information. During the entire workshop student gained basic

knowledge about the process and ways of data classification. Total 40 Students participated.

#### **iv) Student Participation in Exhibitions**

##### **A) Department of Botany:**

Department of Botany has organized Flower Exhibition and one day workshop on preparation of Flower Bouquet and flower decoration on 11<sup>th</sup> February 2020. Total 50 students of the Department participated in this exhibition cum workshop. In this program, participants learnt to prepare flower bouquet and flower decoration on table, on walls, around the entrance and doors, etc. Some students gave information about flower decoration to visitors and guests, who visited our exhibition.

##### **B) Department of Geography:**

On the occasion of National Geography Day, i.e. 14<sup>th</sup> January, Department of Geography has arranged Two Days Exhibition (14/01/2020 and 15/01/2020) of Models, Instruments and Equipment for all College students, Higher Secondary Students and Parents. Our DBT star college scheme students had made different kinds of models and experiment related on the Geographical knowledge. More than 40 models were presented by students. This exhibition was open to all students of this as well as other neighboring colleges. The exhibition was also attended by parents and villagers in large numbers. The exhibition was open for two days, so that large number of students and visitors could get benefit of this.

Following instruments were displayed in the exhibition -

1. Geography surveying instruments and its uses in different sector
2. Weather instrument and its function
3. Dumpy Level and set
4. Theodolite instrument
5. Telescope
6. Weather instrument as- Thermometer, Barometer, Hygrometer, Wind vane, Cup Anemometer etc.
7. Maps and Chart- Toposheet series, Weather Chart, Regional world Map and Indian Maps
8. Landform models
9. Watershed models
10. Soil and water conservation model
11. New horticulture activity and animal husbandry
12. Global climatic changes
15. Model of hydrological Cycle
16. Causes of deforestation
17. Process of Volcano
18. World Population growth
19. Models of Solar system
20. Vertical layer of the atmosphere

**9) Name, designation, host institute of guest faculty invited:****A) Department of Chemistry**

Sr. No.	Name	Designation	Name of Host institute	Dates of visit	Topic of Lecture/ Workshop
1	Dr. Kishor Rajdeo	Assistant Manager, Research & Development	Apcotex Industries Ltd., Gujarat India	30.11.2019	Interview techniques, Skill required for QC, QA and R & D work in Pharmaceuticals
2	Dr. Amol Potgantwar	Assistant Professor	Sandip University Nashik	23.12.2019	IPR- Converting Idea to Patent
3	Dr. Vinodkumar Pathade	Assistant Professor	Sandip University Nashik	23.12.2019	IPR- Converting Idea to Patent
4	Dr. Ramesh Naval	Associate Professor	Jijamata College of Science, Bhende	13.01.2020	Green Chemistry

**B) Botany**

Sr. No	Name	Designation	Name of Host Institute	Dates of Visit	Topic of Lecture/ Practical
1	Dr. B.J. Apparao	Principal	Jijamata College of Science, Bhende	09/08/2019	Research Methodology in Plant Sciences
2	Dr. A.A. Kulkarni	Associate Professor	Ahmednagar College, Ahmednagar	16/01/2020	Applications of Bio-fertilizer in legume Crops

**C) Department of Geography**

Sr. No	Name	Designation	Name of Host Institute	Dates of Visit	Topic of Lecture/ Practical
1	Dr. B.K. Wani	Assistant Professor	A.C.S. College, Satral	19/08/2019	GIS and Dumpy level surveying practical
2	Mr. Sandip Pawar	Software Trainer	Schnell Informatics Pune	11/02/2020 12/02/2020	Trainer for Global Mapper software

**10) Date of Advisory committee meeting:**

Meeting No. 1	-	13.06.2019
Meeting No. 2	-	23.09.2019
Meeting No. 3	-	16.01.2020

(Minutes of meetings are attached at the end)

