## Raver Parisar Shikshan Prasarak Mandal's

# Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College

NAAC Accreduted 'B+' Grade (2nd Cycle)

Prof. (Dr.) Paresh Vasantlal Dalal

(M.Sc., M.Phil., Ph.D.)

**Principal** 

Cell Phone: 7987819272

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Raver, Tal. Raver, Dist. - Jalgaon - 425 508 (M.S.)

Off.: (02584) 250447 (O), 252610 (D) e-mail: principalvsn\_rvr@yahoo.in website: www.svsncollegeraver.org

Affiliated to North Maharashtra University, Jalgaon.

UGC Recognation - S-2(f)-F8-77/2007(CPP-I),31 Jan. 2008

S-12(B)-F8-77/2007(CPP-I),17 Sep. 2008

Outward no.: Prashasan- /2021-22

Date: 28/08/21

To,

Dr. S. G. Chinchore, Coordinator,

RESEARCH CELL & EXTENSION SERVICES COMMITTEE

Subject: Assignment of duties for Academic Year 2021-22 to 2023-24

With reference to the above subject you are assigned by the work as a Coordinator for RESEARCH CELL & EXTENSION SERVICES COMMITTEE including following members-

- 1. Dr. A. G. Patil (Member)
- 2. Dr. B. G. Mukhyadal (Member)

Following are the duties that should be followed throughout your periods for proceedings-

#### **DUTIES:**

- 1. To organize research activities for the staff and students of the college.
- 2. To organize orientation lectures in research for the TY project work students.
- 3. To assist the departments in organizing research seminars.
- 4. To take up major / minor research projects for the college.
- 5. To raise funds for research activities of the college.
- 6. To suggest steps for effective use of college resources for extension services.
- 7. To arrange personality development programme for students.
- 8. To organize activities such as training camps, awareness campaigns etc. in co-ordination with other committees.

(Dr. P. V. Dalal)

Shir Williaminac Sharkharac Malik Arts, Commerce & Stience Colleges, Raver. Dist-Jalgaon-4256083

Note-

The Principal will function as a Ex-Officio Chairman of the committee. Any additional member may be included in the committee as and when required.

## List of Committees for Academic Year 2021-22 to Onward

Sr. No	Name of Committees	Members	Sign	
01	ACADEMIC CALANDER	1. Dr. S. R. Chaudhari (Coordinator)		
	COMMITTEE	2. Mr. S. B. Dhanle (Member)		
		3. Mr. S. D. Dhapse (Member)		
02	TIME-TABLE COMMITTEE	1. Mr. M. M. Patil (Coordinate	or)	
		2. Mr. C. P. Gadhe (Member)		
		3. Mr. S. B. Dhanle (Member)		
03	ATTENDANCE CUM DAILY	4. Dr. S. R. Chaudhari (Coordin	nator)	
	DIARY COMMITTEE	5. Mr. S. B. Dhanle (Member)		
		6. Mr. S. D. Dhapse (Member)		
04	COLLEGE INFRASTRUCTURE	1. Dr. V. B. Suryawanshi (Coo	<mark>rdinator)</mark>	
	MAINTENANCE &	2. Dr. J. M. Patil (Member)		
	DEVELOPMENT COMMITTEE	3. Mr. Y. R. Birpan (Member)		
05	DISCIPLINE & ANTI-RAGGING	1. Dr. A. G. Patil (Coordinator)		
	COMMITTEE	2. Dr. V. B. Suryawanshi (Mem	ber)	
		3. Mr. U. N. Patil (Member)	-	
06	EXAMINATION COMMITTEE	1. Mr. M. M. Patil (Coordinate	or)	
		2. Dr. S. B. Gavhad (Member)		
		3. Mr. N. A. Ghule (Member)		
07	MEDICAL CHECKUP	1. Dr. L. C. Nemade (Coordina	tor)	
	COMMITTEE	2. Mr. S. D.Dhapse (Member)		
		3. Mr. U. N. Patil (Member)		
08	GRIEVANCES COMMITTEE	1. Dr. V. B. Suryawanshi (Coo	<mark>rdinator)</mark>	
		2. Dr. A. G. Patil (Member)		
		3. Mr. U. N. Patil (Member)		
09	RESEARCH CELL &	1. Dr. S. G. Chinchore (Coordi	<mark>nator)</mark>	
	<b>EXTENSION SERVICES</b>	2. Dr. A. G. Patil (Member)		
	COMMITTEE	3. Dr. B. G. Mukhyadal (Memb	<mark>er)</mark>	
10	ASSOCIATION CIRCLE	1. Mr. V. D. Patil (Coordinator	<mark>')</mark>	
	(Arts circle/Commerce	2. Dr. S. B. Gavhad (Member)		
	association/Science association)	3. Mr. S. B. Dhanle (Member)		
11	LIBRARY ADVISORY	1. Dr . V. B. Suryawanshi (Coo	<mark>rdinator)</mark>	
	COMITTEE	2. Dr. S. R. Chaudhari (Membe	r)	
		3. Dr. G. R. Dhembre (Member	·)	
12	MAGAZINE COMMITTEE	1. Dr. G. R. Dhembre (Coordin	ator)	
		2. Mr. P. V. Patil (Member)		
		3. Dr. B. G. Mukhyadal (Memb	er)	
13	DAYS CELEBRATION	1. Mr. M. S. Patil (Coordinator	<mark>r)</mark>	
	COMMITTEE	2. Mr. C. P. Gadhe (Member)		
		3. Mr. S. D. Dhapse (Member)		

14	G.K./COMPITATIVE /TALENT	1. Mr. P. V. Patil (Coordinator)
	SEARCH COMMITTEE	2. Dr. S. B. Gavhad (Member)
		3. Mr. S. B. Dhanle (Member)
15	PARENTS – TEACHERS'	1. Dr. J. M. Patil (Coordinator)
	INTERACTION COMMITTEE	2. Mr. S. D. Dhapse (Member)
		3. Mr. C. P. Gadhe (Member)
16	CAREER COUNCILLING &	1. Mr. P. V. Patil (Coordinator)
	GUIDANCE CELL	2. Dr. S. B. Gavhad (Member)
		3. Mr. S. B. Dhanle (Member)
17	SPORTS COUNCIL	1. Mr. S. U. Patil (Coordinator)
		2. Mr. M. S. Patil (Member)
		3. Mr. N. A. Ghule (Member)
18	STAFF WELFARE COMMITTEE	1. Mr. S. D. Dhapse (Coordinator)
		2. Mr. V. D. Patil (Member)
		3. Mr. M. S. Patil (Member)
19	STUDY TOUR COMMITTEE	1. Mr. M. S. Patil (Coordinator)
		2. Dr. S. G. Chinchore (Member)
		3. Mr. N. A. Ghule (Member)
20	NEWS BULLETIN AND MEDIA	1. Dr. G. R. Dhembre (Coordinator)
	COMMUNICATION	2. Mr. P. V. Patil (Member)
	COMMITTEE	3. Dr. B. G. Mukhyadal (Member)
21	MEDIA/WEB SITE COMMITTEE	1. Dr. G. R. Dhembre (Coordinator)
		2. Mr. P. V. Patil (Member)
		3. Dr. B. G. Mukhyadal (Member)
22	FEEDBACK COMMITTEE	1. Dr . A. N. Sonar (Coordinator)
		2. Mr . N. A. Ghule (Member)
		3. Mr . S. B. Dhanle (Member)
23	ALUMINI ASSOCIATION	1. Mr . S. B. Dhanle (Coordinator)
		2. Mr . U. N. Patil (Member)
		3. Mr. C. P. Gadhe (Member)
24	PROSPECTUS&ADMISSION	1. Dr. S G. Chinchore, Coordinator,
	COMMITTEE	2. Dr. A. N. Sonar, Member
		3. Mr. M. S. Patil, Member
		4. Mr. Mr. S. U. Patil , Member
		5. Mr. C. P. Gadhe, Member
		6. Mr. N. A. Ghule, Member
		7. Mr. S. B. Dhanle, Member
		8. Dr. S. B. Gavhad, Member
		9. Mr. Y. R. Birpan, Member



## ।। अंतरी पेटवू ज्ञानज्योत ।। North Maharashtra University

Umavinagar, Post Box 80, Jalgaon - 425 001, (M.S.) INDIA

# Pro-Vice Chancellor Office (Research Section)

जा.क्र.उमवि/११/प्रयोगशाळा मान्यता/विज्ञान/27 69 /२०१८

दि.०५.०७.२०१८

-	मा.डॉ. यु.एम. जाधव, (अध्यक्ष), कला, वाणिज्य व विज्ञान महाविद्यालय, गहादा	मा.डॉ.एस.एस. राजपुत एस.व्हि.एस. कला, वाणिज्य व विज्ञान महाविद्यालय, दोंडाईचा जि. धुळे
०३	मा.डॉ. गुणवंत एच. सोनवणे,आर.एल. कॉलेज पारोळा जि. जळगांव.	

विषय : विज्ञान विद्याशाखेतर्गत संस्थेस पदव्यत्तर अभ्यासक्रमाच्या (विषयाच्या) संशोधनासाठी प्रयोगशाळेस मान्यता देण्यासंदर्भात चौकशी करुन अहवाल सादर करण्यासाठी स्थानिक चौकशी समितीची नियुक्ती. . . .

महोदय,

विज्ञान विद्याशाखेंतर्गत, पदव्युत्तर अभ्यासक्रमाच्या संशोधनासाठी प्रयोगशाळेस मान्यता देण्यासंदर्भात, विविध महिविद्यालयाचे प्रस्ताव प्राप्त झालेले आहेत. यासंदर्भात खालील संस्थेस त्यांच्या नावासमोर दर्शविलेल्या वर्षासाठी व विषयाच्या संशोधनासाठी प्रयोगशाळेस मान्यता देण्याकरीता प्रयोगशाळेची तपासणीकरुन अहवाल देण्यासाठी आपली समिती नियुक्त करण्यात आलेली आहे.

०१	Shri.V.S. Naik Arts, Commerce & Science College, Raver Dist.Jalgaon.	Chemistry (Renewal)	2018-19 To 2020-21	

यासंदर्भात प्राप्त आदेशान्वये आपणास विनंती की, आपण, आपल्या इतर सदस्यांच्या सहकार्याने सदर महाविद्यालयाच्या तपासणीसाठी भेटीची तारीख व वेळ निाश्चित करुन सदस्यांना व महाविद्यालयास परस्पर कळवावे आणि सोबतच्या नियमावलीनुसार व प्रस्तावाप्रमाणे प्रयोगशाळेची तपासणी करावी. त्यानंतर, सदर महाविद्यालयातील प्रयोगशाळेचा तपासणी अहवाल दोन प्रतीत फाईलसह स्वतंत्रपणे कोणत्याही परिस्थितीत हे पत्र मिळाल्यापासून दहा दिवसांचे आत किंवा महाविद्यालयाला भेट दिल्यानंतर तीन दिवसांच्या आंत विद्यापीठास सादर करावा. विद्यापीठामार्फत वाहनाची व्यवस्था केली जाणार नाही. मात्र, अहवाल व प्रवासभत्ता देयके प्राप्त झाल्यानंतर नियमाप्रमाणे वाहनभत्ता व दैनिक भत्ता अदा केला जाईल.

कळावे.

ATTS, COMMENCICE & SCHOOL

आपला विश्वासू,

(टिप:- सर्व सदस्यांचे परीपूर्ण भरलेले प्रवासभत्ता देयके अहवालासोबत एकाच वेळी सादर करावीत.)

सोबत : १. प्रवासभत्ता देयकाचे कोरे फॉर्म

२. प्रयोगशाळा तपासणीसाठी नियमावलीची व स्थानिक चौकशी समिती अहवालाची नमूना प्रत.

३. संस्थेने पदव्युत्तर अभ्यासक्रमाच्या संशोधनासाठी प्रयोगशाळेला मान्यता देण्यासाठी सादर केलेल्या प्रस्तावाची प्रत

प्रत माहिती तथा कार्यवाहीसाठी:

भा प्राचार्य, - व्हि.एस. नाईक कला, वाणिज्य व विज्ञान महाविद्यालय, रावेर. जि. जळगांव यांना विनंती की, सिमतीने मागितलेले पदव्युत्तर अभ्यासक्रमाच्या संशोधनासाठी प्रयोगशाळा मान्यतेचे/नव्याने/विस्ताराचा प्रस्ताव व आवश्यक ते स्पष्टीकरण आणि इतर कागदपत्रे समितीस भेटीच्या वेळी सादर करुन सहकार्य करावे, तसेच समितीच्या भेटीच्या वेळी शिक्षक, शिक्षकेतर कर्मचारी व विद्यार्थी प्रतिनिधी यांना उपस्थित राहणेविषयी कळविण्यात यावे.

२. मा.वित्त व लेखा अधिकारी, उमवि, जळगाव.





#### । अंतरी पेटवू जानज्योत ।

## उत्तर महाराष्ट्र विद्यापीठ, जळगाव - ४२५००१ NORTH MAHARASHTRA UNIVERSITY, JALGAON - 425001



रोच्य महोत्सयी वर्ष २०१४-१५

Fax Website (91)-0257-2258406

Telephone :(O): 0257-2257224, 0257-2258409

Foreil

bcudresearch@rediffmail.com

NMU/11/Lab.Rcog/112-6 /2014

www.nmu.ac.in

Date: 02.06.2014

To.

The Principal,

Shri.V.S.Naik Arts, Commerce & Science College,

Raver Dist Jalgaon

Sub.: Recognition for Post Graduate Research Centre.

Ref: Your letter Ref.No.151 dated 27.08.2013

Dear Sir.

With reference to the above subject and letter under reference, I would like to inform you that the University has communicated you an expert committee constituted under the Chairmanship of Prof.B.V.Pawar, Director, School of Computer Sciences, NMU, Jalgaon and Dean, Faculty of Science for the recognition of Post Graduate Research Centre of your college vide this office letter No. जा.क.उमवि/११/प्रयोगशाळा मान्यता/विज्ञान/११/२०१४ दि.०२.०१.२०१४. The committee has visited to your college on 15.04.2014. After verification of existing facilities, the committee recommended to grant recognition for Post Graduate Research Center of your college. (A copy of the committee's report is enclosed herewith for your ready reference and compliance of the conditions/suggestions). This report was placed before the Academic Council of the University. The Academic Council has approved the report submitted by the committee appointed for the recognition to your Post Graduate Research Centre as per resolution No. वि.प.ए.-१०१/२०१४ दि.२७.०५.२०१४

In view of the above recommendations of the committee and resolution passed in the Academic Council, I am directed to inform you that the University has granted recognition to the Post-Graduate Research Center of your college in the following subjects:

Sr. No.	Subject	Research students allowed	Period of recogntion
1.	2.	3.	4.
01	Botany	08 per guide	2014-2017
02	Chemistry	08 per guide	2014-2017

Please note that the above recognition is granted only for the years mentioned in the column No. 4 of the above statement.

Thanking you,

191714

Encl.: a/a.

Yours sincerely,

(Prof.D.G.Hundiwale)
Director.

Board of Colleges and University Development.



।। अंतरी पेटवु ज्ञानन्योत ।।

# Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

Umavinagar, Jalgaon - 425 001, (M.S.) INDIA

### Research Section

Ref. No. KBCNMU/11/Lab.Rcog/ 374 /2022

Date: 21.01.2022 f

To,

The Principal,

Shri.V.S. Naik Arts, Commerce & Science College,

Raver Dist. Jalgaon.

Sub.: Recognition for Post Graduate Research Lab.

