

## Department of Biotechnology

### Proforma for submission of Annual Progress Report supported under Star College Scheme

1. Name of the College: PDEA'S Waghire College Arts, Commerce and Science, Saswad.

2. Name of Coordinator, designation: Dr. Vidya Vivek Ptatankar  
Address, Phone nos. Assistant Professor  
Department of Botany,  
Waghire College Saswad  
Mob. No. +91 7387140511

3. Assessment duration 19/08/2020 to 31/03/2021 Duration in years: ½ year

4. Details of Departments Supported

Sr. No	Name of Department	Courses (B.Sc./M.Sc./PG Diploma, certificate etc) offered	Regular Faculty members		
			With Ph.D.	Without Ph.D.	Total
1.	Chemistry	BSc, MSc	3	7	10
2.	Microbiology	BSc, MSc	1	4	5
3.	Botany	BSc	3	1	4
4.	Zoology	BSc	2	0	2

5. Number & Date of Advisory committee meeting:

Meeting Number: 07

Dates of meeting: 18/09/2020, 21/09/2020, 6/10/2020, 18/11/2020, 8/1/2021, 16/2/2021, 21/04/2021

6. Qualitative improvements due to DBT support. Please highlight 5 salient points (within 500 words).

**1. Purchase of Instruments for the development of laboratory:** DBT STAR College scheme provided all the basic laboratory instruments for the development of laboratory infrastructure and facilities. Although our institution has provided basic infrastructure, instrumentation and other facilities, the financial support from DBT has contributed in enhancement of our laboratories, providing quantitative and qualitative facilities to our rural students and thus creating an impact equivalent to being educated in any city college in Pune.

**2. Organization of guest lecture:** As a consequence of COVID -19 pandemic, offline work and other activities related to it are halted even till this date. However, the STAR College Scheme benefitted departments of the college have transitioned themselves from offline mode to online mode and fruitfully organized various online guest lectures of eminent personalities Thus, Students were guided about various career related aspects and recent approaches trending through various lectures.

**3. Organization of online Workshops:** With regards to provision of practical knowledge for better understanding of the respective subjects, Online workshops were arranged by the supported departments during this pandemic and lockdown period in whole of Maharashtra. Thus, shifting from the traditional way of teaching to virtual and ICT based teaching.

**4. Utilisation of Grant to enhance teaching and learning:** Although this year, the grant received was not utilised 100%, the benefitted departments plan to utilize it for students and teaching pragmas to enhance the quality of teaching and learning. We have assigned a project already to students where they can do referencing and basic work at home. Some second year B.Sc. students are doing small project of composting all kitchen waste at home under guidance of Microbiology department. Some projects required some experiments in the laboratory so we have permitted some students to carry out the experiment and take readings with taking all preventive care for COVID 19.

**5. Skill development program:** Through online manner few skill development programs were organised this year like Bonsai preparation, Herbarium Preparation, Vermicompost preparation etc. However, we intend to organize more skill -based development programs in this forth coming year.

**7. Any Novel aspect introduced or planning to introduce during the Scheme duration.**

- **Skill-based training program:** We tried to conduct skill-based training programs related to our subject area to get employment and to encourage entrepreneurship among the students. Like Botany, the department is planned to organize training programs like flower arrangements, horticulture techniques, mushroom cultivation, algae cultivation, bonsai techniques, etc. where skills are required to set up small-scale industry or business.

**8. Lessons learnt / difficulties faced/suggestions if any, in implementation of the programme and utilization of DBT grant.**

The most important lesson learned throughout this pandemic was that, you need a to find solution to problems in spite of all the hardships. Due to the pandemic, the difficulties we faced in the first year was in implementation of this program. Secondly, we received the grant in August 2020. So, besides the certain planned activities, other additional activities were accordingly decided based on the future and further condition of COVID. However, because of the pandemic situation and restrictions imposed some of the objectives we had proposed were difficult to achieve in this situation. We could not conduct hands-on training programs, workshops, practicals, Industrial field visits, etc. Thirdly, we lacked the required manpower, as some of the staff from supported departments got transferred, retired while few left the college. Fourthly, all the students could not be benefitted because of internet range problems or unavailability of smart phones. Yet, in spite of these difficulties, we have conducted online guest lecture series, online workshops, virtual visit to blood bank and online training programs as and when possible.

Faced Difficulties in arranging the following programs:

- Hands-on experiments/Practicals
- Skill development program for practical
- Industrial field visits for awareness and interest amongst students
- Faculty enhancement program through interaction with students.
- Small scientific research projects to create research interest among the students.
- Unable to conduct extra practical's due to unavailability of students due to pandemic situations.
- Workshop on soap preparation in the laboratory, Mushroom cultivation, Molecular techniques and so on.