**11) List of new Practicals introduced in different departments in last one year:****A) Department of Chemistry**

Sr. No.	Name of new practical	Beneficiary/ Target group
1	Extraction of Lemon grass oil by steam distillation	S.Y.B.Sc.
2	Determination of acid strength of various fruits by Titrimetry	S.Y.B.Sc.
3	Isolation and Estimation of lycopene from tomato by spectrophotometry method.	S.Y.B.Sc.
4	Estimation of Aspirin from given Tablet by Spectrophotometry method	S.Y.B.Sc.
5	Manufacturing of soap by Saponification Process from vegetable oil	T.Y.B.Sc.
6	Estimation of Organic Carbon in Soil by Colorimetric method	T.Y.B.Sc.
7	Synthesis of silver Nanoparticles by Co-precipitation method	T.Y.B.Sc.
8	Photocatalytic degradation of Methyl orange dye using Nanoparticles	T.Y.B.Sc.
9	Organic Mixture separation by chemical method	T.Y.B.Sc.
10	Demonstration of Handling and working of Double Beam Spectrophotometer	T.Y.B.Sc.
11	Purification techniques in organic chemistry (recrystallisation and distillation)	S.Y.B.Sc.
12	Demonstration of Thin Layer Chromatography Technique ( Identification and purification of compounds)	T.Y.B.Sc.
13	Steam distillation technique for extraction of essential oil from plant leaf (Eucalyptus oil)	S.Y.B.Sc.
14	Demonstration of Handling and working of Flame Photometer	T.Y.B.Sc.

**Outcome of the Activity:**

The students received the skills to handle instruments such as Conductivity meter, pH meter, Colorimeter, Flame Photometer, UV Spectrophotometer, Muffle furnace, Ultrasonic bath, Synthesis of Nanoparticles and their applications such as degradation of dyes, manufacturing of soaps and their types, purification of organic compounds, distillation methods, soil sample collections, organic reactions with mole calculations, green reactions, their principals and applications, etc.

In the guest lecture on Interview technique, Skill required for QC, QA and R & D work, future in chemical and pharmaceutical industry teacher and students understood skill required in chemical and pharmaceutical industry at present and in future. In the guest lecture on IPR- 'Converting Idea to Patent' teachers and students learned how to convert idea into patent and how to file the patent.

Some students presented their project in competition organized in the college such as Innovation Poster Presentation Competition, Under CIIL OF SPPU, PUNE, New Entrepreneur Competition under Student Development Department, SPPU Pune.

Miss. Chaitali Kshirsagar, our TYBSc student presented a project – organic waste management under My Innovative Research Promotional Speeches activity in INNOVATION FESTIVAL organized in the college, on the occasion of 'Birth anniversary of former president Dr. A.P.J .Abdul Kalam'.

### **B) Department of Botany**

Sr. No.	Name of new Practical	Beneficiary/ Target group
1	Sterilization of Glassware and Equipment for media preparation and inoculation for Plant tissue culture.	F.Y.B.Sc.
2	To study the process of M. S. Media Preparation for tissue culture	F.Y.B.Sc.
3	To study the Inoculation techniques in plant tissue culture	F.Y.B.Sc.
4	Improvement of crop yield by Application of Organic and Biofertilizers: Selection and preparation of plot	F.Y.B.Sc.
5	Improvement of crop yield by Application of Organic and Biofertilizers- Selection of crop for Application of Bio fertilizer Seed treatment and Sowing of seeds	T.Y.B.Sc.
6	Improvement of crop yield by Application of Organic and Biofertilizers- Applications of Organic and Biofertilizers	T.Y.B.Sc.
7	Isolation and small scale production of useful fungi.- Collection of soil samples from college campus	S.Y.B.Sc.
8	Isolation and small scale production of useful Fungi.- Isolation of fungi of collected sample	S.Y.B.Sc.
9	Isolation and small scale production of useful Fungi.- Scaling up and production of Fungi	S.Y.B.Sc.
10	Study of Water parameters (pH, EC, DO, BOD) and Soil parameters (WHC, pH, EC, DO, NPK etc.)	S.Y.B.Sc.
11	Study of Mutagenic effect on seed germination	T.Y.B.Sc.

12	To study the collection and Segregation of Organic Waste for solid state fermentation.	T.Y.B.Sc.
13	To study the Process on Organic Waste for Solid state fermentation.	T.Y.B.Sc.
14	Preparation of Awla Candy	T.Y.B.Sc.
15	Preparation of <i>Tutti frutti</i>	T.Y.B.Sc.