Ref. No.: your letter dated 17.08.2021

Dear Sir,

With reference to the above subject and letter under reference, I would like to inform you that the University has communicated you an expert committee constituted under the Chairmanship of Prof. A.M. Nemade, G.D. Bendale Mahilya Mahavidyalaya, Jalgaon for the recognition of Post Graduate Research Lab. of your Institute, vide this office letterNo.जा.क.उमिव/११/पयोगशाळानुसनीकरण/रसायनशास्त्र/१५०६/२०२१, दि.११.०९.२०२१. The committee has visited to your college on 28.10.2021. After verification of existing facilities, the committee unanimously recommended recognition for Research Lab. of your college. (A copy of the committee's report is enclosed herewith for your ready reference and compliance of the conditions/suggestions) and is vide Section 12(7) of MPUA, 2016, approved by Hon'ble Vice Chancellor

In view of the decision taken by the Hon'ble Vice Chancellor on behelf of Academic Council, I am directed to inform you that the University has granted recognition to the Research Lab. of your Institute in the following subjects:

Sr. No.	Subject	Research students allowed	Period of recognition  4.
01	Chemistry	Number of Students as Per UGC and KBCNMU,Jalgaon Norms	Renewal 2021-22 to 2023-24

Please note that the above recognition is granted only for the years mentioned in the column No. 4 of the above statement. If you want renewal to this recognition or recognition to another subject except above, you will have to again submit the new proposal along with necessary fees as per rules.

Thanking you,

Yours kincerely,

Deputy Registrar Research Section

Encl.: a/a.

C. Documents and Settings (P.D. LANGOTE Desktop Lab. Rec. doc

8(O): 0257-2258409

(O): 0257-2257221 & 2257222 & 224

Fax: (91)-0257-2258403 & 2258406

Website: www.nmu.ac.in

E-mail: pvcresearch@nmu.ac.in

# K.B.C. North Maharashtra University, Jalgaon

Procedure for recognizing an institution as an approved Center for Post Graduate Research (Chemistry)

Shri Vitthalrao Shankarrao Naik
Arts, Commerce and Science College, Raver, Dist.- Jalgaon
Part-I

Sr. No.	Information to be furnished by an Institution.	OBSERVATION		
A	The subject and/or its branch, if any, in which recognition for Post Graduate research is sought	Chemistry		
В	Approximate number of students to be registered by research in that subject for which recognition is sought	04		
С	The names of the teachers recognized or recognizable for guiding Post Graduate research in that subject, together with their academic qualification, research experience and research publications.	Dr. Avinash Nathu Sonar,     Associate Professor,     Experience 12 year publication 79		
D	Certificate by the Institution that optional freedom will be provided to the recognized research guide(s). Also necessary administrative & financial support, if needed, will be provided.			
E	Space available for research laboratory/ laboratories giving details of dimensions, furniture etc. for the exclusive use of the Post –Graduate research students.	20 sq.mtr.		
F	Apparatus and equipments available for the research in relation to the number of research students to be registered.	Basic facilities for synthesis, selected equipment of physical characterization and Nano-materials are available such as UV-Vis-Spectrophotometer, Research Microscope, Spray pyrolysis, Flame photometer, Ultrasonic interferometer, etc. List is separately Attached		

G	Provision of recurring grant available for Post-Graduate research in the subject for which recognition is sought.	No separate provision but agree to support as per the requirements of researchers such as chemicals, glassware, etc.
Н	Library facilities: A list of standard books & journals in the subject of research available and being subscribed in the library of the Institution.	
1	Details of research work already done in last 5 years in that Institution in the subject for which recognition is sought along with a list of publication of research. Categorize in National, International, Conference proceeding, book chapters etc.	<ul> <li>Staff has published research papers in journals and proceedings</li> <li>National conference/ seminar were attended and presented papers</li> <li>As per list attached</li> </ul>
J	Details of number of conferences/symposia/workshop attended/participated by concerned faculty in last 5 years.	Teacher wise list is attached  Attached
K	Details of number of research projects submitted/sanctioned/ ongoing/completed by the faculty in last 5 years.	Nil
L	Details of consultancy and/or analytical services rendered by the concerned faculty. Provide details of revenues earned if any, in the last 5 years.	
M	Information regarding recognition of the Institution by the Universities and the subjects in which such recognition has been granted.	

#### Part-II

#### Instruction for the Institutes:

- Whenever a recognized research teacher in any branch of research in the institute, that is recognized, is not available due to any reason, recognition will normally lapse.
- 2. It should be the duty of the recognized institution to report immediately to the University and change among the recognized staff.
- 3. A recognized Institute has to submit to the research section of the university after every six month a progress report of research work done.

### Strength/Observations:

- Basic infrastructure for carrying out research is available.
- Even research laboratory of Physics is sharing additional facilities.
- Qualified research guide is available to operate research laboratory.
- Total four students have registered for Ph. D. and three are under process.
- Total 3 staff members are with Ph. D. and one with M. Phil as research degrees.

#### Weak Point:

- Research laboratory has a separate space, but it is merged with other laboratory. Hence, it is recommended to have a separate research laboratory for chemistry.
- At present only one research guide is recognized research guide.

## Recommendations:

 Specific branch of the research: Chemistry
 Duration of the recognition: 2021-22 to 2023-24 3. No. of research students/per branch of research: As per Utra Norm.

Prof. A. M. Nemad

Chairman

Committee Member

Date of Visit: 28/10/2021

Time: 11.00 am



## ।। अंतरी पेटवू ज्ञानज्योत ।।

# Kayayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

Umavinagar, Jalgaon - 425 001, (M.S.) INDIA

## Research Section

Ref.No. KBCNMU/11/Lab.Rcog./ 2755 /2021

Date: 21.10.2021

To,

The Principal,

Shri. V. S. Naik Arts, Commerce & Science College,

Raver, Dist. Jalgaon.

Sub.: Recognition for Research Lab.(Center).

Ref. No.: your letter dated 17.08.2021

Dear Sir,

With reference to the above subject and letter under reference, I would like to inform you that the University has communicated you an expert committee constituted under the Chairmanship of Prof. S. T. Bendre, KBCNMU, Jalgaon for the recognition of Research Lab. (Center) of your college, vide this office letter No.जा.क. उमित/१९/प्रयोगशाळा मान्यता/विज्ञान/२४५४/२०२१, दि.०७.०९.२०२१. The committee has visited to your college on 22.09.2021. After verification of existing facilities, the committee unanimously recommended recognition for Research Lab. (Center) of your college. (A copy of the committee's report is enclosed herewith for your ready reference and compliance of the conditions/suggestions). This report was placed before the Academic Council of the University. The Academic Council have approved the report submitted by the committee for the recognition to your Research Lab. (Center) as per resolution No. वि.प.ए.-२३४/२०२१, दि.३०.०९.२०२१.

In view of the decision taken by the Hon'ble Vice Chancellor on behelf of Academic Council, I am directed to inform you that the University has granted recognition to the Research Lab. (Center) of your college in the following subjects:

Sr. No.	Subject	Research students allowed	Period of recognition
1.	2.	3.	4.
01	Physics	Number of Students as Per KBCNMU and UGC Norms.	Renewal 2021-22 to 2023-24

Please note that the above recognition is granted only for the years mentioned in the column No. 4 of the above statement. If you want renewal to this recognition or recognition to another subject except above, you will have to again submit the new proposal along with necessary fees as per rules.

Thanking you,

Yours sincerely,

(V. V. Talele) Asstt.Registrar, Research

Encl.: a/a.

Z:\D\Ph.D-MTB\Science\Lab.Rec.Letter.doc

**(**(0): 0257-2258409

(O): 0257-2257221 & 2257222 & 224

Fax: (91)-0257-2258403 & 2258406

Website: www.nmu.ac.in

E-mail: pvcresearch@nmu.ac.in



#### Raver Parisar Shikshan Prasarak Mandal's Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College,

Raver - 425 508, Tal. - Raver, Dist. - Jalgaon.
[ Affiliated to North Maharashtra University, Jalgaon (M.S.) ]

Prin. Dr. P. V. Dalal M.Sc., M. Phil., Ph.D.

e-mail: paresh10dalal@gmail.com

Cell Phone: 09420074998

Phone: 02584-250447(0)

e-mail: principalvsn\_rvr@yahoo.in

U.G.C. Recognisation -

S-2(f)-F8-77/2007(CPP-I), 31 Jan.2008.

S-12(B)-F8-77/2007(CPP-I),17 Sep.2008.

Ref. No.54/2020-21

Date: 22/06/2021

To, Dr. P. B. Ghante, Librarian Sant Jaganade Maharaj Shikshan Mandal's Arts and Commerce Sr. College, Khapar, Tal-Akkalkuwa, Dist-Nandurbar

**Subject:** Appointment as member of "Research Advisory Committee" in Subject of Library and Information Science.

#### Dear Sir,

We are pleased to inform you that you are appointed as a member of 'Research Advisory Committee' (RAC) in the subject of Library and Information Science in our college. Please accept the appointment and give your confirmation.

We hope that your research knowledge and research guidance will be beneficial to our research center and research students.

Thanks!

(Dr. P. V. Dalal)

PRINCIPAL
Shri V.S.Naik Arts, Comm.& Sci
College, Raver Dist-Jalgson



Raver Parisar Shikshan Prasarak Mandal's

#### Shri. Vitthalrao Shankarrao Naik

#### Arts, Commerce and Science College,

Raver - 425 508, Tal. - Raver, Dist. - Jalgaon. [ Affiliated to North Maharashtra University, Jalgaon (M.S.) ]

Prin. Dr. P. V. Dalal M.Sc., M. Phil., Ph.D.

e-mail: paresh10dalal@gmail.com

Cell Phone: 09420074998

Phone: 02584-250447(0)

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U.G.C. Recognisation -

S-2(f)-F8-77/2007(CPP-I), 31 Jan. 2008.

S- 12(B)-F8-77/2007(CPP-I), 17 Sep.2008.

Outwod No.

Date:20/04/2022

प्रति, प्रति. डॉ. जे. पी. नेहेते रसायन शास्त्र विभाग , एस.व्ही.पी. महाविद्यालय, ऐनपुर ता.रावेर, जिल्हा जळगाव

विषय : संशोधन सल्लागार समिती (RAC) सदस्य पदी नियुक्ती बाबत,

संदर्भ: Revised notification -1/2017 Ph.D. Section W.E.F. April 2017.

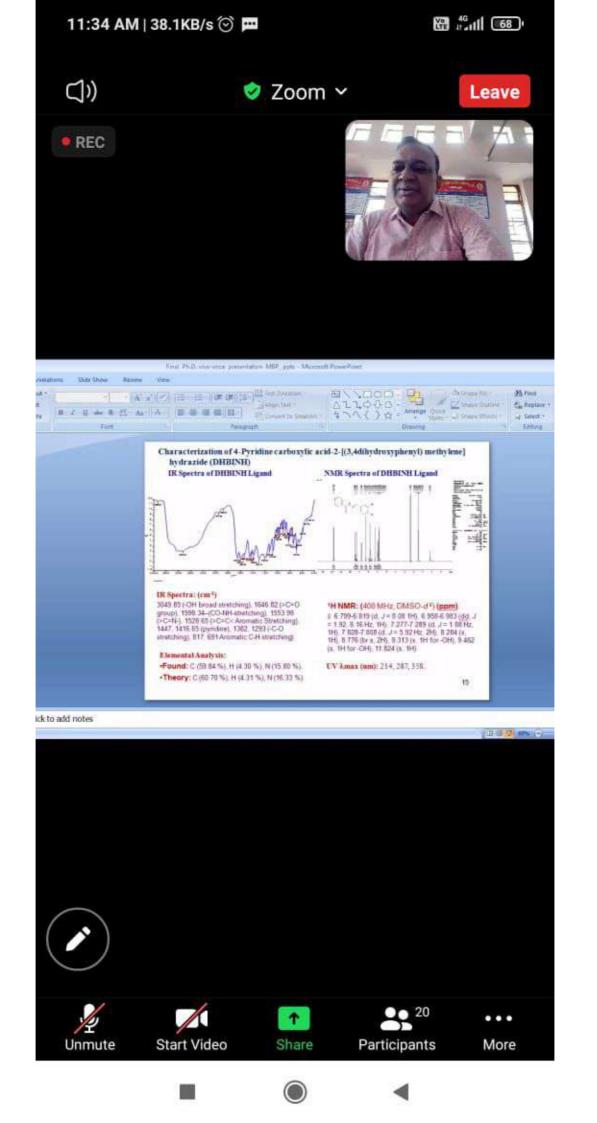
As per Academic council Resolution V.P. A. - 64/2017 Date - 22/05/2017

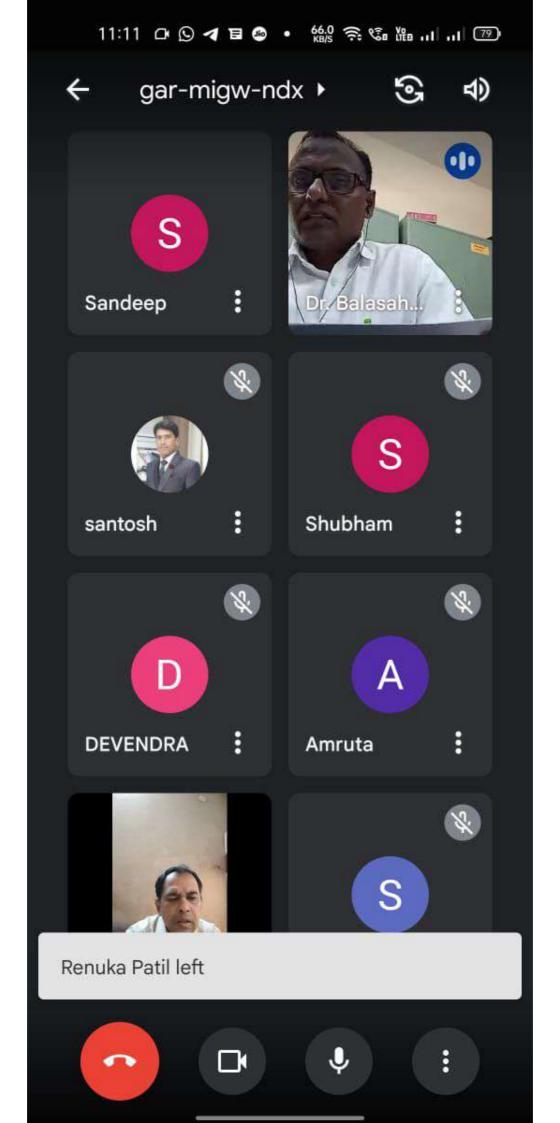
महोदय,

आमच्या महाविद्यालयातील रसायन शास्त्र विषयाच्या "संशोधन सल्लागार समिती" च्या सदस्य पदावर पुढील दोन वर्षासाठी आपली नियुक्ती करण्यात येत आहे. आपण स्वीकार करावा हि विनंती .

(डॉ. पी. व्ही. दलाल)

रावेर परिसर शिक्षण प्रसारक मंडळ श्री विद्वलराव शंकरराव नाईक कला, दाणिज्य व विज्ञान महादिद्यालय, रावेर जि.जळगांव (महा) ४२५५०८











M. S. P. Mandal's

#### SHRI SHIVAJI COLLEGE, PARBHANI

(NAAC Accreditated with A+)

Online One Week FDP on

"NAAC Assessment and Accreditation"
(UNDER UGC PARAMARSH)



This is to certify that <u>Dr.G.R.Dhembre</u> has successfully completed the <u>UGC Paramarsh Online Faculty Development Programme</u> on "NAAC Assessment and Accreditation" conducted by Internal Quality Assurance Cell (IQAC) of this college during <u>21-26 May 2020</u> and scored <u>66%</u> in the online MCQ test based on the content shared in 10 live sessions by experts from across the country including the NAAC itself.