**9. Key performance indicators: N/A**

Department of Chemistry																
S. no	Indicator	Pre-support						During /After Support						Remarks		
1	No. of students admitted	Total = 94 (TY BSc)						Total = 87 (TY BSc)								
		M= 38			F=56			M= 52			F= 35					
		SC	ST	OBC	G	SC	ST	OBC	G	SC	ST	OBC	G			

2	No. of students passing out (%) Students Admitted/passing out (pass %)	76.59% 94 students admitted 72 students passed out (76.59%)	-	
3	Drop-out rates	-	-	
4	No. of students opting for MSc	19	-	
5	Average marks	First Class	-	
6	No. of hands-on experiments being conducted	-	0	
7	No. of new experiments introduced	-	0	
8	Publications (scopus indexed) /patents, if any.	03	05	
9	Training received by faculty	2	0	
10	Exhibitions/seminars/training courses conducted	01 (“ <b>Emerging trends in Life Sciences</b> ” (ETLS-2020) organized by department of Chemistry, on 7 <sup>th</sup> -8 <sup>th</sup> Feb-2020)	01(One Day National e-Webinar on “ <b>Intellectual Property Rights</b> ” by Prin. Dr. M.M. Betkar on 06 <sup>th</sup> March 2021)	
11	Books/journals subscribed from grants	2	01 (Urasian Chemical Communications)	
12	Outreach activities (Popular lectures)	-	02 1. General Introduction to Spectroscopy – by Dr. Satyanarayan Sirasani, Former Vice-Chancellor, Osmania University, Hyderabad, India 2. Career Opportunities in Chemical Sciences -by Dr. Yusufi Mujahid Anwar, Department of Chemistry, Abeda Inamdar College, pune.	
13	Colleges mentored to apply for DBT Star College grants	-	02 -Annasaheb Magar College, Hadapsar, Pune Annasaheb Waghire College, Otur during application for the scheme	
14	Invited lectures	07	07	

Department of Microbiology																
S. no	Indicator	Pre-support							During /After Support							Remarks
1	No. of students admitted (T.Y.B.Sc.)	Total = FYBSc-130 SYBSc-119 TYBSc-60							Total = FYBSc-119 SYBSc-107 TYBSc-69							
		M= 22				F=38			M= 23				F= 46			
		SC	ST	OBC	G	SC	ST	OBC	G	SC	ST	OBC	G	SC	ST	
2	No. of students passing out (%) Students Admitted/passing out (pass %)	95%							-							
3	Drop-out rates	Zero							-							
4	No. of students opting for MSc	In house:14 Other college:4														
5	Average marks	62.36%							-							
6	No. of hands-on experiments being conducted	Nil							-							

7	No. of new experiments introduced	Nil	-	
8	Publications (scopus indexed) /patents, if any.		Nil	
9	Training received by faculty	Nil	Nil	
10	Exhibitions/seminars/training courses conducted	1	1	
11	Books/journals subscribed from grants	1	1 (AIMS Microbiology)	
12	Outreach activities (Popular lectures)	-	Bacteriophage Technology by Dr. Sangita Ahiwale	
13	Colleges mentored to apply for DBT Star College grants		02 Annasaheb Magar College, Hadapsar, Pune Annasaheb Waghire College, Otur during application for the scheme	
14	Invited lectures		9 (In Annexure I)	

Department of Botany																			
S. no	Indicator	Pre-support								During /After Support								Remarks	
1	No. of students admitted	Total = FYBSc-188 SYBSc-146 TYBSc-33								Total = FYBSc-139 SYBSc-127 TYBSc-11									
		M= 1				F=32				M= 2				F= 9					
		SC	S T	O B C	G	SC	ST	O B C	G	S C	ST	OBC	G	SC	ST	O B C	G		
2	No. of students passing out (%) Students Admitted/passing out (pass %)	TYBSC Admitted-33 Passed-30 Percentage -90.90%								-									
3	Drop-out rates	NA								-									
4	No. of students opting for MSc	08																	
5	Average marks	First Class								-									
6	No. of hands-on experiments being conducted	-								-									
7	No. of new experiments introduced	-								-									
8	Publications (scopus indexed) /patents, if any.	1								-									
9	Training received by faculty	5								Bonsai techniques Interactive Board Training									
10	Exhibitions/seminars/training courses conducted	-								Online National Webinar Bonsai techniques Guest Lecture Series									
11	Books/journals subscribed from grants	2								2 (1. Plant Cell Biotechnology and Molecular Biology 2. International Journal of Current Research and Review) Journal subscribed									
	Outreach activities (Popular lectures)	-								Online National Webinar (20-25 <sup>th</sup> March 2021)									
13	Colleges mentored to apply for DBT Star College grants	-								02- Annasaheb Magar College, Hadapsar, Pune Annasaheb Waghire College, Otur during application for the scheme									
14	Invited lectures	4 (Under SDA, SPPU) during 2019-20								<b>Total: 15 (Annexure-I)</b> <b>A-Guest Lecture Series-1</b> 1.Prin. Dr. Shankar Laware 2.Dr. Ashok Tuvar 3.Dr. Kishor Rajput									