### **Outcome of the Activity:**

All the students have been benefited by these lectures and practical. The students of F.Y.B.Sc have acquired knowledge about sterilization procedures of glassware and chemicals, preparation of media for plant tissue culture and inoculation of explants in tissue culture vials. The S.Y.B. Sc. students got the knowledge about Organic Farming, the Soil parameters and analysis of water and soil. T.Y.B. Sc. students learnt about the collection of Organic Waste and how to segregate it and they also learnt about processing on Organic Waste for Solid state fermentation as well as preparation of Awla candy and Tutti frutti. This might help them in future to start up with small scale agro based industry.

### **C) Department of Geography**

Sr. No.	Name of new practical	Beneficiary/ Target group
1	Introduction of Surveying	S.Y.B.A.,S.Y.B.Sc.
2	Types of Surveying	S.Y.B.A.,S.Y.B.Sc.
3	Prismatic Surveying	S.Y.B.A.,S.Y.B.Sc.
4	Plane Table Surveying	S.Y.B.A.,S.Y.B.Sc.
5	Introduction of GIS Advance technology	S.Y.B.Sc.,T.Y.B.A
6	Introduction to Maps and Maps Scale	S.Y.B.Sc.,T.Y.B.A
7	Surveying with GPS	S.Y.B.Sc.,T.Y.B.A
8	Use of Global Mapper Software	S.Y.B.Sc.,T.Y.B.A
9	Practical in Dumpy level	S.Y.B.Sc.,T.Y.B.A

### **Outcome of the Activity:**

The participating students have been benefited by these add-on practical, demonstration, project work and workshops. The students have acquired the skills of handling the instruments individually related with the survey. The technique of surveying can be used professionally as Land surveyor in Government and Private Firms. Also study of advanced GIS technology is a major achievement for rural students. Practical on Dumpy level are useful in future for the field like road and dam construction.



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

### A) Department of Chemistry:

Sr. No.	Name of Item	Model	Nos. Qty	Cost per Unit	Total cost	Company	Date of Purchase	Installation Report
1.	pH Meter	EQ-611	04	11750	47000	Equiptronics	25/7/2019	Installed & ok
2.	Conductivity meter	EQ-661	04	16050	64200	Equiptronics	25/7/2019	Installed & ok
3.	UV Cabinet	BTI-49	01	7062	7062	Biotechnics India Pvt Ltd	25/7/2019	Installed & ok
4.	Colorimeter	EQ-650 A	03	9630	28890	Equiptronics	25/7/2019	Installed & ok
5.	Centrifuge	Bench Top CH 015/5	04	19000	76000	Adarsh	25/7/2019	Installed & ok
6.	Sonicator	LE -60	02	10298	20596	Galaxy Scientific Equipments	25/7/2019	Installed & ok
7.	Analytical Balance 0.01gm	CBB-1000 0.01gm	04	20597	82388	Contech	25/7/2019	Installed & ok
8.	Hot air Drying gun (Hair Dryer)	BHD006/00	04	1750	7000	Philips	25/7/2019	Installed & ok
9.	Freezer	HCF-148 H-2	02	18000	36000	Haier	25/7/2019	Installed & ok
10.	Refrigerator	LG 284L GL-I302RPZL	01	28000	28000	LG	25/7/2019	Installed & ok
11.	Digital melting point apparatus	LT-115	01	23540	23540	Labtronics	25/7/2019	Installed & ok
12.	Analytical Balance	CAS – 44 0.0001gm	01	42800	42800	Contech	25/7/2019	Installed & ok
13.	Microprocessor flame photometer	LT-66	01	35310	35310	Labtronics	25/7/2019	Installed & ok
14.	IR Lamp	IL-11	10	2350	23500	Beurer	25/7/2019	Installed & ok
15.	TLC Plate Silica Gel	Catalog 1.05554.0001	05	4500	22500	Merck	25/7/2019	Ok in use
<b>Total Cost in Rupees</b>					<b>623563</b>			
<b>Amount-Discount 3%+GST18%</b>					<b>/-</b>			
<b>(544786-16343=528443+95120=623563/-)</b>								