C0AODU-CE001427

DR. ROHIDAS NITONDE Coordinator, IOAC 26/05/2020

DR. BALASAHEB JADHAV Principal



**SNDT Women's University** 

Nathibai Thackersey Road, Mumbai 400020 Dr.B.R.Ambedkar Chair In collaboration with



PVDT COLLEGE OF EDUCATION FOR WOMEN. MUMBAI



This certificate is presented to

Dr. Mukhyadal Balu Gangadhar From

Shri. V. S. Naik Arts, Commerce and Science College Raver Dist. Jalgaon

He/she has successfully completed the One Weeks
TRAINING PROGRAM ON e-LEARNING
organised during 28 June to 04 July 2020.

Dr. Danslauman Dreadhan

Dr.Ramkumar Pradhan,
Associat Professor
SNDT College of Arts College
Co-Convener

Dr.Bhúpendra Bansod , Librarian

PVDT College of education for women
Convener

Dr.Sanjay Shedmake, Director (I/C)

Dr. Babasaheb Ambedkar chair Course Director Dr.Meena Kute, Principal

PVDT College of education for women
Program Director



# MANONMANIAM SUNDARANAR UNIVERSITY, Tirunelveli MADRAS LIBRARY ASSOCIATION, Chennai



# Certificate

This is to certify that Dr. **Dr. Mukhyadal Balu Gangadhar**, *Librarian, Shri V. S. Naik College Raver Dist Jalgaon,Raver* has participated in the One Week Online Short Term Course on "Library and Information Science" held on 17-24/07/2020 Jointly organised by Manonmaniam Sundaranar University and Madras Library Association. He/She secured **100** % in Online Examination.

Prof. Dr. K. Nithyanandam

President, MALA Convener Mr. K.Venkataramani

Coordinator

P. Belis Wova marrian

Dr.P.Balasubramanian

University Librarian & Head

Manonmaniam Sundaranar University, Tirunelveli
Organizing Secretary

P.O.O. II. I.P.I.

Dr.S.Santhosh Baboo

Registrar,

Manonmaniam Sundaranar University. Tirunelyeli

## Marathwada Shikshan Prasarak Mandal's



# Deogiri College, Aurangabad



NAAC Reaccredited (3rd cycle) 'A' Grade (3.75 CGPA)

# CERTIFICATE OF PARTICIPATION

This is to Certify that **Sandeep Dasrao Dhapse** has successfully participated in the online quiz Competition organized by Department of Political Science, Deogiri College, Aurangabad.

Thank you for participating in online political Science quiz.

Stay Home, Stay Safe

Dr. Sham Kadam

Professor & Head Dept. of Political Science Dr. Shivajirao N. Thore
Principal



# Shri Shivaji Education Society Amravati's Dr. Gopalrao Khedkar Mahavidyalaya Gadegao (Telhara) Dist. Akola Collaboration with



Gajanan Maharaj Shikshan Sanstha Amravati's
Narayanrao Rana Mahavidyalaya Badnera Dist. Amravati
Organized by Department of Political Science & Department of Sociology
National Level Interdisciplinary E-Conference on

Socio-Political and Economic Changes at the National and International Levels During the Covid Period

# CERTIFICATE

This is to certify that Sandeep Dasrao Dhapse of Shri.V.S.Naik College Raver, Dist-Jalgaon has participated in the National e-conference entitled "Socio-Political and Economic Changes at the National and International Levels During the Covid Period" Organized by Department of Political Science Dr. Gopalrao Khedkar Mahavidyalaya Gadegao (Telhara) Dist. Akola Collaboration with Department of Sociology Narayanrao Rana Mahavidyalaya Badnera Dist. Amravati held on July 31, 2021.

Dr. Krushna A. Mahure Convener Dr. Schin J.Holey Convener Dr. Gopal J. Dhole Principal Dr. Gopal S. Vairale Principal



'A' Grade NAAC Re-Accredited (3rd Cycle) Jalgaon-425001, Maharashtra (India)

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#### Blank Mark List For

B.A.(with Credits) - Regular-under CBCS [June-2019] Pattern - F.Y. B.A. - Sem-II For May-2022

College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Jalgaon Pin: 425508

aper N	lame: Environm	ental Studies (85555)	Field Work CA (Max Mark: 40		Total
Sr. No.	Seat Number	PRN	Student Name	Marks	plan)
1	100070	2021015400222274	GUPTA BHUMIKA LALAN	@ avan	Neem
2	112763	2021015400208193	AMODE MAYURI ANIL	MAD.	(Tul
3	112764	2021015400217965	ATKALE PRASHIK ASHOK	- Patrole	Control
4	112765	2021015400209552	BHAGYESHWAR ROHIT KISHOR	Bris	m
5	112766	2021015400217996	BHALERAO SIDHDARTH SANTOSH	SSBHUSE	- Heer
6	112767	2021015400221224	BHALERAV AJAY VIJAY	2435	
7	112768	2021015400218535	BHARATE BHAVANA MANOHAR	Brancete	Bambox
8	112769	2021015400221313	BHAVSAR JANHAVI RAJENDRA	J. R. Bhansan	. Nee
9	112770	2021015400222251	BHILL LAKHAN SUNDARLAL	Bar	nee
10	112771	2021015400218005	BHOI POOJA MAGAN	P.M.B	TAMMI
11	112772	2021015400218237	BHOI SHRUTI PRAKASH	S.P. Bhoi	Fuls
12	112773	2021015400220824	BIRAPAN KIRAN KAILAS	- B.K.K	BRE.
13	112774	2021015400310823	BIRPAN AJINKYA YUVRAJ		
14	112775	2021015400222467	BIRPAN SARANG RUPA	Spinon.	Adul
15	112776	2021015400207232	BORSE KAJAL RAMKRUSHNA		( COJOIBOT
16	112777	2021015400213453	BORSE KAVITA SAMADHAN	- 83 -	C C
17	112778	2021015400217064	BUNDELE GAURAV MUKUNDA		GMB N
18	112779	2021015400207305	CHAITALI NARAYAN Mahajan	Chaltali	N
19	112780	2021015400223037	CHARAN SHANKAR AANANDA	SACHARA	Asho
20	. 112781	2021015400217571	CHAUDHARI AAKASH GANESH	A.a.chalu	dri Ne
21	112782	2021015400207143	CHAUDHARI ABHISHEKH RAJENDRA	Aluxola	Ne
22	112783	2021015400222475	CHAUDHARI ATUL SHANTARAM	(Deili)	COME !
23	112784	2021015400217033	CHAUDHARI HARSHAL PRADIP	(IP	Near
24	112785	2021015400218276	CHAUDHARI KIRTI PRAMOD	K.P.C	Kohne
25	112786	2021015400215533	CHAUDHARI RAHUL EKNATH	B.	Heer
26	112787	2021015400207271	CHAUDHARI VAISHNAVI VILAS	(Bushnais	Nea
27	112788	2021015400305524	CHAUHAN KRUSHNA RAMESH		Nea
28	112789	2021015400218551	DHANDE KOMAL JAYANTA	K.J.D	Neev

Seal



Date



'A' Grade NAAC Re-Accredited (3rd Cycle) Jalgaon-425001, Maharashtra (India)

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B.A.(with Credits) - Regular-under CBCS [June-2019] Pattern - F.Y. B.A. - Sem-II For May-2022

College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Raver, Jalgaon Pin: 425508 Count of Student: 164 Field Work CA (Max Mark: 40 Min Mark: 16)

Paper Name: Environmental Studies (85555)		ental Studies (85555)	Field Work CA (Max Mark: 40 )	Personal Control of the Control of t
Sr.	Seat Number	PRN	Student Name	Marks Total plant nau
29	112790	2021015400213437	DHANGAR AMOL DINESH	A.D.D Neem
30	112791	2021015400222204	DHANGAR DEVYANI SHANTARAM	Thungar Ashok
31	112792	2021015400207294	DHANGAR SUVARNA KAILAS	SKP. Neer
32	112793	2021015400207584	GADHE AJAY PRAKASH	A Neem
33	112794	2021015400239164	GADHE ANMOLIKA RAGHUNATH	Radue Calles me
34	112795	2021015400212941	GADHE KANCHAN SURESH	Color Tulo
35	112796	2021015400214247	GADHE RITIK SURESH	Deep By Ch
36	112797	2021015400212836	GADHE ROSHANI CHHAGAN	Per neem
37	112798	2021015400291901	GADHE SUREKHA RAJENDRA	5. R.C. Saco. 84
38	112799	2021015400213395	HIVARE GOPAL GAUTAM	9.9. Hivaxe people
39	112800	2021015400220913	HIVARE MAYUR BHAURAO	Mening heem
40	112801	2021015400212813	INGALE PAWAN SATISH	Mrs C. Near
41	112802	2020015400309602	JADHAV ASHUTOSH HIMMAT	
42	112804	2021015400214232	JADHAV DHYANESHWAR RAMBALI	
43	112805	2021015400218284	KAPADE UDAY SANJAY	W.S.K Neer
44	112806	2021015400246527	KHAIRE ROHIT YADAV	Proces -
45	112807	2021015400217957	KHEDKAR BHARATI RAMKRUSHN	Boss coconut
46	112808	2021015400305532	KOLI AATISH NILKANTH	
47	112809	2021015400208185	KOLI KHUSHBU SANJAY	Keoli Neem
48	112810	2021015400214294	KOLI ROHINI NARAYAN	Exer's sunflew
49	112811	2021015400223181	KOLI ROHIT ANIL	Rassali Bertoliniper
50	112812	2021015400212902	LAHASE KRUSHNA ISHWAR	4. T Johnso to Introdo
51	112813	2021015400213476	LAHASE NARENDRA ANIL	of Neem.
52	112814	2021015400220983	LAHASE SANKET RAMKRUSHN	S.R.Calmise 17
53	112815	2021015400305516	LULHE KANCHAN JAGANNATH	setulbo selluba Bad
54	112816	2021015400209432	MAHAJAN AKSHAY SANTOSH	· A.SA) NEAM
55	112817	2021015400207247	MAHAJAN ASHWINI RAJESH	Orahojan prepa
56	112818	2021015400221247	MAHAJAN BHAGYASHRI MURLIDHAR	Boon Kalme

Seal



Signature of Examiner

Date



'A' Grade NAAC Re-Accredited (3rd Cycle) Jalgaon-425001, Maharashtra (India)

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College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Jalgaon Pin: 425508

aper N	lame: Environme	ental Studies (85555)	Field Work CA (Max Mark: 40 Min Mark		
Sr.	Seat Number	PRN	Student Name	Marks 51gm -	plant
57	112819	2021015400207576	MAHAJAN DATTAPRASAD PRAVIN	100	Kerpha
58	112820	2021015400221255	MAHAJAN DHANASHRI MURLIDHAR	amo	Julsi
59	112821	2021015400217095	MAHAJAN DIPAK MANOHAR	Fakm	Neem
60	112822	2021015400222193	MAHAJAN DIPAK SAMADHAN		
61	112823	2021015400214255	MAHAJAN GAYATRI PRAKASH	G.P.M	Korphac
62	112824	2021015400221336	MAHAJAN HARASHALI NAGINDAS	amahaim -	neer
63	112825	2021015400217973	MAHAJAN HARSHALI YOGESH	HY Mahajar	Meem
64	112826	2021015400207263	MAHAJAN HARSHALI YUVARAJ	Hemahajan	Neem
65	112827	2021015400214224	MAHAJAN HEMANGI NARENDRA	PM.	Tulsi
66	112828	2021015400217594	MAHAJAN JAGRUTI MANIK	gypholician_	papaya
67	112829	2021015400213317	MAHAJAN KAJAL GOPAL	Prahaja	papar
68	112830	2021015400221263	MAHAJAN KAJAL PRAVIN	Who Tab	nee
69	112831	2021015400221197	MAHAJAN LALITA NILESH	I.N. Mahajan	popaya
70	112832	2021015400209424	MAHAJAN MOTILAL PUNAMCHAND	Aly	Py
71	112833	2021015400218214	MAHAJAN NIHAL JAGAN	N.J. mahatir.	Neem
72	112834	2021015400214271	MAHAJAN PRAGATI ISHWAR	Ptm_	Tulsi
73	112835	2021015400217942	MAHAJAN PUJA VITTHAL	Pu Michaldo E	v muhaita
74	112836	2021015400221321	MAHAJAN RITU DNYANESHWAR	Romabagn.	· Ashoks
75	112838	2021015400221201	MAHAJAN SANJANA NAMDEV	5.N.M	Mesto
76	112839	2021015400220921	MAHAJAN SEJAL SANDIP	5.5. M.	- Lin
77	112840	2021015400223061	MAHAJAN SWAPNIL VIJAY	0.03	
78	112841	2021015400212852	MAHAJAN TEJAS DEVANDAS	Garatort.	Meen
79	112842	2021015400220975	MAHAJAN TEJASWINI PRAKASH	Rahajah.	Ash
80	112843	2021015400221182	MAHAJAN TEJASWINI SANJAY	Endhia	Korph
81	112844	2021015400220894	MAHAJAN TEJESHWARI RAMESH		Populayer
82	112845	2019015400300482	MAHAJAN UMESH SURESH	Lemon	Sweet
83	112846	2021015400213484	MAHAJAN URMILA NATTHU	1 11	I.N.mahayan
84	112847	2021015400213341	MAHAJAN VAIBHAV VASANT	And i	Constitute !