			<p>4. Dr. Vikram Rawal  <b>B-Guest Lecture Series-2- Total 02 Lectures</b>  5. Dr. B.C. Nagraja-Hotspots of Biodiversity  6. Yogesh Mahajan –Horticulture  7. Sharmili Jagtap-Microbial technology  8. Dr. Sharad Kambale-Floristic Biodiversity  <b>C- National Webinar-04</b>  9. Dr. Milind Sardesai- Plant and Animal interaction Prof.  10. Prof. Dr. M. Daniel - Phytochemistry basics and Applications,  11. Dr. Varsha Shriram-Plant Tissue Culture Techniques,  12. Dr. H. B. Sonawane-Fungi reservoir of metabolites and their Applications.  13. Dr. Gaurav Sanghavi Cloning Techniques  <b>D- Online Workshop on E-herbarium-14. Dr. Mayur Nandikar</b>  <b>E- 15. Dr. Kishor Bobade -Online preparation of Bonsai and its application-</b></p>	
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Department of Zoology																		
S. no	Indicator	Pre-support								During /After Support								Remarks
1	No. of students admitted	Total = 123(SY) + 436(FY)								Total = 119 (SY)+ 132 (FY)								
		M= 40+ 53				F=83+83				M= 48 + 61				F= 71+71				
		SC	ST	OB	G	SC	ST	OB	G	SC	ST	OBC	G	SC	ST	OB	G	
2	No. of students passing out (%) Students Admitted/passing out (pass %)	96%								-								
3	Drop-out rates	-								-								
4	No. of students opting for MSc									-								
5	Average marks	First class								-								
6	No. of hands-on experiments being conducted	0								0								
7	No. of new experiments introduced	0								0								
8	Publications (scopus indexed) /patents, if any.	0								0								
9	Training received by faculty	1								0								
10	Exhibitions/seminars/training courses conducted	0								1 (Workshop on vermicomposting)								
11	Books/journals subscribed from grants	1								1 (Advances in Environmental Science)								
12	Outreach activities (Popular lectures)	0								6 (All lectures of series)								
13	Colleges mentored to apply for DBT Star College grants	0								02 Annasaheb Magar College, Hadapsar, Pune								

			Annasaheb Waghire College, Otur during application for the scheme	
14	Invited lectures	0	6 (In Annexure I)	

- Proofs (S.No. 6-14 not more than 5 pages, 1.5 line spacing 11 times roman font size) to be provided duly attested by Principal and Coordinator. (Annexure I: Proofs)

### 10. Self-evaluation

Department	*Objective (as stated in proposal)	% achieved	Reasons for underachievement / If achieved, state in quantitative metrics
<b>Chemistry</b>	-Equipment purchase -Extra practicals -Guest lecture -Workshops -Hands on training -MOU with other institution and companies -Industrial visits	<b>65%</b>	Reason for under achievement- 1. Pandemic impositions, 2. Lack of manpower, -Workshop and hands on training -Industrial/Field visits -Extra practicals, workshop of soap making in laboratory, small scientific projects because of pandemic restrictions and no offline schools/colleges.
<b>Microbiology</b>	-Equipment purchase -Extra practicals -Guest lecture -Workshops -Hands on training -MOU with other institution and companies -Industrial visits	<b>70%</b>	Reason for under achievement- 1. Pandemic impositions, 2. Lack of manpower, -Workshop and hands on training -Industrial/Field visits, -Extra practicals because of pandemic restrictions and no offline schools.
<b>Botany</b>	-Equipment purchase -Extra practicals -Guest lecture -Workshops -Hands on training -MOU with other institution and companies -Industrial visits	<b>80%</b>	Reason for under achievement- 1. Pandemic impositions, 2. Lack of manpower, -MOU in process with IMUNITA Pvt. Lt. - Industrial/Field visits because of pandemic restrictions and no offline schools/colleges.
<b>Zoology</b>	-Equipment purchase -Extra practicals -Guest lecture -Workshops -Hands on training -MOU with other institution and companies -Industrial visits	<b>75%</b>	Reason for under achievement- 1. Pandemic impositions, 2. Lack of manpower, -Workshop and hands on training -Industrial/Field visits because of pandemic restrictions and no offline schools/colleges.

\* For quantitative analysis you may fix five objective (max) each having 2 marks and accordingly can calculate the matrix.

Course Coordinator  
(With Seal)

Head of the Institution  
(With Seal)