### B) Department of Botany:


Sr. No.	Name of Item	Model	Nos./ Qty.	Cost per Unit	Total cost	Company	Date of Purchase	Installation Report
1.	Micro Centrifuge	R-12C	1	38000	38000	Remi	06/8/2019	Installed & ok
2.	Deluxe Conductivity meter	LT-26	1	9250	9250	Labtronics	06/8/2019	Installed & ok

3.	Digital Cup Anemometer	AM-4201	1	10312	10312	Lutron	06/8/2019	Installed & ok
4.	Digital Water Bath	BTI-57	1	15500	15500	Biotechnics	06/8/2019	Installed & ok
5.	Senior Rotary Microtome	MT-1090A	01	50075	50075	Weswox	06/8/2019	Installed & ok
6.	Soil & Water analysis Kit	LT-59	01	36000	36000	Labtronics	06/8/2019	Installed & ok
7.	Student Compound Microscope	NA	17	3500	59500	Labby Scopes	06/8/2019	Installed & ok
8.	UV Chamber (Ultra Violet Inspection Cabinet )	BTI-49	01	6600	6600	Biotechnics	06/8/2019	Installed & ok
9.	Vaccum Pump (Oil Free Diaphragm Type)	TID-25-S	01	10500	10500	Biotechnics	06/8/2019	Installed & ok
10.	Laboratory Oven	BTI-29	01	12800	12800	Biotechnics	06/8/2019	Installed & ok
11.	Digital balance 0.5grm to 10kg	NA	01	7800	7800	Tapson	06/8/2019	Installed & ok
12.	Digital Turbidity meter	LT-33	01	12000	12000	Labtronics	06/8/2019	Installed & ok
13.	Heamocyto meter	NA	01	1750	1750	Indian	06/8/2019	Installed & ok
14.	Electrophoresis Apparatus power supply with Horizontal Gel Apparatus	EQ760/752	01	27000	27000	Equiptronics	06/8/2019	Installed & ok
15.	Microscope with Live LED screen	LED-08	01	82917	82917	Spark - X	06/8/2019	Installed & ok
16.	Cork borer set of 12 German pattern	NA	1	3150	3150		06/8/2019	Ok in use
17.	Wet & Dry Thermometer	NA	2	1050	2100	Dimple	06/8/2019	Ok in use
18.	Maximum and Minimum Thermometer	NA	2	1100	2200	Dimple	06/8/2019	Ok in use
19.	Micro- pipette Variable 2 to 20ul	NA	01	3000	3000	Biosystem (shine)	06/8/2019	Ok in use
20.	Micro- pipette Variable 20 to 200ul	NA	2	3000	6000	Biosystem (shine)	06/8/2019	Ok in use
21.	Micro- pipette Variable 100 to 1000ul	NA	03	3000	9000	Biosystem (shine)	06/8/2019	Ok in use
22.	Soil Thermometer 12"	NA	02	650	1300	Indian	06/8/2019	Ok in use
23.	Mortar & pestle Agate 2"	NA	03	475	1425	-	06/8/2019	Ok in use
24.	Mortar & pestle Agate 4"	NA	03	775	2325	-	06/8/2019	Ok in use


25.	Secateurs	NA	06	550	3300	Folcon	06/8/2019	Ok in use
26.	Hedge Cutter	NA	03	650	1950	Folcon	06/8/2019	Ok in use
27.	Burette stand	NA	24	950	22800	-	06/8/2019	Ok in use
28.	Burette Clamp double	NA	24	350	8400	-	06/8/2019	Ok in use
<b>Total:</b>					446954			
<b>GST 18%</b>					80452			
<b>Total amount (Rs.) including GST</b>					<b>527406</b>			
					/-			