Date



'A' Grade NAAC Re-Accredited (3rd Cycle) Jalgaon-425001, Maharashtra (India)

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B.A.(with Credits) - Regular-under CBCS [June-2019] Pattern - F.Y. B.A. - Sem-II For May-2022

College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Jalgaon Pin: 425508 (Max Mark: 40 Min Mark: 16)

Daner	Name: Environm	nental Studies (85555)	Field Work CA (Max Mark: 40 Min Mark: 1		San
Sr.	Seat Number	PRN	Student Name	Marke 8190	plant,
No.				0''	1 nam
85	112848	2021015400214216	MAHAJAN VASUDEV SHRIRAM	1.5 M	VSIN new
86	112849	2021015400218485	MAHAJAN VINAY RATNAKAR	And ga	Heem yeem
87	112850	2021015400217934	MAHAJAN VISHAL KAILAS	(Mrs	Meet Meet
88	112851	2021015400207255	MAHAJAN YAMUNA VIJAY	Yumahojan	TWIST
89	112852	2021015400213267	MALI KAJAL SADASHIV TUGI-	famez"	Kenny
90	112853	2021015400209672	MORE SHUBHAM SHRIKRISHNA	8hbb 210	Sandam Leman
91	112854	2021015400222235	NAGARIYA NIKITA KAUSHAL		· Neem
92	112855	2021015400220905	NAIK GAYATRI DIPAK	Graik	Meen
93	112856	2021015400212956	NAYAIKAR BHUSHAN SUNIL	- Ball-	farming .
94	112857	2021015400220952	NHAVI VISHVESHVARI MUKUNDA	Dattori.	- Aduls a
95	112858	2021015400212821	NIKAM ANKUSH BHAGWAN	Much	Neem
96	112859	2021015400005985	PANDIT SHREYA MADAN	Pandil	Vae
97	112860	2021015400220886	PATIL ADITI RAVINDRA	THUE	Banyan
98	112861	2021015400220871	PATIL AMRUTA KISHOR	Arketi	Ashoka Tree
99	112862	2021015400213275	PATIL ATUL SUDHAKAR		,
100	112863	2021015400213244	PATIL BHAGYASHRI SANTOSH	Poplatit	Ashwagandh
101	112864	2021015400213387	PATIL JIJABAI BAJIRAO	Felcui	Sitaphel
102	112865	2021015400221174	PATIL KAJAL SANJAY	Kity	Asholicy
103	112866	2021015400207151	PATIL KALYANI BHAGWAN	*patil	Meem Neem
104	112867	2021015400221294	PATIL KALYANI NARENDRA	KORHI	Neem "
105	112868	2021015400214263	PATIL KANCHAN BRIJALAL	K.B.P	HBP Neem
106	112869	2021015400218477	PATIL KHUSHI SANJAY	k.s.P.	*5.P. Neem
107	112870	2021015400218543	PATIL KOMAL YASHWANT Menum.	BHBM	The state of
108	112871	2021015400220832	PATIL MAHIMA RAMDAS (panfuti)	Matil.	The state of the s
109	112872	2021015400221271	PATIL NEHA RAJU Neem	· DePeut	- TOTAL
110	112873	2021015400213372	PATIL NIKITA KAILAS	Btil	Many Tulsi
111	112874	2021015400207166	PATIL RUSHALI GOKUL	Betty	Menun
112	112875	2021015400220847	PATIL SANIKA MOHAN	John.	Backen
				-	



fremade

Date



'A' Grade NAAC Re-Accredited (3rd Cycle) Jalgaon-425001, Maharashtra (India)

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#### Blank Mark List For

B.A.(with Credits) - Regular-under CBCS [June-2019] Pattern - F.Y. B.A. - Sem-II For May-2022

College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Parisarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Parisarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Parisarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Parisarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Rave

Paper N	Name: Environm	ental Studies (85555)	Field Work CA (Max Mark: 40 Min Mark:		Student: 164
Sr.	Seat Number	PRN	Student Name	Marks	Total
113	112876	2021015400212933	PATIL SHITAL DNYANESHWAR	sopatil.	Neem
114	112877	2021015400217586	PATIL SHITAL SANJAY	<b>P</b>	A Ra
115	112878	2021015400217621	PATIL SHRUTIKA RAJENDRA	ORte	CON N
116	112879	2021015400220816	PATIL SONAL YOGESH	SPAIN	Umber
117	112880	2021015400217056	PATIL TEJASVINI CHANDRAKANT	711	Kady ba
118	112881	2021015400213252	PATIL TULSABAI SURESH	TEQ:	agaa i
119	112882	2021015400218504	PATIL VAISHNAVI VINOD	atil	Ne
120	112883	2021015400217605	PATIL VARSHA GOPAL	7	Vach
121	112884	2021015400220855	PATIL VISHAKHA PANDURANG	12811	Vesti 0
122	112885	2021015400222517	PATIL VIVEK PRAKASH	JPP -	Neev
123	112886	2021015400222243	PATIL YOGITA SAMADHAN	SRA!	Achok
124	- 112887	2021015400213445	PAWAR PRASHIK GANESH	Ofen.	Sieno V
125	112888	2021015400207611	PAWAR RITESH VIJAY	Route	White A
126	112889	2021015400221305	PRAJAPATI TEJASWINI SANJAY	Prophi	rulsi
127	112890	2021015400222227	RAJPUT HEMLATA TEJSING	Hairof	Kahne
128	112891	2021015400222491	RAJPUT PRANJAL MANOJSINGH	TOPIN	12mh
129	112892	2021015400222483	RANDHAVE AJAY GORELAL	Acae 2	The Mr
130	112893	2021015400222212	RATHOD AMOL LAXMAN	NOST.	19
131	112894	2021015400208162	RAVILAXMAN Khandare -	Port	Meen
132	112895	2021015400217636	SANYAS ASHVINI VIJAY	Av.	Neer
133	112896	2021015400218261	SAVALE KAJAL HUKUMCHAND	Rus.	BOXXXX. TU
134	112897	2021015400218245	SAVALE NIKITA SUNIL		nkth
135	112898	2021015400217114	SAWALE VAISHANAVI SUNIL KAhner	Mulo	Associate
136	112899	2021015400212925	SHAIKH ISRAR AHMAD SHAIKH AAZAM MANYAR	E DAN	de G
137	112900	2021015400213283	SHINDE PRATIKSHA SANJAY	P.S.Shinde	Mediality
38	112901	2021015400212794	SHIRSALE SWAPNIL SUKDEV		
39	112902	2019015400301694	SONAR HEMANT RAMKRUSHNA		
40	112903	2021015400221344	SURWADE JAYESH CHANDU		

Seal



James Le Signature of Examiner

Date



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College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Jalgaon Pin: 425508 Count of Student: 164

Paper N	Name: Environm	ental Studies (85555)	Field Work CA (Max Mark: 40 Min Mark	
Sr.	Seat Number	PRN	Student Name	Marks Total Plant Plane
141	112904	2021015400220967	SUTAR RADHA PRAKASHA	Jes Nem
142	112905	2021015400223165	SUTAR VAISHNAVI GANESH	( Deepu) Bata
143	112906	2021015400218253	TADAVI AMIN EDU	Panduti
144	112907	2021015400212891	TADAVI DILSHAN HAMEED	And Fadavi
145	112908	2021015400221216	TADAVI JAVED MUSTUFA	Maday Neem
146	112909	2021015400218493	TADAVI REHANA FIROJ	Banna (neepal)
147	112910	2021015400218527	TADAVI SALIM SAHEBU	symian i Weemade es
148	112911	2021015400218222	TADAVI SAMIR FATTU	Jadaji (Neam)
149	112912	2021015400213325	TADAVI SHAREEF JALDAR	
150	112913	2021015400217106	TADAVI TASLIM RAMJAN	(Lemon) favoi
151	112914	2021015400213414	TAYADE CHETAN VINOD	Forface , Neen
152	112915	2021015400246535	TAYADE NISHA TOPALU	Retor Heem.
153	112916	2021015400217087	TAYADE RAKSHITA SUKDEV	(Neem) Blunde
154	112917	2021015400217981	TAYADE RANI DILIP	RDT Badew
155	112918	2021015400217652	TAYADE SHIVAM RAJENDRA	S.P. Tarde Strain N
156	112919	2021015400209544	THAKANE SHWETA NAGO	(neem) Indiane
157	112920	2021015400212964	VALVI ASHVINI KALUSING	Just (Rahner
158	112921	2021015400213291	VALVI KU URMILA PRATAP	(chandra)
159	112922	2021015400212883	VASAVE MONIKA AAMSHA	1 Constitution
160	112923	2021015400212844	VASAVE PUNAM AAMSHA	there Lemon
161	112924	2021015400223092	WAGH AKSHATA GOKUL	Au Ble Fred
162	112925	2021015400217644	WANKHEDE ROHIT SHIVALAL	neem.)
163	112926	2021015400222266	ZOPE BHARTI SHAILENDRA	Bezope Limber
164	112927	2021015400222823	ZOPE NITESH ATUL	vad

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B.Com.(with Credits) - Regular-under CBCS [June-2019] Pattern - F.Y. B.Com - Sem-II For May-2022

College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Jalgaon Pin: 425508 Count of Student: 96

aner I	Name: Environm	ental Studies (85555)	Field Work CA (Max Mark: 40 Min Mark: 16	Count of s	Student: 96
Sr.	Seat Number	PRN	Student Name	Marks	Total
Vo.	600004	2021015400215525	BARI DIPALI CHAMPALAL		DCR
1	808301		21/104	nal,	D - 0 13 0
2	808302	2021015400219175	BELASKAR PRACHI GANESH	10)	P.G.Belosker
3	808303	2021015400223207	CHANDWANI BHARAT DILIP		
4	808304	2021015400209196	CHAUDHARI AARTI PRABHAKAR		
5	808305	2021015400219272	CHAUDHARI HARSHAL EKNATH papa	19	Hickory
6	808306	2021015400219167	CHAUDHARI HARSHAL RAJENDRA		
7	808307	2021015400219024	CHAUDHARI HARSHALI RAMKRUSHNA	amebri.	chan
8	808308	2021015400218825	CHAUDHARI JAYASHRI KISHOR TULSI		Richari
9	808309	2021015400219345	CHAUDHARI KAJAL SURESH	ì	K.s.chaudh
10	808310	2021015400215556	CHAUDHARI KANCHAN SUNIL TUSI	(	Kspau
11	808311	2021015400215204	CHAUDHARI NIKITA SUNIL		
12	808312	2021015400215131	CHAUDHARI SOHAM SUNIL		
13	808313	2021015400214843	CHAUDHARI SWAPNIL GOPAL		
14	808314	2021015400209231	CHAUDHARI VAISHALI GOPAL	V.G.chart	Kahne
15	808315	2021015400218841	CHAUDHARI VAISHNAVI SUNIL Zend		Ver
16	808316	2021015400218856	DHANGAR MANOJ SAHEBRAO ,		
17	808317	2021015400209293	DHANGAR UJWALA JAGDISH	Jsi .	genela 1.
18	808318	2021015400209374	DHIVARE MANOHAR ATMARAM AShok		ma-hicse
19	808319	2021015400219337	DIPAK BALIRAM	7.	4
20	808320	2021015400207696	GAYAKWAD DURGA SUNIL		
21	808321	2921015400215564	INGALE ISHWAR TRAYMBAK	min.	I.T. Frague
22	808322	2021015400219086	JANJALKAR TEJASWINI SANJAY		Zanjallar
23	808323	2021015400215146	JAVHARE DIVYA TARACHAND Neev	)	Penhane.
24	808324	2021015400209262	JUNGHARE TUSHAR RAJENDRA  KARAD RAJASHRI NIVRUTTI	asmin .	Tungh and
25	808325	2021015400215185			0 0 .
26	808326	2021015400219136	KAWADKAR MADHURI VINOD ACHWO	gandha.	ME
27	808327	2021015400209285	KAWADKAR RUPALI BHAGAWAN Tuls	)	(BBKawadk
28	808328	2021015400215517	KHARE KU PRATIKSHA VINOD	a	P.V. Khar



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'A' Grade NAAC Re-Accredited (3rd Cycle) Jalgaon-425001, Maharashtra (India)

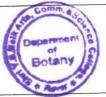
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B.Com.(with Credits) - Regular-under CBCS [June-2019] Pattern - F.Y. B.Com - Sem-II For May-2022

College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthairao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Jalgaon Pin: 425508 (Max Mark: 40 Min Mark: 16)

	And a second of the second second	atal Studios (85555)	Field Work CA (Max Mark: 40	Min Mark: 16)	Count of S	Student: 96
aper	Name: Environme	ental Studies (85555)	Student Name		Marks	Total
Sr. No.	Seat Number	PRN	5,000			Andrian
29	808329	2021015400219113	MAHAJAN APEKSHA SANJAY	Kalon	er	Amount
30	808330	2021015400215115	MAHAJAN BHAGYASHRI ASHOK	chando	mi	Smahago
31	808331	2021015400209157	MAHAJAN BHAGYASHRI SANJAY	paperg		<b>डिसंग्नरप्रत</b> े
32	808332	2021015400219353	MAHAJAN CHETANA DNYANESHWAR			N
33	808333	2021015400219094	MAHAJAN DHANASHRI KADU	kahne	Y-	Kmahajan
34	808334	2021015400209223	MAHAJAN DIPALI TULASHIDAS	Free		Kanher
35	808335	2021015400215212	MAHAJAN GAYATRI SUNIL	Litrus		THE STATE OF THE S
36	808336	2021015400219144	MAHAJAN HARSHAL DILIP			
37	808337	2021015400209277	MAHAJAN HARSHAL SANTOSH	Henry		Kney
38	808338	2021015400218906	MAHAJAN HEMANT BALU	Mersum,	•	Hamalejan.
39	808339	2021015400219016	MAHAJAN JAY GANESH			
40	808340	2021015400215123	MAHAJAN KALPANA SANTOSH	Aloever	5	Mahara
41	808341	2021015400214932	MAHAJAN KUNAL JAYANT			
42	808342	2021015400214827	MAHAJAN MEGHA SUNIL	Pitoe ver	4	Mmahajan
43	808343	2021015400223246	MAHAJAN NAKUL RAMESH			
44	808344	2021015400215073	MAHAJAN NIKHIL SANJAY		1	
45	808345	2021015400209351	MAHAJAN PAVAN DINESH			
46	808346	2021015400215572	MAHAJAN PRATIK PRAMOD			
47	808347	2021015400209366	MAHAJAN PRIYANKA VINOD	denum		Prohagn-
48	808348	2021015400219063	MAHAJAN PUJA SANJAY	Julsi		Smarajan
49	808349	2021015400209254	MAHAJAN PUNAM YUVRAJ	papaya		P.Y. Mahaja
50	808350	2021015400215154	MAHAJAN SARIKA ASHOK			
51	808351	2021015400214916	MAHAJAN SAURAV ANIL			
52	808352	2021015400209181	MAHAJAN SNEHAL MADHUKAR	nango		Shahata
53	808353	2021015400209207	MAHAJAN SWAPNASHABHU SUNIL	U		
54	808354	2021015400215096	MAHAJAN UDAY ANIL			
55	808355	2021015400209165	MAHAJAN VRUSHALI EKNATH	Aloever	ra	vem
56	808356	2021015400219071	MAHALE TANUSHA SANJAY	Ashoka		Blande





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B.Com.(with Credits) - Regular-under CBCS [June-2019] Pattern - F.Y. B.Com - Sem-II For May-2022

College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Raver, Jalgaon Pin: 425508

0.	niege : Ravei Fanso		Raver, Raver, Jalgaon Pin: 425508 Field Work CA (Ma	x Mark: 40 Min Mark: 16	Count of Stu	ident: 96
aper N	lame: Environme	ental Studies (85555)	Student Name		Marks	Lets
Sr.	Seat Number	PRN	Student Name		1º Wir	
57	808357	2021015400219032	MALI NIKHIL KANHAIYALAL	Kahoner	N. H.	Marie T
58	808358	2021015400219121	MALI RAHUL GIRDHAR	Ashoka	Remain	
59	808359	2021015400215081	MALI VIVEK KAILAS	701		
60	808360	2021015400215541	MARATHE SAKSHI MANOJ	Alberera	S.M. Monelle	
9860 	808361	2021015400214874	MULKUTKAR PRATIK DILIP	Ashoke	P. Mukidka	
61	008000000000000	2021015400215162	NIVATKAR YOGITA CHANDRAKANT	Kahner		
62	808362	2021015400209304	PATEL KHUSHAL VIRENDRA	1000	QO DIVON SI	
63	808363		PATIL ANIKET MOHAN	Ash	oka -	Singhet
64	808364	2021015400218864	PATIL ANIKET VINOD	Tosh	and	Aveab
65	808365	2021015400215193	PATIL BHAVANA PRABHAKAR	Tuls	ì	000
66	808366	2021015400219152				Bath
67	808367	2021015400218887	PATIL CHAITALI KANTILAL	e Elaich	w.	
68	808368	2021015400215491	PATIL DIPALI NAMDEV	Alver		D.N.R.
69	808369	2021015400219105	PATIL DNYANESHWARI RAJU	Newm	D.C.	Para
70	808370	2021015400219295	PATIL HARSHA GOPAL	Aloer	eva	Jeny
71	808371	2021015400219314	PATIL HARSHA RAJU	Hoer	rore	J- Revi
72	808372	2021015400214804	PATIL HARSHAL RAMCHANDRA	Chhot	elards	4 OA KIL
73	808373	2021015400213492	PATIL JAYESH MADHUKAR			PAN AVA
74	808374	2021015400215057	PATIL KAJAL MADHUKAR	Neev	1 =	K.D. Yue
75	808375	2021015400214924	PATIL MINAKSHI BABURAO	Ashivey	gandha	model
76	808376	2021015400215177	PATIL MONIKA SANJAY	New	in	Mosop
77	808377	2021015400209215	PATIL NIKITA SUDHIR	Ashwe	gandha.	@Btu
78	808378	2020015400201211	PATIL RITESH PRALHAD		V	
79	808379	2021015400218833	PATIL SAGAR VILAS			
80	808380	2021015400215502	PATIL SAMIKSHA RAJENDRA	Kah	ner	5 RPay
81	808381	2021015400209173	PATIL SANIKA UMAKANT	Aloe	vera	Silan
82		2021015400219055	PATIL SARIKA VIKAS	Nee		DRU
83		2021015400219306	PATIL VAIBHAV LILADHAR	bel		Orgati
84		2021015400215042	PATIL VRUSHALI VITTHAL	Aloev	ery	UPILI