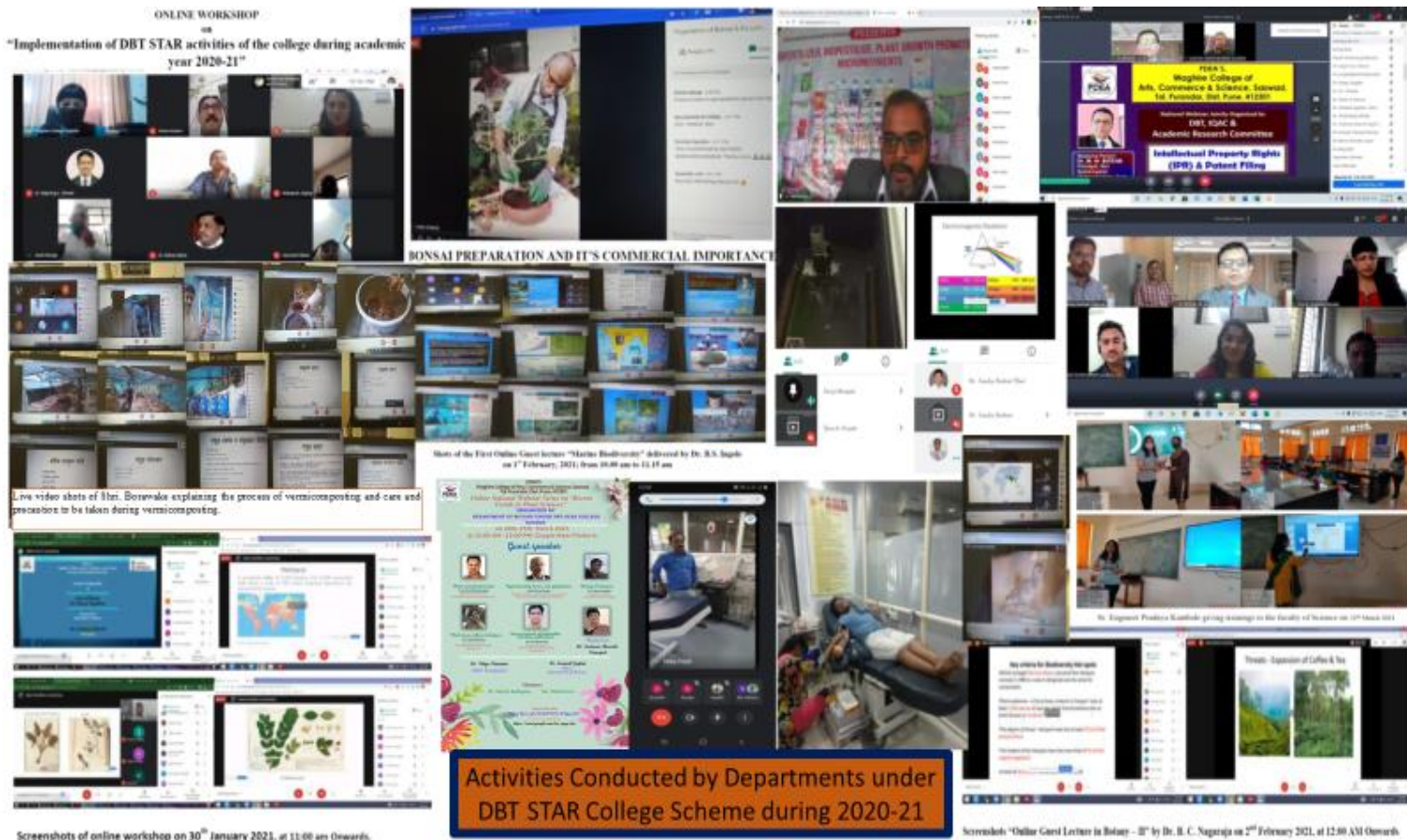
**Annexure: 1**

Proofs ( S.No. 6-14 not more than 5 pages, 1.5 line spacing 11 times roman font size) to be provided duly attested by Principal and Coordinator.



### Department wise activities in 2020-21

Sr. no.	Activity Name and Details	Department	Dates	TIME
1	Implementation of DBT STAR activities of the college during academic year 2020-21	DBT	29-09-2020	12:00-1:00pm
2	ONLINE GUEST LECTURE SERIES IN BOTANY	Botany	06-11-2020-07-11-2020	11.00am-12.30pm
3	Online workshop on Preparation of Bonsai & it's commercial values	Botany	14-12-2020	02:00 -5:30PM
4	ONLINE GUEST LECTURE SERIES IN BOTANY	Botany	1-02-2021-2-02-2021	12.00-1.00
5	Online Workshop on E-herbarium preparation	Botany	30 <sup>th</sup> Jan.2021	11.00-12.00 PM
6	Online Drawing Competition on the occasion of World Wetland Day	Botany & Zoology	2nd Feb 2021	
7	Intercollegiate Quiz Competition	Botany & Zoology	28-Feb-21	
8	Online National Webinar on "Recent Trends in Plant Sciences"	Botany	21 on 20th March 2021	10:00-11:15 AM
9	Online National Webinar on IPR	DBT	6th March 2021	10:00-11:15 AM
10	Online Guest lecture-Biofertilizer	Microbiology	16th October 2020	11-30am
11	Online Guest lecture-'Bacteriophage Technology'	Microbiology	03-11-2020	11-30am
12	Online Guest lecture-'Sterilization and Disinfection'	Microbiology	29th October 2020	1.45pm to 3.15 pm.
13	Online Guest lecture series II	Microbiology	21-23rd Jan. 2021	11.00-12.30 PM
14	Online Guest lecture series III	Microbiology	8-10-March-2021	11:00-1:00 PM
15	ONLINE VIRTUAL VISIT 'AKSHAY BLOOD BANK, HADAPSAR, PUNE.	Microbiology	30th January 2021	11.00 am. Onwards
16	Online Guest lecture series I in Zoology	Zoology	6-8 Oct. 2020	11.00 am. Onwards
17	Online Guest lecture series II in Zoology	Zoology	1-3 Feb. 2021	11.00 am. Onwards
18	"Online workshop on Vermicomposting"	Zoology	5th February, 2021	1.00 pm to 2.30 pm
19	Guest lecture on lab safety	Chemistry	10th Nov. 2020	11.00 am. Onwards
20	Guest lecture on Gravimetric analysis	Chemistry	8th Jan 2021	11.00 am. Onwards
21	Online Guest lecture series	Chemistry	8-13th Feb 2021	11.00 am. Onwards
21	One Day Online workshop on UV-visible Spectroscopy	Chemistry	10th March 2021	11.00 am. Onwards
22	Interactive Panel hands on training for teachers	DBT	12 <sup>th</sup> March 2021	11:00 am-4:00 pm