**C) Department of Geography:**

Sr. No.	Name of Item	Model	Nos./ Qnty	Cost / Unit (Rs.)	Total cost (Rs.)	Company	Date of Purchase	Installation Report
1	Plane Table	BPS-003A	04	7400	29600	Best Products	24/8/2019	Ok in use
2	Prismatic Compass	NA	04	3900	15600	Best Products	24/8/2019	Ok in use
3	Dumpy Level	DL 12	02	6800	13600	Best Products	24/8/2019	Ok in use
4	GPS	Oregon 750	01	36300	36300	Gramin	24/8/2019	Installed & ok
5	Measuring Tape	NA	05	490	2450	Best Products	24/8/2019	Ok in use
6	Computer	Intel i7	01	52000	52000	Dell	24/8/2019	Installed & ok
7	Printer	Laser Jet 1005	01	16700	16700	HP	24/8/2019	Installed & ok
8	UPS	NA	02	1700	3400	Intex	24/8/2019	Installed & ok
					<b>Total amount (Rs.)including GST: 189864/-</b>			

  
**Dr. Mohiuddin J. Shaikh**  
 Coordinator  
 DBT-Star College Scheme  
 Mula Education Society's  
 Arts, Commerce & Science College, Sonai

  
**Arts Officer**  
 Mula Education Society's  
 Arts, Commerce & Science College,  
 Tal. Newasa, Dist. Ahmednagar.

  
**PRINCIPAL**  
 Mula Education Society's  
 Arts, Commerce & Science College  
 Sonai, Tal. Newasa, Dist. A'nagar  
 Pin - 414105

### 13) Details of books and journals subscribed from DBT grant:

Sr. No.	Name of Book/ Journal	Publisher	Date of Purchase	Amount (Rs.)
1.	Handbook of Water and Waste analysis	Atlantic Pub. New Delhi	15/4/2019	522.50
2.	Manual of Soil Plant & Water Analysis	Astral Instrument Pvt.Ltd, New Delhi	15/4/2019	945.25
3.	Practical Experimental Designs & Optimization Methods for Chemists	VCH America	15/4/2019	4263.60
4.	Models in Chemical Science	BayneCV	15/4/2019	3819.00
5.	Building Scientific Apparatus	Benjamin W.A.	15/4/2019	4263.60

### 14) Qualitative improvements due to DBT support: Please highlight (5 salient lines)

Due to support from Department of Biotechnology, the college has made the following qualitative improvements in teaching – learning processes.

- 1. Enrichment of Laboratories:** The institution could procure lot of essential equipments and instruments in the concerned departments. Each participating department, viz., Chemistry, Botany and Geography has purchased new instruments worth Rs. 1000000/-. This has enriched the departments and enabled us to them to conduct several new practical which could not be performed earlier and involve several students to take up project work. This has resulted in significant qualitative improvement in performing / conducting practical in the department and enabled the students to work on equipment.
- 2. Introduction of new Practical:** During the two academic years, 2018-19 and 2019-20, after getting DBT grant, a total of 38 new practicals were introduced and conducted by the participating Departments. The Chemistry department could introduce 14 new practicals. Similarly department of Botany has introduced 15 new practicals and the department of Geography, 9 new practicals. This number was 28 during the last academic year and 38 during this academic year. Thus there was 35% increase in introduction of new practicals as compared to previous academic year (Fig.1).

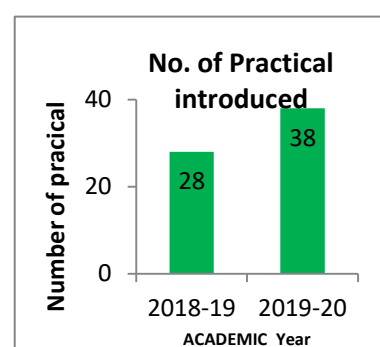


Figure 1

- 3. Increase in Number of Student Participation in Execution of Projects:** Number of students undertaking project work has increased tremendously during the last two years. During the academic year 2018-19, only 30 students could undertake project

work in the departments, whereas during the last academic year 2019-20, the number has increased to 81 (Fig. 2). Thus due to DBT financial assistance there was a 2.7 fold increase in the number of students undertaking project work in the college. This is a great leap towards providing individual exposure to students to get firsthand experience on design and execution of projects. The students have acquired the skills of handling the instruments individually. This has also helped in inculcating / developing scientific aptitude in students.