Date



'A' Grade NAAC Re-Accredited (3rd Cycle) Jalgaon-425001, Maharashtra (India)

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B.Com.(with Credits) - Regular-under CBCS [June-2019] Pattern - F.Y. B.Com - Sem-II For May-2022

College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Jalgaon Pin: 425508

aper N	ame: Environm	ental Studies (85555)	Field Work CA (Wax Mark: 40 Mill Mark: 40 Mi	unt of Student: 96
Sr.	Seat Number	PRN	Student Name Marks	5 Total
85	808385	2021015400219287	RATHOD AKSHAY SARICHAND	
86	808386	2021015400209134	RATHOD VISHAL HARDAS	
87	808387	2021015400219322	SAVALE JYOTI NARAYAN (cmor)	Tisavale
88	808388	2021015400215107	SHARMA RUSHIKESH CAPPY A	RRS.
89	808389	2021015400214777	SHIMPI PIYUSH DATTATRAY	
90	808390	2021015400214897	SHINDE BHUSHAN PITAMBER	
91	808391	2021015400213503	SHINDE DURGESH DNYANESHAWAR	Dinte
92	808392	2021015400219047	SHINDE RAJ DILIP	
93	808393	2021015400218895	SONAWANE DIPALI RANJIT	D.R.Songwall
94	808394	2021015400223223	SURYAVANSHI RAHUL RAVINDRA	0
95	808395	2021015400219001	TAPASE ANKITA SIDDHARTH	West
96	808396	2021015400209246	WAGHMARE GAURAV ARJUN	



- Instruction

  1. While entering the marks, please ensure a clear, legible hand-writing, without any scratches or over-writing.

  2. In case of scratches, over-writing or corrections, please re-write the marks separately with your signature.

  3. Use English number while entering the marks.

  4. Usage of whitner is strictly prohibited.



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B.Sc.(with Credits) - Regular-under CBCS [June-2019] Pattern - FY B.Sc. - Sem-II For May-2022

College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Jalgaon Pin: 425508 Count of Student 118

aper t	lamo: Environme	ental Studies (85555)	Field Work CA (Max Mark: 40	, Will thom: Toy	t of Student: 118
Sr. No.	Seat Number	PRN	Student Name	Marks	Total
1	308391	2021015400209591	ATKALE AJAY MARI	cycas"	And
2	308392	2021015400209792	ATKALE ARATI DNYANESHWAR	J	
3	308393	2021015400209811	BARI DEVENDRA KASHINATH	Badam	Thon
4	308394	2021015400214947	BHIDE MRUDULA CHHOTULAL	Rose	व्याउन्
5	308395	2021015400284715	BHOI PRAFUL PRAKASH . A	tshoka	Prosent
6	308396	2021015400210056	BHOI VAISHNAVI SUNIL		
7	308397	2021015400209695	CHAUDHARI GAURAV ARUN	Ashoka.	GAC
8	308398	2021015400209714	CHAUDHARI GAYATRI SANJAY	cahner	(F)
9	308399	2021015400284731	CHAUDHARI KALPESH SHAMRAO		
10	308400	2021015400209656	CHAUDHARI PRAJWAL MURALIDHAR		
11	308401	2021015400209602	CHAUDHARI RIYA RAHUL	Whoti chandni	- Hujer
12	308402	2021015400209737	CHAUDHARI ROHIT SANTOSH	Neem	Sahit
13	308403	2021015400209633	CHAUDHARI RUNALI KAILAS	Menum.	Phan chay
14	308404	2021015400246551	CHAUDHARI SHRADDHA MANOHAR	Bambo	Estei:
15	308405	2021015400209687	CHAUDHARI TEJASWINI KIRAN	behda	J.K.C.
16	308406	2021015400209706	DEOHANS SAURABH MANOJ		
17	308407	2021015400210087	DEVRAJ SANTOSH BAGARE		
18	308408	2021015400209617	DHANDE JAYESH DNYANDEO	Rui	Just Thunde
19	308409	2021015400313125	DHANGAR GAYATRI GOVINDA	Rui Kanher	Just Thunde
20	308410	2021015400209722	DHANGAR KAJAL VINOD		
21	308411	2021015400209625	GADHE RUTIK SUNIL		
22	308412	2021015400222564	JALANKAR YADNYESH ASHOK	Neem	(Adaylog
23	308413	2021015400209641	KACHARE PRIYANKA PRAKASH	hanyan	Kehope
24	308414	2021015400284723	KAKADE AKSHAY MADHUKAR	yeas plant	Malast
25	308415	2021015400314001	LASURKAR MANALI PRAKASH	yeas plant Neem	
26	308416	2021015400305497	LOHAR POOJA RAJESH	Neem	Hoten .
27	308417	2021015400210033	MAHAJAN ANKITA JIVAN		
28	308418	2021015400207626	MAHAJAN BHAVESH SANDIP		

Seal



Date



'A' Grade NAAC Re-Accredited (3rd Cycle) Jalgaon-425001, Maharashtra (India)

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B.Sc.(with Credits) - Regular-under CBCS [June-2019] Pattern - FY B.Sc. - Sem-II For May-2022

College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Raver, Jalgaon Pin: 425508

aper N	lame: Environm	ental Studies (85555)	Field Work G	10 Min Mark: 16)	Marks	Total
Sr.	Seat Number	PRN	Student Name		Walks	
No.	308419	2021015400209865	MAHAJAN CHAITALI ANIL	Kanher		Compagan
30	308420	2021015400313992	MAHAJAN CHIRAYU VINOD			
31	308421	2021015400314016	MAHAJAN DIPALI SUNIL	Karher		Den.
32	308422	2021015400222645	MAHAJAN DIVYASHRI DNYANESHWAR	Beelan		trachagion
33	308423	2021015400222676	MAHAJAN GAURAV VINOD			
34	308424	2021015400222541	MAHAJAN GAYATRI SATISH	Neem .		Gemelaja
35	308425	2021015400222525	MAHAJAN HEMANGI SANJAY	Cocas	-	martin
36	308426	2021015400222572	MAHAJAN JAGRUTI NARENDRA	· Kouhner	۲.	mohosto
37	308427	2021015400210072	MAHAJAN KAJAL DILIP			
38	308428	2021015400222653	MAHAJAN KOMALIKA SUNIL			The state of the s
39	308429	2021015400283074	MAHAJAN KULDIP KISHOR	Neem.		Incom.
40	308430	2021015400313102	MAHAJAN KUNALI DAGADU	Neem		marajas.
41	308431	2021015400209776	MAHAJAN LOKESH ANIL	Ashoka		mahaja
42	308432	2021015400222622	MAHAJAN PUNAM SANJAY	Kanher	•	Brahaj
43	308433	2021015400222606	MAHAJAN RENUKA DIVAKAR	Kanher		Trabajas
44	308434	2021015400222556	MAHAJAN ROHAN MOHAN	Amlatre	e	Bornestas
45	308435	2021015400222587	MAHAJAN RUPESH SUNIL			
46	308436	2021015400209664	MAHAJAN SHRUTIKA GOPAL	Kassod		Quahaja
47	308437	2021015400209873	MAHAJAN SHUBHANGI BALU	Buda	in,	Son
48	308438	2021015400223142	MAHAJAN SHUBHANGI GANESH	Kahrer		semahayan.
49	308439	2021015400222692	MAHAJAN SUMIT PANDHARI			
50	308440	2021015400209745	MAHAJAN TANVI GOKUL	Kassod		T. Cr. Maha
51	308441	2021015400223157	MAHAJAN TEJAL ANANDA	Neon		TAMaloga
52	308442	2021015400210025	MAHAJAN VIPUL RAVINDRA	No.		0
53	308443	2021015400210041	MAHAJAN YASH DIGAMBAR	Mango		Whom
54	308444	2021015400214793	MALKHEDE DOLLY SUDHAKAR	Banana		Dolly.
55	308445	2021015400210064	MISAR JAYENDRA PRADIP			
56	308446	2021015400246543	NILAM GOUD			



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College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Jalgaon Pin: 425508

	- 1	ental Studies (85555)	Field Work CA	(Max Mark: 40 Min Mark: 16)	Count of Student: 118
Paper N	SAMSSS:	PRN	Student Name		Marks Total
Sr.	Seat Number	EIN			
57	308447	2021015400222684	PACHPOLE BHARATI SUNIL	Henrum	BIS. P
58	308448	2021015400223045	PATIL AAKANKSHA NITIN	cycas	Matil
59	308449	2021015400222637	PATIL AKSHADA PAVAN	Neem	Asti
60	308450	2021015400233094	PATIL ANSHIKA MAHENDRA	cycas	Matil
61	308451	2021015400223111	PATIL ANUJ CHANDRAKANT	J	
62	308452	2021015400223076	PATIL ANURAG GANESH	Meem.	Agri
63	308453	2021015400209803	PATIL CHAITALI NITIN	Bamboo	· Patter
64	308454	2021015400305501	PATIL CHETAN ANIL	Ashoka	APOL
65	308455	2021015400302901	PATIL DEVANAND BHUSHAN	Ashoka	D.B.Pa
66	308456	2021015400209842	PATIL DIVYA DHANRAJ	Bambio	
67	308457	2021015400214866	PATIL GANESH SANJAY	Ashoka	68 Cetti
68	308458	2021015400222862	PATIL GAYATRI PRAKASH	Ashoka	G.P.Pal
69	308459	2021015400223022	PATIL GAYATRI SURAJMAL	Neem	3 par
70	308460	2021015400283066	PATIL HARSHAL BALU		
71	308461	2021015400223053	PATIL JAGRUTI GOPAL	Herrum	Front
72	308462	2021015400223084	PATIL KALYANI NITIN	Bamboo	KNRat
73	308463	2021015400222893	PATIL KAVITA TULASHIDAS	Nerium	(Koratil
74	308464	2021015400214835	PATIL KOMAL EKNATH	Neem	R.EPat
75	308465	2021015400209857	PATIL KOMAL VITTHAL	cycas	Bratil
76	308466	2021015400214812	PATIL KUNAL SANJEEV	Ashoro	Roal
77	308467	2021015400222831	PATIL KUNDAN BHASKAR	Cy cas p	tant. SPAN
78	308468	2021015400222815	PATIL LOKESH SURESH	Ashoko	u 150th
79	308469	2021015400215065	PATIL MOHINI SITARAM	Nenur	1.01.
80	308470	2021015400214785	PATIL MONIKA KISHOR	Bambo	MERCEN
81	308471	2021015400209826	PATIL NIKHIL SANTOSH		
82	308472	2021015400209834	PATIL NIKITA RAMBHAU	Nilgiri	Patil
83	308473	2021015400223103	PATIL NIKITA SUNIL	Neen	. Per
84	308474	2021015400214882	PATIL PRAPTI RAMAKANT	cycal-	- Potet

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College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Jalgaon Pin: 425508

aper	Name: Environm	ental Studies (85555)	Field Work CA (Max Mark: 40 Min Mark:		Total
Sr.	Seat Number	PRN	Student Name	Marks	
85	308475	2021015400214851	PATIL ROHINI HIRALAL AShol	Qq -	TRELL
86	308476	2021015400209784	PATIL RUCHA ANIL CYCAU		Pots
87	308477	2021015400223196	PATIL RUCHITA DHANRAJ		
88	308478	2021015400222614	PATIL SAKSHI VIJAY KQS50	00.	SUBLY
89	308479	2021015400222703	PATIL SANJANA PRAVIN CYCA S		Tatil
90	308480	2021015400222982	PATIL SAPNA BALU		
91	308481	2021015400284746	PATIL VAIBHAV NATTHU		
92	308482	2021015400214901	PATIL VAISHNAVI KAILAS Neem CACO	s plant.	VKRety
93		2021015400222711	PATIL VAISHNAVI NITIN	en	Patel
94	308484	2021015400223126	PATIL VEDIKA NARAYAN NEEM	tree	yaty
95	308485	2021015400302882	RAYMALE AKASH SURESH CYCOS	plant	Helyn
96	308486	2021015400222912	RAYMALE UMESH MANIK		
97	308487	2021015400209753	RAYPURE ABHISHEK BHADU Ash	ka	Righ
98	308488	2021015400222877	SAWALE HARSHALI UJWAL C MA	eas.	Hesolle
99	308489	2021015400313117		ner	Resource
100	308490	2021015400223173		ve loyos	
101	1 308491	2021015400209761	SAYYED AWAIS SAYYED ASGAR		
102	2 308492	2021015400292637	SHELKE ANISHA SAMADHAN CYC	as ,	Breek
103	3 308493	2021015400233086		ranel.	+Dauld
104	4 308494	2021015400304374	SHINDE TEJASKUMAR PRADEEP		
105	5 308495	2021015400207642	SURYAWANSHI MADHURI LAXMAN	as-	M.L. Gary
106	6 308496	2021015400222997	SUTAR MAYUR BHAGAWAT		1
10	7 308497	2021015400222846	TABEESH ALI SAYYED MASUD ALI	ajuz (Cycas)	15 gayes
108	8 308498	2021015400222943		ajus (cyco	Atayacle,
109	9 308499	2021015400222935	TAYADE AJAY SATISH Ashok		Dayju
111	0 308500	2021015400222927	TAYADE HARSHAL ANANT KA	jur.	Handre
11	1 308501	2021015400222854	TAYADE NITIN HIRAMAN	J	
11:	2 308502	2021015400223215	THAKANE SWEETY NAGO	mun	Strakan

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College: Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarao Naik Arts, Commerce and Science College (180037), Raver, Raver, Raver, Jalgaon Pin: 425508

Co	llege : Raver Parisa		Field Work CA (Max Mark:	40 Min Mark: 16)	Count of S	tudent: 118
aper N	ame: Environm	ental Studies (85555)	Student Name		Marks	Total
Sr.	Seat Number	PRN	0 <del>-</del> 00000000000000000000000000000000000			Saut
NO.		2021015400233105	VARANKAR DNYANESHWAR DATTATRAYA	be	-	- (
113	308503			. (	hadia	THE .
114	308504	2021015400223014	WAGH HARSHALI MAHENDRA		(ady)	
115	308505	2021015400223006	WAGH VINITA TUSHAR	Ranhe		Thagh
IT STATE	308506	2021015400222904	WAGH YOGITA NITIN	Kunh	er	grugh
116	300300		WANKHEDE KOMAL VINOD	Kanher		Kreenkh
117	308507	2021015400222966	WAINTIEDE ROMAE VINOS			
118	308508	2021015400222974	WARKE VINITA JIVAN	kanher.		Ownise

Seal



Signature of Example

Date



## कवरित्री बहिणाबाई चौधरी उत्तर महाराष्ट्र विद्यापीठ, जळगाव Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

## अभ्यास मंडळ विभाग

जा.क्र. :उमवि/२१/Environmental Studies/ ५२/ /२०१८

दिनांक:- २२/११/२०१८

प्रति.