Reports are long to fit in five pages so we are summarising some of the reports here all the reports will be displayed on departmental page of college website also under DBT-STAR College team.

PDEA'S  
Waghire College of Arts Commerce and Science,  
Saswad, Tal-Purandar, Dist-Pune  
Department of Chemistry

Online Guest Lecture-I  
On  
"LABORATORY SAFETY"  
Under  
DBT Star College Scheme  
(2020-21)

Guest speaker: **Mr. Hemant Kasat**  
(Sintor Associate)  
Synlet Pvt.Ltd.,Pune.

It is with great pride and pleasure that we announce that our college has received strengthening grant under DBT STAR scheme.

This Guest Lecture was organized by department of chemistry under **DBT STAR scheme of the college during academic year 2020-21** on **10<sup>th</sup> November 2020**, at 11:00-12:00 PM on "Laboratory Safety" to aware the students regarding how to works in the laboratory, how to handle the toxic chemical, what kind of precaution is essential while working in chemical i laboratory.

During this lecture our honourable guest speaker Mr. Hemant Kasat Sir, who is senior associate, in Synlet Pvt.Ltd., Pune, has given very informative and inractive lecture on "Laboratory Safety".

For this online Guest Lecture 93 UG student were presents. All heads of concern departments and staff were present during this lecture. Many students and teachers have been asked questions to Mr. Hemant Kasat Sir and they have cleared their doubts. He guided well for the same.

Anchoring and introduction of the Guest done by Dr. M.M. Jagtap. Lastly vote of thanks is given by Dr. Sandip Rathod.



P.D.E.A'S  
Waghire College of Arts Commerce and Science, Saswad  
Tal-Purandar, Dist-Pune  
Department of Chemistry

**"One Day Online Workshop on UV-Visible Spectroscopy"**  
Under

**DBT Star College Scheme (2020-21)**

**10<sup>th</sup> March 2021**

**By**

**Guest speaker: 1) Prof. Ganesh B Nigade** (Assistant Professor, S.G.R.S. College of Pharmacy, Saswad.)

*"Learning gives Creativity, Creativity leads to thinking, Thinking provides knowledge, Knowledge makes us Great..."* It is with great pride and pleasure that, Waghire College of Arts, Commerce and Science, Saswad successfully conducted One Day online workshop on "UV-Visible Spectroscopy" Organised by Department of Chemistry under DBT Star College Scheme On **10<sup>th</sup> March 2021 at 11:00 am to 02:00 pm**. For this one day online workshop Prof. Ganesh Nigade, Assistant Professor, S.G.R.S. College of Pharmacy, Saswad, is invited as a Resource Person and he delivered a very informative talk on "UV-Visible Spectroscopy".

The workshop is conducted in two sessions. The Session -I is conducted at 11:00 am to 12:00 noon. In the session -I, the following subtopics are covered:

- General Introduction to spectroscopy
- Electromagnetic Radiation and electromagnetic spectrum



ACADEMIC YEAR 2020-2021  
**Department of Botany**  
ONLINE GUEST LECTURE SERIES IN BOTANY  
on  
(6<sup>th</sup>-7<sup>th</sup> November 2020, at 11:00 AM Onwards)

This online guest lecture series were conducted in Botany with various specialised topics in Disciplin. This lecture series in funded by DBT STAR Scheme. The schedule of the program is given as follows,

**Guidance by Speakers:**

Sr.No	Name of the Resource Person	Date	Time
1.	Prin. Dr. Shankar Laware	6-11-2020	11.00am-12.30pm
2.	Dr. Ashok Tuwar		12.30pm-1.30pm
3.	Dr. Kishor Rajput	7-11-2020	11.30am-12.30pm
4.	Dr. Vikram Rawal		12.30pm-1.30pm

During this workshop our honourable guest speaker Prin. Dr. Shankar Laware from Mula education society, Sonai College, Newasa, had motivated students and spoke about how to pursue idea and dream with his students experience in reseach. This topic gave how to think differently and innovatively to the rural students of saswad. Second speaker Dr.Ashok Tuwar talked on diversity of marine fungi biodiversity and reseach opportunity in same subject. On second day eminent person Dr. K. S. Rajput sir from Maharaja Sayajirao Gayakwad University has guided students on how anatomy of plant is important in plant taxonomy and its importance in research area as well as advanced techniques of anatomy used by different contries. Second guest speaker Dr. Vikram Rawal from Gujrat central university, guided on various carrier opportunities in lifesciences as well as in Botany. Hundred participants were present during this lecture series and students submitted their positive feedback online on the lectures.