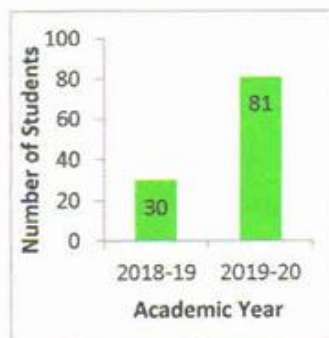


Figure 2

4. **Student Training Programs:** The College has organized 6 student training programs during this academic year. They are 1. Student Development Programme, 2. Training Program on Interview techniques, Skills required for QC, QA and R & D work, Future in Chemical and Pharmaceutical Industry, 3. Training program on IPR – ‘Converting Idea to Patent’, 4. Hands on training on ‘Skill Development’, 5. ‘Bridging the gap between Traditional Knowledge and Current Technologies’ and 6. Workshop on: ‘Data Input and Data Collection from Villages’. All these training programs were attended by large number of students. This has helped in motivating the students and acquiring the required skills in facing interview, handling instruments, understanding the procedures of patenting etc.

5. **Increase in number of Industrial / Field visits:** During this academic year, the college has organized five field visits, one each by Chemistry and Botany departments, two by the department of geography and one combine all departments. This is almost double as compared to last year (Fig.3).

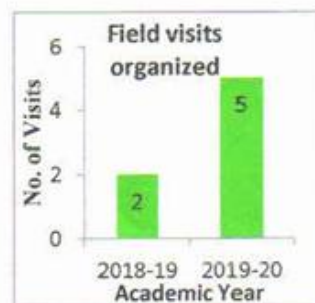


Figure 3

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

1. This year due to the Pandemic Covid 19, lockdown period was extended, so could not conclude the programme satisfactorily in a required way.

(Dr. Mohiuddin J. Shaikh)  
 Coordinator  
**Dr. Mohiuddin J. Shaikh**  
 Coordinator  
 DBT-Star College Scheme  
 Mula Education Society's  
 Arts, Commerce & Science College, Sonai



(Dr. Shankar L. Laware)  
 PRINCIPAL  
 Mula Education Society's  
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 Sonai, Tal. Newasa, Dist. Anagar  
 Pin - 414105

## **Glimpses of the Scheme**

### **Hands on Tools**



**Department of Chemistry: Students performing practical under DBT Scheme**



**Department of Botany: Students performing practical under DBT Scheme**



**Department of Geography: Students performing practical under DBT Scheme**

## **Glimpses of the Scheme**

### **Lectures and Demonstrations**



### **Department of Chemistry: Lectures and Demonstrations under DBT Scheme**



### **Department of Botany: Lectures and Demonstrations under DBT Scheme**



### **Department of Geography: Lectures and Demonstrations under DBT Scheme**

## **Glimpses of the Scheme**

### **Exhibition organized in the College by Students**



**Teachers, Parents and Students visit Exhibition organized by Geography Department**



**Exhibition of Models and Instrument**



**Flower and Bouquet Workshop**



**Flower and Bouquet Exhibition**



**New Entrepreneur Competition**



## **Glimpses of the Scheme Industry/Field Visits and Student Activities**



**Industrial Visit to Sahyadri Agro Farms and Sula Vineyard, Nashik**



**Participation of student in poster presentation in IIC competition by SPP University, Pune**

**Student Development Program**



**Field Visits by Department of Botany to Saputara**

**National Science Day Program**

Minutes of DBT Advisory Committee Meeting

①

Meeting - ⑨

Thursday - 13/06/2019

The meeting of DBT - Star college scheme Advisory committee was held on Thursday 13/06/2019 at 11-30 am in IQAC office.