क.ब.चौ.उमविशी संलग्न सर्व महाविद्यालयांचे मा-प्राचार्य व मान्यता प्राप्त परिसंस्थांचे मा-संचालक आणि

मा.विभाग प्रमुख विद्यापीठ शैक्षणिक प्रशाळा / विभाग यांना...

विषय :- Environmental Studies या विषयाचे अभ्यासक्रमा संदर्भात.

### महोदय / महोदया,

उपरोक्त विषयांस अनुसरुन आपणांस कळविण्यात येते की, मा.सर्वोच्च न्यायालयाचे निर्णयानुसार पर्यावरण संतुलन राखण्यासाठी प्रथम वर्षास प्रवेशित विद्यार्थ्यांसाठी सहा महिन्यांचा पर्यावरणशास्त्र विषयाचा अभ्यासक्रम जून, २००४ पासून सर्व विद्याशाखांमध्ये समाविष्ट करण्यात आलेला आहे.

शैक्षणिक वर्ष २०१८-१९ पासून प्रथम वर्ष कला विज्ञान व वाणिज्य वर्गांना Choice Based Credit System लागू करण्यात आलेली असल्याने Environmental Studies या विषयाचा अभ्यासक्रम Ability Enhancement Course अंतर्गत Choice Based Credit System प्रमाणे तयार करणेसाठी नियुक्त सिमतीच्या सभेत Environmental Studies विषयाच्या गुणांची विभागणी (Marks Pattern) देखील ६०:४० प्रमाणे करण्यात यावी, व गुणांकन (Marks Pattern) पुढील प्रमाणे करण्यात यावी, असे ठरले आहे.

लेखी परीक्षा (Theory) ६० गुण अंतर्गत (Internal) परीक्षा फिल्ड वर्क /व्हायवा <u>४० गुण</u> एकण १०० गुण

अंतर्गत ४० गुणांची विभागणी पुढील प्रमाणे करण्यात यावी.

उपस्थिती (Attendance) ०५ गुण वर्तणूक (Behaviour) ०५ गुण व्हायवा (Viva-voce) १० गुण फिल्ड वर्क (Report of field Work) २० गुण ४० गुण

त्याअनुषंगाने Environmental Studies या विषयाचा अभ्यासक्रम विद्यापीठ अनुदान आयोगाने दिलेला असून तो जसाचे तसा लागू करण्यात आलेला असल्याने अभ्यासक्रमात बदल न करता अभ्यासक्रम तोच ठेवण्यात आला आहे. सदरचा अभ्यासक्रम उमिवच्या संकेत स्थळावर अपलोड करण्यात आला आहे. तरी वरील आशय सर्व संबंधित प्राध्यापक व विद्यार्थी यांचे निदर्शनास आणून देवून पुढील योग्य ती कार्यवाही करुन विद्यापीठास सहकार्य करावे, ही विनंती.

म.कळावे,

आपला विश्वासू,

JUM.

(ए.सी.मनारे) उपकुलसचिव

अभ्यास मंडळ विभाग

🖀 : (९१) ०२५७- २२५७२९४, २९७

फॅक्स: (९१) ०२५७- २२५८४०६

वेबसाइंट: www.nmu.ac.ln

ई-मेल : acmanore@nmu.ac.in

## Shri. V. S. Naik Arts Commerce and Science College Raver

## Environmental Studies Field Work 2021-22 (FYBA)

Sr.No	PRN		
1	2021015400222274	Name of Students	Title of Project
2		GUPTA BHUMIKA LALAN	Study of Neem in college campus
3	2021015400208193	AMODE MAYURI ANIL	Composition and Medicinal uses Plant-Tulasi
4	2021015400217965	ATKALE PRASHIK ASHOK	Various uses of Medicinal Plant-Neem
5	2021015400209552	BHAGYESHWAR ROHIT KISHOR	Medicinal Plant-Neem used as traditional medicine
	2021015400217996	BHALERAO SIDHDARTH SANTOSH	Information of Medicinal Plant-Neem
6	2021015400221224	BHALERAV AJAY VIJAY	Medicinal Plant-
7	2021015400218535	BHARATE BHAVANA MANOHAR	Different uses of Bamboo plant
8	2021015400221313	BHAVSAR JANHAVI RAJENDRA	Medicinal and religious uses of Medicinal Plant-Neem
9	2021015400222251	BHILL LAKHAN SUNDARLAL	Geographical distribution of Medicinal Plant-Neem
10	2021015400218005	BHOI POOJA MAGAN	History and nutrition value of Medicinal Plant-Jamhoor
11	2021015400218237	BHOI SHRUTI PRAKASH	
12	2021015400220824	RIDADANIZIDANIZA	Medicinal Plant in residential area -Tulasi Neem, Geloy
13	2021015400310823	BIRAPAN KIRAN KAILAS	Importance of Jalsinchan
14	2021015400222467	BIRPAN AJINKYA YUVRAJ	Medicinal Plant-
15	2021015400207232	BIRPAN SARANG RUPA	Medicinal uses of Plant-Adulsa
16	2021015400213453	BORSE KAJAL RAMKRUSHNA	Medicinal uses of Plant-Tulasi
17	2021015400217064	BORSE KAVITA SAMADHAN	Description of plumeria-Champa
		BUNDELE GAURAV MUKUNDA	Geographical distribution of Medicinal Plant-Neem in
18	2021015400207305	CHAITALI NARAYAN	college campus.  Medicinal uses Plant-Neem
19	2021015400223037	CHARAN SHANKAR AANANDA	Chemical composition of Medicinal Plant-Ashoka
20	2021015400217571	CHAUDHARI AAKASH GANESH	Study of Medicinal Plant-Neem
21	2021015400207143	CHAUDHARI ABHISHEKH RAJENDRA	Description of Medicinal Plant-Neem
22	2021015400222475	CHAUDHARI ATUL SHANTARAM	
23	2021015400217033	CHAUDHARI HARSHAL PRADIP	Traditional uses of Medicinal Plant-Azadirachta indica  Medicinal uses of Plant-Neem oil
24	2021015400218276	CHAUDHARI KIRTI PRAMOD	
25	2021015400215533	CHAUDHARI RAHUL EKNATH	Study the toxicity effect of Medicinal Plant-Kanher  Medicinal Plant-Neem
26	2021015400207271	CHAUDHARI VAISHNAVI VILAS	
27	2021015400305524	CHAUHAN KRUSHNA RAMESH	Traditional and modern Medicinal uses of Plant-Neem  Medicinal Plant-
28	2021015400218551	DHANDE KOMAL JAYANTA	
29	2021015400213437	DHANGAR AMOL DINESH	Topical uses Medicinal Plant-Neem  Geographical distributions
30	2021015400222204	DHANGAR DEVYANI SHANTARAM	Geographical distribution of Plant-Neem
21	2021015400207294	DHANGAD SUNADAIA KAWAS	Description, chemical composition and uses of Plant-
31	2021015400207294	DHANGAR SUVARNA KAILAS	Agriculture of medicinal uses of Medicinal Plant-Neem
32		GADHE AJAY PRAKASH	Information of Medicinal Plant-Neem
33	2021015400239164	GADHE ANMOLIKA RAGHUNATH	Traditional uses of Plant-Neem
		Alto Commerce School	

Used as traditional medicine of Medicinal Plant-Neem 40021395 HIVARE GOPAL GAUTAM Potential uses of Medicinal Plant-Pimpal 40021395 HIVARE GOPAL GAUTAM Potential uses of Medicinal Plant-Neem 400212813 INGALE PAWAN SATISH Information of Medicinal Plant-Neem 400212813 INGALE PAWAN SATISH Information of Medicinal Plant-Neem 400214232 JADHAV ASHUTOSH HIMMAT Medicinal Plant- 400218284 KAPADE UDAY SANJAY Morphological study of Plant-Neem 400218284 KAPADE UDAY SANJAY Morphological study of Plant-Neem 400218275 KHAIRE ROHIT YADAV Geographical Morphological study of Plant-Neem 400217957 KHEDKAR BHARATI RAMKRUSHN Information of coconut tree-Coconut 400217957 KHEDKAR BHARATI RAMKRUSHN Information of coconut tree-Coconut 400217957 KHEDKAR BHARATI RAMKRUSHN Information of Medicinal Uses of Plant-Neem 4002018185 KOLI KHUSHBU SANJAY Classification and Medicinal uses of Plant-Neem 4002014294 KOLI ROHINI NARAYAN DESCRIPTION OF Plant-Sunflower 400213181 KOLI ROHINI NARAYAN DESCRIPTION OF Plant-Sunflower 400213476 LAHASE KRUSHNA ISHWAR Study of Medicinal Plant-Neem 400213476 LAHASE NARENDRA ANIL Geographical distribution and information of Medicinal 400213476 LULHE KANCHAN JAGANNATH Benefits of -Almond 400209432 MAHAJAN ASHAY SANTOSH Information of Medicinal Plant-Neem 400209432 MAHAJAN ASHAY SANTOSH Information of Medicinal Plant-Neem 400207247 MAHAJAN BHAGYASHRI MURLIDHAR Information of Medicinal Plant-Neem 400207247 MAHAJAN BHAGYASHRI MURLIDHAR Information of Medicinal Plant-Neem 400207355 MAHAJAN DHANASHRI MURLIDHAR Information of Medicinal Plant-Neem 400207355 MAHAJAN DHANASHRI MURLIDHAR Information of Medicinal Plant-Neem 40021795 MAHAJAN DHANASHRI MURLIDHAR Chemical constituent and uses of Medicinal Plant-Aleo-vera 40021795 MAHAJAN DHAKASHAH MURLIDHAR Information and benefits of Plant-Neem 40021795 MAHAJAN DHANASHRI MURLIDHAR Description and benefits of Plant-Neem 40021795 MAHAJAN DHANASHRI MURLIDHAR Description and benefits of Plant-Neem 40021795 MAHAJAN DHANASHRI MURLIDHAR Description and benefits of Plant-Neem	62 63	2021015400221336 2021015400217973	MAHAJAN GAYATRI PRAKASH MAHAJAN HARASHALI NAGINDAS	Uses of Medicinal Plant Al
Used as traditional medicine of Medicinal Plant-Neem 40021395   GADHE SUREKHA RAJENDRA   Science in daily life 40021395   HIVARE GOPAL GAUTAM   Potential uses of Medicinal Plant-Neem 400212813   HIVARE MAYUR BHAURAO   Brief information of Plant-Neem 400309602   JADHAV ASHUTOSH HIMMAT   Medicinal Plant- 400214232   JADHAV DHYANESHWAR RAMBALI   Medicinal Plant- 400218284   KAPADE UDAY SANJAY   Morphological study of Plant-Neem 400218285   KHAIRE ROHIT YADAV   Geographical Morphological study of Plant-Neem 400217957   KHEDKAR BHARATI RAMKRUSHN   Information of coconut tree-Coconut   400208185   KOLI AATISH NILKANTH   Medicinal Plant-  400208185   KOLI KHUSHBU SANJAY   Classification and Medicinal uses of Plant-Neem 400214294   KOLI ROHIN NARAYAN   Description of Plant-Sunflower   400212902   LAHASE KRUSHNA ISHWAR   Study of Medicinal Plant-Neem 4002023181   KOLI ROHIT ANIL   Classification and uses of Medicinal Plant-Neem 4002031476   LAHASE NARENDRA ANIL   Geographical distribution and information of Medicinal Plant-Neem 4002031476   LAHASE NARENDRA ANIL   Geographical distribution and information of Medicinal Plant-Neem 4002031476   LULHE KANCHAN JAGANNATH   Benefits of -Almond   4002031476   MAHAJAN AKSHAY SANTOSH   Information of Medicinal Plant-Neem 4002031476   MAHAJAN ASHWINI RAJESH   Soil and growth condition of Plant-Pimpal   400207247   MAHAJAN ASHWINI RAJESH   Soil and growth condition of Plant-Pimpal   400207247   MAHAJAN ASHWINI RAJESH   Soil and growth condition of Plant-Pimpal   400207255   MAHAJAN DATTAPRASAD PRAVIN   Description and chemical properties of Medicinal Plant-Neem   400221255   MAHAJAN DIPAK SAMADHAN   Description and benefits of Plant-Neem   400221293   MAHAJAN DIPAK SAMADHAN   Medicinal Plant-Neem   400221255   MAHAJAN DIPAK SAMADHAN   Medicinal Plant-Secription and benefits of Plant-Neem   400221255   MAHAJAN DIPAK SAMADHAN   Medicinal Plant-Secription and benefits of Plant-Neem   400221255   MAHAJAN DIPAK SAMADHAN   Medicinal Plant-Secription and benefits of Plant-Neem   400221255	62		MAHAJAN GAYATRI PRAKASH	riant-
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Used as traditional medicine of Medicinal Plant-Neem  GADHE SUREKHA RAJENDRA  Science in daily life  Potential uses of Medicinal Plant-Pimpal  HIVARE MAYUR BHAURAO  Brief information of Plant-Neem  HIVARE PAWAN SATISH  Information of Medicinal Plant-Neem  JADHAV ASHUTOSH HIMMAT  Medicinal Plant-  Morphological study of Plant-Neem  Medicinal Plant-  Medicin	48	2021015400208185	KOLI KHUSHBU SANJAY	
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				Used as traditional medicine of Medicinal Plant-Neem
Necessary of Solar Energy			GADHE RITIK SURESH	Necessary of Solar Energy
Necessary of Solar Energy	35 36 37	2021015400214247 2021015400212836 2021015400291901	GADHE ROSHANI CHHAGAN	Used as traditional medicine of Medicinal Plan