PDEA'S  
Waghire College of Arts Commerce and Science, Saswad,  
Tal-Purandar, Dist-Pune  
(2020-21)  
**ONLINE GUEST LECTURE 2**  
(Under DBT STAR scheme)  
On  
'Fermentation Technology'  
Date: 23/01/2021(Time: 1.00pm to 2.00pm)

**Guest speaker: Mr. Vandan Ghule,**  
Technical Officer,  
Dept. of Alcohol Technology & Biofuels,  
Vasantdada Sugar Institute,  
Manjari, Pune.

Under DBT Star scheme, the department of Microbiology had organised 2<sup>nd</sup> lecture series in the month of Jan 2021. On 23<sup>rd</sup> January 2021, a guest lecture was organized on "Fermentation Technology" for S.Y.B. Sc. Microbiology students at 1.00pm. The lecture was organized to make students understand the concepts of Fermentation, its types, techniques and applications. As Fermentation technology is the part of S.Y.B.Sc curriculum, we had an eminent presence of Mr. Vandan Ghule, from VSI, Manjari, Pune as a resource person to share his knowledge and expertise in the said topic. He talked about the Concept of fermentation technology, different types of fermenters & fermentation. He explained techniques to students by presenting beautiful slides and pictures. He shared his knowledge by giving day to day life examples for making students understand the concept of continuous & batch fermentation. He explained students about primary & secondary metabolites, microbial biotransformation. He also touched characteristics, principle & methods of screening of industrially important microbial strains. He stressed on the importance, preservation & maintenance of industrially important strains. Lastly he motivated students to come forward & exploit their knowledge in the field of fermentation technology. Dr. Sushma Bhosale, Principal, Waghire College Saswad was present online throughout the lecture and she appreciated lecture delivered by the resource person. She also appreciated the efforts taken by HOD of Microbiology department Mrs. Hemlata Sonawane madam, and her team. All heads and faculty of Science departments were also present for a lecture. Welcome of the honourable guest, teachers and students was done by Mrs. Hemlata Sonawane, Introduction of the guest was done by Ms. Vishakha Ganvir and vote of thanks was delivered by Mrs. Hemlata Sonawane.

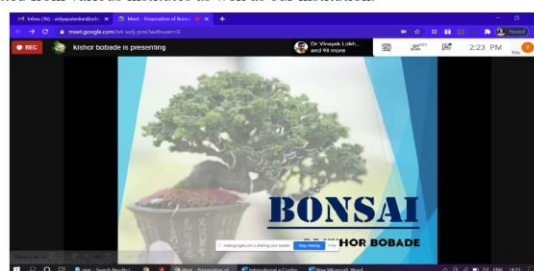
ACADEMIC YEAR 2020-2021  
**Department of Botany**  
ONLINE ONE DAY WORKSHOP  
ON  
**BONSAI PREPARATION AND IT'S COMMERCIAL IMPORTANCE**  
(14<sup>th</sup> December 2020, at 02:00 PM Onwards)

This online one day workshop is conducted on Bonsai preparation and it's commercial importance by Botany Department. This workshop is funded by DBT STAR Scheme and with permission of PDEA and Prin. Dr. Sushama Bhosale on 14<sup>th</sup> Dec. 2020. The schedule of the program is given as follows,

**Introduction of Guest lecture series:** Dr. S. S. Jagtap  
**Welcome Address:** Prin. Dr. Sushama Bhosale  
**Introduction of guest:** Dr. Vidya Patankar  
**Guidance by Speakers:** Dr. Kishore Bobade  
Ex. Medical Officer, Amravati  
Life member of Amravati Garden Club.  
Prof. Nikhil Gurav

**Vote of Thanks:**

This workshop is divided into first session theory of bonsai where he explained about what is mean by bonsai? From where its is originated? Instruments, requirements and types of bonsai. In second session he covered practical online demonstration how to prepare bonsai and how to do repoting etc. It was very informative session around 273 students and teachers were participated from various institutes as well as our institution.



PDEA'S  
Waghire College of Arts Commerce and Science,  
Saswad, Tal-Purandar, Dist-Pune  
(2020-21)  
**ONLINE VIRTUAL VISIT**  
(Under DBT STAR scheme)  
To  
'AKSHAY BLOOD BANK,  
HADAPSAR, PUNE.

**Guest speaker:** Mr. Uttamkumar P. Patil  
Quality Manager,  
Akshay Blood Bank,  
Hadapsar, Pune.

The department of Microbiology had organised a virtual visit for T. Y. B. Sc. Microbiology students on 30<sup>th</sup> January 2021 at 11.00 am. to learn blood bank techniques of collection, separation and storage of blood and blood components and other blood bank practices. They study the said techniques, theoretically as a part of their syllabus.