Following members were present

S. no.	Name	Designation	Signature
1	Prin. Dr. S. L. Laware	Chairman	
2	Prin. Dr. R. G. Paradeshi	Ext. Expert Fergusson college	
3	Dr. M. J. Shaikh	Co-ordinator	
4	Dr. A. R. Tiwar	Vice Principals H.O.D. Botany	
5	Prof. V. R. Phatake	HOD, Chemistry	
6	Dr. R. V. Wagh	HOD, Geography	
7	Dr. V. E. Darandale	Coordinator, Botany	
8	Prof. A. D. A. Tiwar	Member - Bot	
9	Prof. S. A. Najan	Member - che.	
10	Prof. M. S. Jangale	Coord. - chem.	
11	Prof. Y. B. Salve	Mem - che.	
12	Prof. S. Z. Fakir	Coord. - Geo	
13	Prof. S. K. Auti	Mems. - Geo.	
14	Mr. S. K. Gadakh	Account officer	
		(P.T.O.)	

Minutes of the meeting No. - 09

(2)

~~Subj~~ The meeting of DBT-Star College Scheme Advisory committee was held in presence of External Expert - Principal Dr. R.G. Paradeshi, Fergusson college, Pune and chaired by Principal Dr. Shanker L. Laware. Following subjects were discussed.

Subject No. - 1

To discuss income and expenditure occurred during financial year 2018-19

Resolution No. - 1

Overall coordinator Dr. M. J. Shaikh, put the statements of income and expenditure accounts in the meeting.

Total grant received from DBT, New Delhi - 41,00,000/-

Interest earned from Bank - 1,25,511/-

Total income - 42,25,511/-

Expenditure on Non Recurring - 16,60,058/-

Expenditure on Recurring - 10,22,494/-

Total Expenditure - 26,82,552/-

Balance amount for next 2019-2020 year was

Rs. 15,42,958/-

Subject No. - 2

Implementation of the scheme during next financial year 2019-2020.

Resolution No. - 2

Principal Dr. R.G. Paradeshi, guided all committee members and departmental coordinators about effectively implementing the scheme during current year. He also guided about massive application of the scheme so as to benefit maximum number of students. It was decided to increase enrollment number of students. Even we can enroll students from Arts faculty, B.A and A. Voc faculties.

Subject No. - 3

To increase number of minor projects and increase involvement of students in projects

Resolution No. - 3

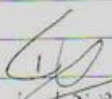
It has been decided to increase the number of project allotment by all the three participating departments. Each department will conduct atleast five projects and minimum number of students will be two, where as maximum number of students for each project will be restricted to four. All the faculty members will be involved in either guiding the project students or will conduct add-on practicals and demonstration practicals.


Subject No. - 4

To increase inter-disciplinary projects and involvement of students other than science departments

Resolution No. - 4

It has been decided to increase inter departmental and inter-disciplinary activities to make awareness and involvement of students from Arts, Humanities, Business Administration and Vocational courses. At least there shall be six minor projects and involvement of twenty students from different departments, other than science faculty.

  
(Dr. S. K. Sawane)  
Principal

  
(Dr. M. J. Shaikh)  
Coordinator



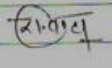


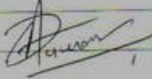
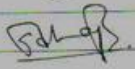
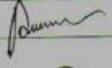
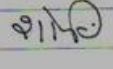
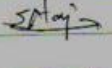
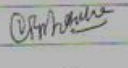


Meeting No. - 10

①

Monday - 23/09/2019

The meeting of Advisory Committee of DBT - Star College Scheme of Arts, Commerce and Science College, Sonai was held on Monday, 23<sup>rd</sup> September, 2019 at 12-00 pm in IGAC meeting hall.

Following members were present for meeting

- 1) Principal Dr. S. L. Laware - Chairperson - 
- 2) Dr. M. J. Shaikh - Coordinator - 
- 3) Dr. R. V. Wagh - H.O.D. Geography - 
- 4) Mr. S. R. Gadakh - Account officer - 
- 5) Dr. Dharandale V. E. Co-ordinator 
- 6) Tusar D. A. Member - Botany 
- 7) Salve Y. B. Member - Chem. 
- 8) Pawan V. M. Member - Chem. 
- 9) SHUKAT FAKIR Co-ordinator Geography. 
- 10) Mr. S. A. Najan Mem. Chemistry 
- 11) Mr. V. R. Phatoke HOD, Chemistry 
- 12) Mr. M. S. Jangale Co-ordinator Chemistry 
- 13) Dr. A. R. Tusar HOD Botany 

(P.T.O.)