71	2021015400218214	MAHA IANI NIII IA	L. C. westion
72		MAHAJAN NIHAL JAGAN	Neem –Tree information
	2021015400214271	MAHAJAN PRAGATI ISHWAR	Morphology of Tulasi
73	2021015400217942	MAHAJAN PUJA VITTHAL	Uses of lemon
74	2021015400221321	MAHAJAN RITU DNYANESHWAR	Chemical constituent of Ashoka
75	2021015400221201	MAHAJAN SANJANA NAMDEV	Morphology of lemon
76	2021015400220921	MAHAJAN SEJAL SANDIP	History and uses of lemon
77	2021015400223061	MAHAJAN SWAPNIL VIJAY	Medicinal Plant-
78	2021015400212852	MAHAJAN TEJAS DEVANDAS	Geological survey of Neem
79	2021015400220975	MAHAJAN TEJASWINI PRAKASH	Chemical constituent and description of Ashoka
80	2021015400221182	MAHAJAN TEJASWINI SANJAY	Medicinal Uses of aleo-versa
81	2021015400220894	MAHAJAN TEJESHWARI RAMESH	History of Tulsi
82	2019015400300482	MAHAJAN UMESH SURESH	Photochemical in lemon
83	2021015400213484	MAHAJAN URMILA NATTHU	Uses of Neem
84	2021015400213341	MAHAJAN VAIBHAV VASANT	Ecological study of Neem
85	2021015400214216	MAHAJAN VASUDEV SHRIRAM	Traditional medicine-Neem
86	2021015400218485	MAHAJAN VINAY RATNAKAR	Neem tree information
87	2021015400217934	MAHAJAN VISHAL KAILAS	Imp. Uses of Neem
88	2021015400207255	MAHAJAN YAMUNA VIJAY	Chemical composition and uses of Neem
89	2021015400213267	MALI KAJAL SADASHIV	Classification of Neem
90	2021015400209672	MORE SHUBHAM SHRIKRISHNA	Benefits of lemon
91	2021015400222235	NAGARIYA NIKITA KAUSHAL	Medicinal Uses of Neem
92	2021015400220905	NAIK GAYATRI DIPAK	Uses of Neem
93	2021015400212956	NAYAIKAR BHUSHAN SUNIL	Indian farming
94	2021015400220952	NHAVI VISHVESHVARI MUKUNDA	Information of Adulsa
95	2021015400212821	NIKAM ANKUSH BHAGWAN	Information of Neem
96	2021015400005985	PANDIT SHREYA MADAN	Benefit of Banyan Tree
97	2021015400220886	PATIL ADITI RAVINDRA	History of Banyan Tree
98	2021015400220871	PATIL AMRUTA KISHOR	Morphology and uses of Ashoka
99	2021015400213275	PATIL ATUL SUDHAKAR	Medicinal Plant-
100	2021015400213244	PATIL BHAGYASHRI SANTOSH	Medicinal information of Ashwagandha
101	2021015400213387	PATIL JIJABAI BAJIRAO	Important of Custard apple
102	2021015400221174	PATIL KAJAL SANJAY	Phytochemical and uses of Ashoka
103	2021015400207151	PATIL KALYANI BHAGWAN	Benefits of Neem
104	2021015400221294	PATIL KALYANI NARENDRA	Geological distribution of Neem
105	2021015400214263	PATIL KANCHAN BRIJALAL	Benefits of Neem tree
106	2021015400218477	PATIL KHUSHI SANJAY	Ecology and uses of Neem
107	2021015400218543	PATIL KOMAL YASHWANT	Study, the toxicity and uses of yellow kanher
108	2021015400220832	PATIL MAHIMA RAMDAS	Benefits of Paththar chatta-
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109	2021015400221271	PATIL NEHA RAJU	Study of Medicinal Plant-Neem			
110	2021015400213372	PATIL NIKITA KAILAS	Information of Medicinal Plant-Neem and Tulas			
111	2021015400207166	PATIL RUSHALI GOKUL	Medicinal Plant-			
112	2021015400220847	PATIL SANIKA MOHAN	Production and uses of Badam			
113	2021015400212933	PATIL SHITAL DNYANESHWAR				
114	2021015400217586	PATIL SHITAL SANJAY	Study of Neem Medicinal Plant-			
115	2021015400217621	PATIL SHRUTIKA RAJENDRA	Use of badam			
116	2021015400220816	PATIL SONAL YOGESH	Medicinal importance of Neem Plant			
117	2021015400217056	PATIL TEJASVINI CHANDRAKANT	Overall information of Umber Medicinal Plant-			
118	2021015400213252	PATIL TULSABAI SURESH	Classification and uses of Kadu Badam			
119	2021015400218504	PATIL VAISHNAVI VINOD	Information of Umber Medicinal Plant			
120	2021015400217605	PATIL VARSHA GOPAL	Benefits of Medicinal Plant-			
121	2021015400220855		Chemical composition of Ashoka			
122	2021015400220835	PATIL VIVEK PRAKASU	Detail Information of Medicinal Plant-Pimpal			
123		PATIL VIVEK PRAKASH	Morphological study and Medicinal importance of Plant-Neem			
	2021015400222243	PATIL YOGITA SAMADHAN	Description and chemical composition of Medicinal Plant-Ashoka			
124	2021015400213445	PAWAR PRASHIK GANESH	Medicinal Plant-Neem Uses as traditional Medicine.			
125	2021015400207611	PAWAR RITESH VIJAY	Description of Medicinal Plant-Neem			
126	2021015400221305	PRAJAPATI TEJASWINI SANJAY	Medicinal uses of Tulasi Plant-			
127	2021015400222227	RAJPUT HEMLATA TEJSING	Chemical composition and uses of Medicinal Plant- Kanher			
128	2021015400222491	RAJPUT PRANJAL MANOJSINGH	Information of Medicinal Plant- Umber			
129	2021015400222483	RANDHAVE AJAY GORELAL	Medicinal Use of neem in Corona			
130	2021015400222212	RATHOD AMOL LAXMAN	Medicinal Plant-			
131	2021015400208162	RAVI LAXMAN	Geographical description of Neem			
132	2021015400217636	SANYAS ASHVINI VIJAY	Traditional use of Medicinal Plant-Neem in agriculture for pest control			
133	2021015400218261	SAVALE KAJAL HUKUMCHAND	Information and Medicinal uses of Tulasi Plant-			
134	2021015400218245	SAVALE NIKITA SUNIL	Chemical composition and morphological study of Kanher.			
135	2021015400217114	SAWALE VAISHANAVI SUNIL	Chemical composition and medicinal study of Kanher.			
136	2021015400212925	SHAIKH ISRAR AHMAD SHAIKH AAZAM MANYAR	Use and types of Rose			
137	2021015400213283	SHINDE PRATIKSHA SANJAY	Importance of Jalsinchan-			
138	2021015400212794	SHIRSALE SWAPNIL SUKDEV	Medicinal Plant-			
139	2019015400301694	SONAR HEMANT RAMKRUSHNA	Medicinal Plant-			
140	2021015400221344	SURWADE JAYESH CHANDU	Medicinal Plant-			
141	2021015400220967	SUTAR RADHA PRAKASHA	Traditional use of Neem Plant			
142	2021015400223165	SUTAR VAISHNAVI GANESH	Information of Medicinal Plant-Pimpal			
143	2021015400218253	TADAVI AMIN EDU	Information of Neem tree			
144	2021015400212891	TADAVI DILSHAN HAMERO	Information of Medicinal Plant-Panfuti			

145	2021015400221216	TADAVI JAVED MUSTUFA	Study of Medicinal Plant-Neem
146	2021015400218493	TADAVI REHANA FIROJ	Study of pimpal Medicinal Plant in college campus
147	2021015400218527	TADAVI SALIM SAHEBU	Geographical distribution of Medicinal Plant-Neem
148	2021015400218222	TADAVI SAMIR FATTU	Medicinal Plant-
149	2021015400213325	TADAVI SHAREEF JALDAR	Medicinal Plant-
150	2021015400217106	TADAVI TASLIM RAMJAN	Variety and uses of Edlimbu(Lemon) as Medicinal
151	2021015400213414	TAYADE CHETAN VINOD	Various Variety and uses of Edlimbu(Lemon) as Medicinal Plant-
152	2021015400246535	TAYADE NISHA TOPALU	Description of Neem Plant
153	2021015400217087	TAYADE RAKSHITA SUKDEV	Traditional used medicine from Neem Plant
154	2021015400217981	TAYADE RANI DILIP	Nutritional values in Badam
155	2021015400217652	TAYADE SHIVAM RAJENDRA	Information of Medicinal Plant-Neem
156	2021015400209544	THAKANE SHWETA NAGO	Uses of Kadu nimba traditional medicine
157	2021015400212964	VALVI ASHVINI KALUSING	Study Medicinal Plant-Kanher in college campus.
158	2021015400213291	VALVI KU URMILA PRATAP	Phytochemical study of Chandani
159	2021015400212883	VASAVE MONIKA AAMSHA	Medicinal Plant-
160	2021015400212844	VASAVE PUNAM AAMSHA	History of Medicinal Plant- Lemon
161	2021015400223092	WAGH AKSHATA GOKUL	Importance of tree in Human life.
162	2021015400217644	WANKHEDE ROHIT SHIVALAL	Information of Neem
163	2021015400222266	ZOPE BHARTI SHAILENDRA	Study of lemon – Uses and medicinal value
164	2021015400222823	ZOPE NITESH ATUL	Medicinal values and uses of Ficus (Wad)

PRINCIPAL

Raver Parisar Shikehan Prasarak Mane-Shri Vitthairao Shankarrao Nai Arts, Commerce & Science Colli-Raver, Dist-Jalgaon (M.S.) 425500



Johnach co-ordination env. studies.

# Shri. V. S. Naik Arts Commerce and Science College Raver Environmental Studies Field Work- 2021-22 (F Y B Com)

Sr. No	PRN	Name of Students	Title of Project
1	2021015400215525	BARI DIPALI CHAMPALAL	Study of clustered farming
2	2021015400219175	BELASKAR PRACHI GANESH	Medicinal Plant-Neem
3	2021015400223207	CHANDWANI BHARAT DILIP	Medicinal Plant-
4	2021015400209196	CHAUDHARI AARTI PRABHAKAR	Medicinal Plant-
5	2021015400219272	CHAUDHARI HARSHAL EKNATH	Economics important of -Papaya
6	2021015400219167	CHAUDHARI HARSHAL RAJENDRA	
7	2021015400219024	CHAUDHARI HARSHALI RAMKRUSHNA	Morphological; study of Chandani
8	2021015400218825	CHAUDHARI JAYASHRI KISHOR	Benefits of -Cycas
9	2021015400219345	CHAUDHARI KAJAL SURESH	Morphological study of Papaya
10	2021015400215556	CHAUDHARI KANCHAN SUNIL	Study of cycus plant
11	2021015400215204	CHAUDHARI NIKITA SUNIL	Medicinal Plant- Jasmine
12	2021015400215131	CHAUDHARI SOHAM SUNIL	Medicinal Plant-
13	2021015400214843	CHAUDHARI SWAPNIL GOPAL	Medicinal Plant- Kanher
14	2021015400209231	CHAUDHARI VAISHALI GOPAL	Classification and distribution of -Nerium
15	2021015400218841	CHAUDHARI VAISHNAVI SUNIL	Economic importance of - Zendu
16	2021015400218856	DHANGAR MANOJ SAHEBRAO	Medicinal Plant-
17	2021015400209293	DHANGAR UJWALA JAGDISH	Classification of Tulsi
18	2021015400209374	DHIVARE MANOHAR ATMARAM	Chemical composition and morphological study of Ashoka
19	2021015400219337	DIPAK BALIRAM	Medicinal Plant-
20	2021015400207696	GAYAKWAD DURGA SUNIL	Medicinal Plant-
21	2021015400215564	INGALE ISHWAR TRAYMBAK	Study of Jasmine plant
22	2021015400219086	JANJALKAR TEJASWINI SANJAY	Information about date plant
23	2021015400215146	JAVHARE DIVYA TARACHAND	Uses of Neem plant
24	2021015400209262	JUNGHARE TUSHAR RAJENDRA	Study of Jasmine
25	2021015400215185	KARAD RAJASHRI NIVRUTTI	Medicinal Plant-
26	2021015400219136	KAWADKAR MADHURI VINOD	Study of -Ashwagandha
27	2021015400209285	KAWADKAR RUPALI BHAGAWAN	Medicinal uses of Tulsi
28	3 2021015400215517	KHARE KU PRATIKSHA VINOD	Study of Guava plant
29	2021015400219113	MAHAJAN APEKSHA SANJAY	Phytochemical study of -Nerium
30	2021015400215115	MAHAJAN BHAGYASHRI ASHOK	Uses of Chandani
31	1 2021015400209157	MAHAJAN BHAGYASHRI SANJAY	Benefits of Papaya plant
32	2 2021015400219353	MAHAJAN CHETANA DAYANESHWAF	Medicinal Plant-

33	2021015400219094	MAHAJAN DHANASHRI KADU	Medicinal use of Nerium plant	
34	2021015400209223	MAHAJAN DIPALI TULASHIDAS	Classification and distribution of -Nerium	
35	2021015400215212	MAHAJAN GAYATRI SUNIL	Uses of lemon tree	
36	2021015400219144	MAHAJAN HARSHAL DILIP	Medicinal Plant-	
37	2021015400209277	MAHAJAN HARSHAL SANTOSH	Classification of Plant-Kanher	
38	2021015400218906	MAHAJAN HEMANT BALU	Medicinal uses of Plant-Kanher	
39	2021015400219016	MAHAJAN JAY GANESH	Medicinal Plant-	
40	2021015400215123	MAHAJAN KALPANA SANTOSH	Informational study of Aleovera	
41	2021015400214932	MAHAJAN KUNAL JAYANT	Medicinal Plant-	
42	2021015400214827	MAHAJAN MEGHA SUNIL	Medicinal uses of Aleovera	
43	2021015400223246	MAHAJAN NAKUL RAMESH	Medicinal Plant-	
44	2021015400215073	MAHAJAN NIKHIL SANJAY	Medicinal Plant-	
45	2021015400209351	MAHAJAN PAVAN DINESH	Medicinal Plant-	
46	2021015400215572	MAHAJAN PRATIK PRAMOD	Medicinal Plant-	
47	2021015400209366	MAHAJAN PRIYANKA VINOD	Informational study of -Kanher	
48	2021015400219063	MAHAJAN PUJA SANJAY	Medicinal Plant- cycas	
49	2021015400209254	MAHAJAN PUNAM YUVRAJ	Medicinal Plant-Papaya	
50	2021015400215154	MAHAJAN SARIKA ASHOK	Medicinal Plant-	
51	2021015400214916	MAHAJAN SAURAV ANIL	Medicinal Plant-	
52	2021015400209181	MAHAJAN SNEHAL MADHUKAR	Classification and distribution -Amba	
53	2021015400209207	MAHAJAN SWAPNASHAMBHU SUNIL	Medicinal Plant-	
54	2021015400215096	MAHAJAN UDAY ANIL	Medicinal Plant-	
55	2021015400209165	MAHAJAN VRUSHALI EKNATH	Medicinal Plant-Aloe vera	
56	2021015400219071	MAHALE TANUSHA SANJAY	Medicinal Plant-Ashoka	
57	2021015400219032	MALI NIKHIL KANHAIYALAL	Medicinal Plant-Kanher	
58	2021015400219121	MALI RAHUL GIRDHAR	Morphology of- Ashoka	
59	2021015400215081	MALI VIVEK KAILAS	Medicinal Plant-	
60	2021015400215541	MARATHE SAKSHI MANOJ	Classification and distribution & importance - Aleovera	
61	2021015400214874	MULKUTKAR PRATIK DILIP	Classification and distribution &	
62	2021015400215162	NIVATKAR YOGITA CHANDRAKANT	Information about Kanher	
63	2021015400209304	PATEL KHUSHAL VIRENDRA	Medicinal Plant-	
64	2021015400218864	PATIL ANIKET MOHAN	Classification and description, chemical composition of - Ashoka	
65	2021015400215193	PATIL ANIKET VINOD	Classification and description -Jaswand	
66	2021015400219152	PATIL BHAVANA PRABHAKAR	Importance of -Tulas	
67	2021015400218887	PATIL CHAITALI KANTILAL	Origin, cultivation c c &imp. of-Vilaychi	
68	2021015400215491	PATIL DIPALI NAMDEV	Uses &c c of – Aleo vera	
69	2021015400219105	PATIL DNYANESHWARI BALLI	Classification, cc, & imp of-Kanher	
			,	