The honourable, Mr. U. P. Patil, Quality Manager, Akshay Blood Bank, Hadapsar, Pune shared his knowledge and experiences in the field of Immunohematology.

Blood banking is the process that takes place in the lab to make sure that donated blood or blood products are safe before they are used in blood transfusions and other medical procedures. Blood banking includes typing the blood for transfusion and testing for infectious diseases. **Mr. Patil guided** students regarding the criteria; the volunteer must pass before blood donation. He explained a certain set of standard tests done in the lab once blood is donated, including, typing: ABO group (blood type), Rh typing (positive or negative antigen), screening for any unexpected red blood cell antibodies that may cause problems in the recipient, screening for current or past infections, including: Hepatitis viruses B and C, Human immunodeficiency virus (HIV), Syphilis and Malaria. **He also demonstrated** the techniques used for collection and separation of blood and blood components such as Red blood cells (commonly used in the treatment of anemia), Platelets (used in the treatment of leukemia and other forms of cancer), White blood cells (help to fight infection, and aid in the immune process), Cryoprecipitate AHF (help to control bleeding) and plasma (helps to maintain blood pressure, provides proteins for blood clotting, and balances the levels of sodium and potassium).

The head, Mrs. Sonawane madam and teachers of Microbiology department were present for this activity. She welcomed the honourable guest speaker, teachers and students. Dr. Nita Patil gave introduction of the guest speaker. Ms. Vishakha Ganvir expressed vote of thanks.

Per year the wild life week is celebrated in India from 2<sup>th</sup> to 8<sup>th</sup> October. The Zoology department of Waghire college too celebrated the Wildlife Week by organizing a three days online Lecture series from 6<sup>th</sup> October to 8<sup>th</sup> October 2020 and a Quiz Competition on the occasion of "Wildlife Week" under the DBT- STAR College Scheme. The three-day online lecture series was inaugurated at the hands of Dr. Sushama Bhosale, Hon. Principal of Waghire college.

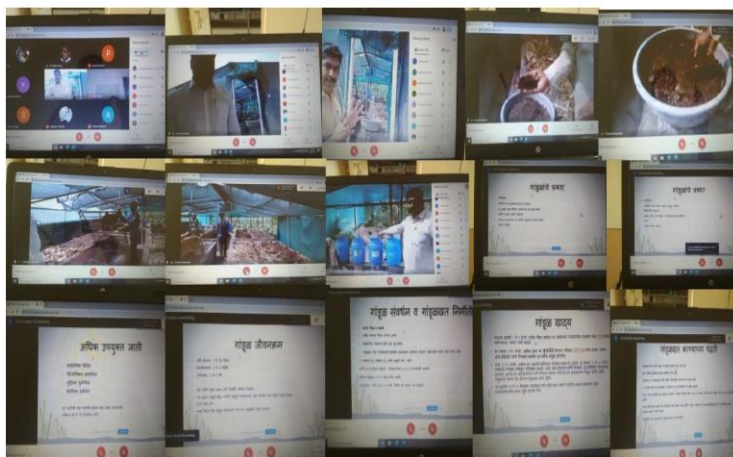
The three guest speakers invited for the lecture series on the three respective days were 1. Prof. Dr. Sudhakar Murlidhar Kurhade, New Arts, Commerce and Science College, Shevgaon, Dist. Ahmednagar; 2. Prof. Shrihari Ashok Pingale, Sangamner Mahanagarपालिका Arts, D.J.Malpani Commerce and B.N. Sarda Science college, Sangamner, Dist. Ahmednagar and 3. Prof. Dr.Vidhin Sunder Kamble, Sangola college, Sangola, Dist. Solapur respectively.

On 6<sup>th</sup> October 2020, the Guest speaker Dr. Sudhakar Kurhade spoke on the topic "Avian diversity" wherein he explained how India is blessed with a rich avian diversity. Through his presentation he showed the participants the different species of birds, the ecological role played by the birds in the environment and the threats faced by them due to anthropological activities. Around 64 participants including the students and faculty attended the lecture.

Attendance of Lecture on "Avian Diversity"; Date-06/10/2020; Time- 12.00 pm to 1.10 pm;  
Speaker - Dr. Sudhakar M. Kurhade

Sl. No.	Participant Name	Sl. No.	Participant Name	Sl. No.	Participant Name
1	Dr. Sushama Bhosale	1	Dr. Sushama Bhosale	1	Dr. Sushama Bhosale
2	Dr. Sushama Bhosale	2	Dr. Sushama Bhosale	2	Dr. Sushama Bhosale
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The Zoology department had organized an online workshop titled "Online Workshop on Vermicomposting" on 5<sup>th</sup> February, 2021 from 1.00 pm to 2.30 pm under the DBT- STAR College scheme. The guest speaker invited for conducting this workshop was Shri. Prashant Borawake, An Environmentalist and Coordinator of Paani Panchayat, an NGO ran under the guidance of Gram Gaurav Pratisthan, Khalad. This NGO carries out vermicomposting on a major scale and sells vermicompost and vermishaw to the farmers of Purandar tehsil, Pune. Shri. Borawake along with his colleague Ms. Sonali Jagtap explained meticulously and in lucid manner the importance and the need for Vermicomposting; the detail procedure of vermicomposting and vermiculture; how vermishaw is prepared and obtained; the care and precautions to be taken during vermicomposting, the schedule to be followed, the different species of earthworms used in vermiculture; the benefits of using vermicompost and how vermiculture can serve as a source of self - employment to the youth. Through his live video and also presentation, he appealed to the students of F.Y.B.Sc and S.Y.B.Sc to carry out small experiments and propagate vermicomposting in their areas.