Minutes of the meeting held on 23/09/2019

(2)

Subject No. - 1 -

Review of Non-Recurring grant for purchase of equipments

Resolution No. - 1

As the time limit for purchase of equipments under non-recurring grant head was upto 04/09/2019, the amount utilized for purchase of equipments was Rs. 13,40,833/- against balance grant of Rs. 13,39,942/-. It has been noted that excess amount of Rs. 891/- is considered to be the college contribution under non-recurring head.

Subject No. - 2 -

Review of enrollment of students under DBT-Star college, scheme

Resolution No. - 2 -

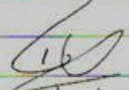
It has been noted that all the three participating departments has enrolled about 250 students from their own departments and about 50 students as inter-disciplinary students from other departments and other faculties. This is mainly to expand awareness of basic sciences amongst students of other than Science departments.

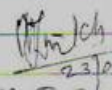
Subject No. - 3 -

Conduction of add-on practicals and demonstrations

Resolution No. - 3 -

All the three participating departments are conducting add-on practicals of about 90 to 120 minutes duration for the enrolled students. Some demonstration practicals have been conducted by respective teachers as extra classes and practicals

  
(Dr. S. L. Lawane)  
Principal

  
23/09/2019  
(Mr. M. J. Shaikh)  
Coordinator




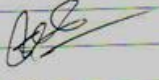


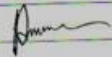


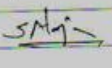
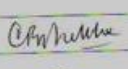


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Meeting No. - 11

Thursday - 16/01/2020

The meeting of advisory committee of DBT Star college Scheme of Mula Education Society's Arts, Commerce and Science college, Sorsai was held on Thursday 16<sup>th</sup> January 2020 at 11-00 am in Seminar Hall of the college.

Following members were present for meeting

- 1) Principal Dr. S. L. Laware - Chairman - 
- 2) Dr. M. J. Shaikh - Overall Coordinator - 
- 3) Dr. R. V. Wagh - HOD Geography - 
- 4) Mr. S. K. Gadakh - Account officer - 
- 5) Dr. Parvate V. E. - Co ordinator - 
- 6) Lake Y. B. - Member - Chem. - 
- 7) Pawar V. M. - Chem. Member - 
- 8) Tumar D. A. - Member - Botany - 
- 9) SHOUKAT FAKIR - CO ordinator Geography - 
- 10) Mr. S. A. Najam - Member Chem - 
- 11) Mr. V. R. Phatake - HOD, Chemistry - 
- 12) Mr. M. S. Jangale - Co ordinator - Chemistry - 
- 13) Dr. A. R. Tumar - HOD Botany -   
(P.T.O.)

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Minutes of the meeting held on 16/01/2020

(2)

Subject No. - 1 -

Review of lectures conducted by participating departments.

Resolutions no. - 1 -

Dr. V. C. Davanlule, coordinator of Botany, Mr. M. S. Jangal, coordinator of Chemistry and Mr. S. Z. Farin, coordinator of Geography shown the details of lectures conducted during academic year 2019-2020. It has been noted that about 80% of planned lectures have been conducted so far and they are advised to complete remaining till 28<sup>th</sup> February 2020.

Subject No. - 2 -

Review of Add-on practicals and demonstration practicals as hands-on tools

Resolutions no. - 2 -

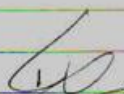
It has been noted that about 90% of planned practicals as hands-on tools has been ~~conducted~~ conducted so far by the respective teachers of participating departments. It is also advised to complete remaining practicals before 15<sup>th</sup> February 2020.

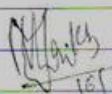
Subject No. - 3 -

Review of projects assigned to students.

Resolutions no. - 3 -

All the three coordinators of Botany, Chemistry and Geography has given data and summary about projects. It has been decided to keep the records of minor projects in the respective departments and will be provided for assessment as and when required.

  
(Dr. S. L. Laware)  
Principal

  
(Dr. M. J. Shaikh)  
Coordinator

(2)

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