Live video shots of Shri. Borawake explaining the process of vermicomposting and care and precaution to be taken during vermicomposting.

The Guest speaker on 7<sup>th</sup> October 2020, Prof. Shrihari Pingale spoke on "Wildlife Protection and Acts" and sensitized the participants regarding the importance of wildlife, the dangers and different threats faced by them in terms of poaching, hunting, urbanization, habitat fragmentation, pollution etc. and explained the IUCN categories of wildlife. He also emphasised on the different protection laws enacted by the Indian government to safeguard the wildlife. 80 beneficiaries benefited from the above lecture.

PDEA'S  
Waghire College of Arts Commerce and Science,  
Saswad, Tal-Purandar, Dist-Pune

ONLINE WORKSHOP  
on  
"Implementation of DBT STAR activities of the college during academic  
year 2020-21"


Guest speaker: **Dr. Kisan Kodam**  
Professor in Biochemistry  
Savitribai Phule Pune University, Pune

This workshop was conducted to get insight of how to implement programs under DBT STAR scheme. During this workshop our honorable guest speaker Dr. Kodam sir, who is professor in Biochemistry, Department of Chemistry, Savitribai Phule University has given nice guidance for implementation of grants under this program. what points should consider mainly during implementation and following are the points he emphasised on,

1. This scheme grant only utilize for UG students.
2. Only mentioned departments are part of it, use grants only for those departments.
3. Use grants as they have mentioned in their sanction order.
4. Preparation of plan of work for every year (academic calendar).
5. Grant outcome for every year need to be checked by advantages in terms of increase in job opportunity and increase in higher education enrolment after implementation of program.
6. No fee collection from students for organising Training program.
7. Feed back should be taken on programs and activities conducted under this scheme from students.

All heads of concern departments and staff were present during this workshop. Many teachers have asked questions to Dr. Kodam Sir and they have cleared their doubts about implementation during this pandemic situation. He guided well for the same.

Anchoring of the program is done by Dr. Vidya Patankar, welcome address by Prin. Dr. Sushama Bhosale followed by introduction of speaker and guidance by speaker Dr. Kisan Kodam with question and answers session. Lastly vote of thanks is given by Dr. Sandip Rathod.


  
PDEA'S  
Waghire College of Arts Commerce and Science,  
Saswad, Tal-Purandar, Dist-Pune  
(2020-21)

ONE DAY NATIONAL WEBINAR ON  
"INTELLECTUAL PROPERTY RIGHTS"  
Jointly organised by DBT, IQAC and Academic Research Committee

Saturday, 06 March, 2021

Resource Person: **Dr. Betkar M. M., Principal,  
Shri Kumarswami Mahavidyalaya, Ausa, Latur**

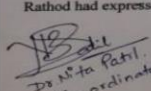
**REPORT ON NATIONAL WEBINAR**


DBT, IQAC and Academic Research Committee had organised, jointly, One day National webinar on "Intellectual Property Rights" at Pune District Education Association's Waghire college of arts, science and commerce, Saswad, Pune on Saturday, 06 March, 2021 from 11.00am to 1.00 pm. on "go to meeting platform". Two hundred twenty six participants were registered for the participation and one hundred thirty nine were attended the webinar.

The details and purpose of this webinar was introduced by Dr. Nita Patil, Co-ordinator, in her welcome speech. Introduction of the resource person was given by Dr. Sanjay Zagade. Hon. Dr. Betkar M. M. delivered a speech on Intellectual property Rights and Patent Filing.

The main objective of this webinar was to acquaint the participants on IPRs. The speaker elaborated various aspects of Intellectual Property Rights, starting with what are IP's? What is IPR? What is trade mark, trade secret with suitable examples, Geographical Indications, Design and Utility model (with suitable example), and plant Breeders Right, what is Copy Rights- is well explained with suitable examples. What is Patent? How to file the patent? Who can file the patent? Details procedure for filing the patent is explored in details. In addition to that, the discussion was held on patentable Inventions, non-patentable inventions, Infringements (Duplication or sale of duplicate material) with various examples.

It was followed by the guidance talk of our principal Hon. Dr. Sushama Bhosale. Dr. Sandip Rathod had expressed gratitude. Dr. Vidya Patankar was at anchor.


  
Dr. Nita Patil,  
Co-ordinator


  
PRINCIPAL  
Waghire College, Saswad,  
Tal-Purandar, Dist-Pune.