70	2021015400219295	PATIL HARSHA GOPAL	Medicinal Plant-Aleovera	
71	2021015400219314	PATIL HARSHA RAJU	Medicinal Plant-Aleovera	
72	2021015400214804	PATIL HARSHAL RAMCHANDRA	Medicinal Plant	
73	2021015400213492	PATIL JAYESH MADHUKAR	Medicinal Plant-	
74	2021015400215057	PATIL KAJAL MADHUKAR	Economic imp of-Neem	
75	2021015400214924	PATIL MINAKSHI BABURAO	Morphology, classification, c c,& imp of - Ashwagandha	
76	2021015400215177	PATIL MONIKA SANJAY	Classification ,& imp ofNerium	
77	2021015400209215	PATIL NIKITA SUDHIR	Medicinal Plant-Ashwagandha	
78	2020015400201211	PATIL RITESH PRALHAD	Medicinal Plant-	
79	2021015400218833	PATIL SAGAR VILAS	Medicinal Plant-	
80	2021015400215502	PATIL SAMIKSHA RAJENDRA	Morphology & imp of - Nerium	
81	2021015400209173	PATIL SANIKA UMAKANT	Medicinal uses of -Aleovera	
82	2021015400219055	PATIL SARIKA VIKAS	Essay on -Neem	
83	2021015400219306	PATIL VAIBHAV LILADHAR	Medicinal information of Bel	
84	2021015400215042	PATIL VRUSHALI VITTHAL	C C & Uses of - Aleovera	
85	2021015400219287	RATHOD AKSHAY SARICHAND	Medicinal Plant-	
86	2021015400209134	RATHOD VISHAL HARDAS	Medicinal Plant-	
87	2021015400219322	SAVALE JYOTI NARAYAN	Morphology ,shape & Benefits of-Lemon	
88	2021015400215107	SHARMA RUSHITA RUSHIKESH	Characters & Benefits of -Papaya	
89	2021015400214777	SHIMPI PIYUSH DATTATRAY	Medicinal Plant-	
90	2021015400214897	SHINDE BHUSHAN PITAMBER	Medicinal Plant-	
91	2021015400213503	SHINDE DURGESH DNYANESHAWAR	Morphology & c c of - Nerium	
92	2021015400219047	SHINDE RAJ DILIP	Medicinal Plant-	
93	2021015400218895	SONAWANE DIPALI RANJIT	Uses of-Citrus	
94	2021015400223223	SURYAVANSHI RAHUL RAVINDRA	Medicinal Plant-	
95	2021015400219001	TAPASE ANKITA SIDDHARTH	Morphology, shape & Benefits of Bamboo	
96	2021015400209246	WAGHMARE GAURAV ARJUN	Medicinal Plant-	



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# Shri. V. S. Naik Arts Commerce and Science College Raver Environmental Studies Field Work- 2021-22 (F Y B Sc)

Sr No		Name of Students	Title of Project
1	2021015400209591	ATKALE AJAY MARI	Classification & benefits of Cycas
2	2021015400209792	ATKALE ARATI DNYANESHWAR	
3	2021015400209811	BARI DEVENDRA KASHINATH	Classification and description of Badam
4	2021015400214947	BHIDE MRUDULA CHHOTULAL	Classification & benefits of -Rose
5	2021015400284715	BHOI PRAFUL PRAKASH	Information about Ashoka
6	2021015400210056	BHOI VAISHNAVI SUNIL	Medicinal Plant-Ashoka
7	2021015400209695	CHAUDHARI GAURAV ARUN	Morphology of -Ashoka
8	2021015400209714	CHAUDHARI GAYATRI SANJAY	CC and Uses of -Kanher
9	2021015400284731	CHAUDHARI KALPESH SHAMRAO	Medicinal Plant-
10	2021015400209656	CHAUDHARI PRAJWAL MURALIDHAR	Medicinal Plant-
11	2021015400209602	CHAUDHARI RIYA RAHUL	Planting and care of - Jasmine
12	2021015400209737	CHAUDHARI ROHIT SANTOSH	Description and classification of -Neem
13	2021015400209633	CHAUDHARI RUNALI KAILAS	Information about -Kanher
14	2021015400246551	CHAUDHARI SHRADDHA MANOHAR	CC and uses of -Bamboo
15	2021015400209687	CHAUDHARI TEJASWINI KIRAN	Morphology of -Beheda
16	2021015400209706	DEOHANS SAURABH MANOJ	Medicinal Plant-
17	2021015400210087	DEVRAJ SANTOSH BAGARE	Medicinal Plant-
18	2021015400209617	DHANDE JAYESH DNYANDEO	Classification morphology of -Calotropis
19	2021015400313125	DHANGAR GAYATRI GOVINDA	Morphology of -Nerium
20	2021015400209722	DHANGAR KAJAL VINOD	Medicinal Plant-
21	2021015400209625	GADHE RUTIK SUNIL	Medicinal Plant-
22	2021015400222564	JALANKAR YADNYESH ASHOK	Classification and description of -Neem
23	2021015400209641	KACHARE PRIYANKA PRAKASH	Morphology and uses of -Banyan
24	2021015400284723	KAKADE AKSHAY MADHUKAR	CC and uses of -Cycus
25	2021015400314001	LASURKAR MANALI PRAKASH	Medicinal Plant-
26	2021015400305497	LOHAR POOJA RAJESH	Classification and uses of -Neem
27	2021015400210033	MAHAJAN ANKITA JIVAN	Medicinal Plant-
28	2021015400207626	MAHAJAN BHAVESH SANDIP	Medicinal Plant-
29	2021015400209865	MAHAJAN CHAITALI ANIL	Classification and uses of –Nerium indicum
30	2021015400313992	MAHAJAN CHIRAYU VINOD	Medicinal Plant-
31	2021015400314016	MAHAJAN DIPALI SUNIL	Classification and uses of -Nerium
32	2021015400222645	MAHAJAN DIVYASHRI DNYANESHWAR	Medicinal Plant-
33	2021015400222676	MAHAJAN GAURAV VINOD	Medicinal Plant-
34	2021015400222541	MAHAJAN GAYATRI SAHSH	Morphology CC and uses of -Neem
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35	2021015400222525	MAHAJAN HEMANGI SANJAY	Medicinal Plant-		
36	2021015400222572	MAHAJAN JAGRUTI NARENDRA			
37	2021015400210072		Medicinal Plant-		
38		MAHAJAN KAJAL DILIP	Medicinal Plant-		
	2021015400222653	MAHAJAN KOMALIKA SUNIL	Medicinal Plant-		
39	2021015400283074	MAHAJAN KULDIP KISHOR	Classification and morphology and economic importance of -Neem		
40	2021015400313102	MAHAJAN KUNALI DAGADU	Medicinal Plant-		
41	2021015400209776	MAHAJAN LOKESH ANIL	CC and classification of -Ashoka		
42	2021015400222622	MAHAJAN PUNAM SANJAY	Classification and habitat of -Nerium		
43	2021015400222606	MAHAJAN RENUKA DIVAKAR	Classification and information about -Kanher		
44	2021015400222556	MAHAJAN ROHAN MOHAN	Classification and habitat of -Amla		
45	2021015400222587	MAHAJAN RUPESH SUNIL	Medicinal Plant-		
46	2021015400209664	MAHAJAN SHRUTIKA GOPAL	Classification and morphology of -Casssia		
47	2021015400209873	MAHAJAN SHUBHANGI BALU	Classification and uses of -Badam		
48	2021015400223142	MAHAJAN SHUBHANGI GANESH	Classification and uses of -Kanher		
49	2021015400222692	MAHAJAN SUMIT PANDHARI	Medicinal Plant-		
50	2021015400209745	MAHAJAN TANVI GOKUL	Classification and uses of - Cassia		
51	2021015400223157	MAHAJAN TEJAL ANANDA	Uses of -Neem		
52	2021015400210025	MAHAJAN VIPUL RAVINDRA	Medicinal Plant-		
53	2021015400210041	MAHAJAN YASH DIGAMBAR	Classification and morphology of -Amba		
54	2021015400214793	MALKHEDE DOLLY SUDHAKAR	Uses and Morphology of - Musa		
55	2021015400210064	MISAR JAYENDRA PRADIP	Medicinal Plant-		
56	2021015400246543	NILAM GOUD	Medicinal Plant-		
57	2021015400222684	PACHPOLE BHARATI SUNIL	Habitat and morphology of -Kanher		
58	2021015400223045	PATIL AAKANKSHA NITIN	Classification and uses of -Cycus		
59	2021015400222637	PATIL AKSHADA PAVAN	Medicinal Plant-		
60	2021015400233094	PATIL ANSHIKA MAHENDRA	Classification ,location and uses of -Cycus		
61	2021015400223111	PATIL ANUJ CHANDRAKANT	Medicinal Plant-		
62	2021015400223076	PATIL ANURAG GANESH	Classification and description of -Neem		
63	2021015400209803	PATIL CHAITALI NITIN	Classification and morphology and uses of - Bamboo		
64	2021015400305501	PATIL CHETAN ANIL	Classification, CC, and uses of -Ashoka		
65	2021015400302901	PATIL DEVANAND BHUSHAN	CC and Uses of -Ashoka		
		PATIL DIVYA DHANRAJ			
66	2021015400209842		Classification, morphology and benefits of -Bamboo		
67	2021015400214866	PATIL GANESH SANJAY	Classification and morphology of -Ashoka		
68	2021015400222862	PATIL GAYATRI PRAKASH	Classification and uses of -Ashoka		
69	2021015400223022	PATIL GAYATRI SURAJMAL	Medicinal Plant-		
70	2021015400283066	PATIL HARSHAL BALU	Medicinal Plant-		
71	2021015400223053	PATIL JAGRUTI GOPAL	Classification and uses of -Nerium		
72	2021015400223084	PATIL KALYANI NITIN	Classification, CC and morphology and medicinal uses		
′2	2021010100220004	The comments of the comments o	of -Bamboo		

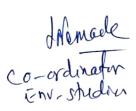
RAVER DIST JOHN

		No.	1			
110	2021015400222927	TAYADE HARSHAL ANAM	Medicinal Plant-			
109	2021015400222935	TAYADE AJAY SATISH	Morphology and uses of Ashoka			
108	2021015400222943	TAYADE AAKASH KANTILAL	Medicinal Plant-			
107	2021015400222846	TABEESH ALI SAYYED MASUD ALI	Medicinal Plant-			
106	2021015400222997	SUTAR MAYUR BHAGAWAT	Medicinal Plant-			
105	2021015400207642	SURYAWANSHI MADHURI LAXMAN	Classification and morphology of -Cycus			
104	2021015400304374	SHINDE TEJASKUMAR PRADEEP	Medicinal Plant-			
103	2021015400233086	SHINDE HITESH DHONDU	Morphology and classification of Jaswand			
102	2021015400292637	SHELKE ANISHA SAMADHAN	Classification and CC and uses of -Cycas			
101	2021015400209761	SAYYED AWAIS SAYYED ASGAR	Medicinal Plant-			
100	2021015400223173	SAWALE VAIBHAV KADU	Medicinal Plant-Nim			
99	2021015400313117	SAWALE RUPALI SUNIL	Morphology and uses of -Nerium			
98	2021015400222877	SAWALE HARSHALI UJWAL	Morphology and uses of -Cycas			
97	2021015400209753	RAYPURE ABHISHEK BHADU	Classification and CC and benefits of -Ashoka			
96	2021015400222912	RAYMALE UMESH MANIK	Medicinal Plant-			
95	2021015400302882	RAYMALE AKASH SURESH	Classification and economic importance of Cycas			
94	2021015400223126	PATIL VEDIKA NARAYAN	Classification and morphology and uses of -Neem			
93	2021015400222711	PATIL VAISHNAVI NITIN	Medicinal Plant-Cycas			
92	2021015400214901	PATIL VAISHNAVI KAILAS	Classification and CC and uses of -Neem			
91	2021015400284746	PATIL VAIBHAV NATTHU	Medicinal Plant-			
90	2021015400222982	PATIL SAPNA BALU	Medicinal Plant-			
89	2021015400222703	PATIL SANJANA PRAVIN	Classification and uses of -Cycas			
88	2021015400222614	PATIL SAKSHI VIJAY	Medicinal Plant-Kassod			
87	2021015400223196	PATIL RUCHITA DHANRAJ	Medicinal Plant-			
86	2021015400209784	PATIL RUCHA ANIL	CC and uses of -Cycus			
85	2021015400214851	PATIL ROHINI HIRALAL	Classification and uses of -Ashoka			
84	2021015400214882	PATIL PRAPTI RAMAKANT	CC and benefits of -Cycas			
83	2021015400223103	PATIL NIKITA SUNIL	Classification and uses of -Neem			
82	2021015400209834	PATIL NIKITA RAMBHAU	Medicinal Plant-Nilgiri			
81	2021015400209826	PATIL NIKHIL SANTOSH	Medicinal Plant-			
80	2021015400214785	PATIL MONIKA KISHOR	Classification and uses of -Bamboo			
79	2021015400215065	PATIL MOHINI SITARAM	Classification and uses of -Nerium			
78	2021015400222815	PATIL LOKESH SURESH	Classification and morphology of -Ashoka			
77	2021015400222831	PATIL KUNDAN BHASKAR	Classification, CC and benefits of -Cycas			
76	2021015400214812	PATIL KUNAL SANJEEV	Uses ,CC and morphology of -Ashoka			
75	2021015400209857	PATIL KOMAL VITTHAL	Uses ,CC and morphology of -Cycas			
74	2021015400214835	PATIL KOMAL EKNATH	Classification and uses of -Neem			
73	2021015400222893	PATIL KAVITA TULASHIDAS	Classification and morphology of -Nerium			

111	2021015400222854	TAYADE NITIN HIRAMAN	Medicinal Plant-
112	2021015400223215	THAKANE SWEETY NAGO	Classification and morphology and uses of -Jambul
113	2021015400233105	VARANKAR DNYANESHWAR DATTATRAYA	Classification and morphology of - Bel
114	2021015400223014	WAGH HARSHALI MAHENDRA	Classification and morphology and CC of -Almond
115	2021015400223006	WAGH VINITA TUSHAR	Classification and information about -Kanher
116	2021015400222904	WAGH YOGITA NITIN	Classification and morphology of -Kanher
117	2021015400222966	WANKHEDE KOMAL VINOD	Classification and morphology and CC and uses of - Kanher
118	2021015400222974	WARKE VINITA JIVAN	Classification and morphology of -Kanher

PRINCIPAL

Raver Parisar Shikshan Prasarak Mangai Shri Vitthalrao Shankarrao Naik Arts, Commerce & Science College Raver, Dist- Jalgaon (M.S.) 42550





Name.Chaitali Narayan Mahajan

**FYBA** 

Roll no. (75)

College name.Shri.v.s.naik college .Rave:

(1)Classification-

Common name- Neem

Botanical name- Azadirachta indica

Kingdom-Plantae

Division - Magnoliophyta

Class- Magnoliopsida

Order-Sapindales

Genus- Azadirachta

Species- A indica

Family-Meliaceae

(2) Family-

Fast growing tree of the mahogany family(Meliaceae)

(3)Genus-

Azadirachta

(4)Botanical Name -

Azadirachta indica

(5)Local name-Neem

Environment Project

(6)Description

Neem tree are attractive bord - leaved evergreens that can grow up to 30m tall and 2 5m in girth their spreading branches form rounded cwrons as much as 20m across they remain in leaf except during extreme drought, when the leaves may fall off

(7)Uses- Margosa oil is an extract of the seeds of azadirachta indica, commonly knows as the neem tree native to india and sri lanka. In low doses, margosa oil has been a traditinal remedy for centuries in India and southeast asia used in treating asthma, intestinal parasites arthritis and leprosy.

(8)Medical values- All parts of neem tree used as

- antihelmintic,antifungal,antidiabetic ,antibacte
   rial ,antiviral contraceptive and sedative
- 2)Neem tree is used in many medicinal treatment like skin diseases,healthy hair,improve liver function ,detoxify the blood pest and disease control,fever reduction, dental treatments cough asthma ulcers,piles intestinal, worms, urinary diseases



Dhubali.

Interne

**Student Name: Pawan Satish Ingale** 

College Name: V.S.Naik College Raver

Seat No. : 112802

Class : F.Y.B.A.

Subject : Environment Project

PRN No : 2021015400212813

Name Of Tree: Neem



Neem is a fast growing tree that usually reaches a height of 15-20 m, and under very Neem is a tast growing to approximately 30-35 m. As a rule it is a evergreen tree, but under very extreme circumstances, such as extended dry periods, it may shed most of nearly all of its leaves. The branches spread widely. The fairly dense crown is roundish or oval and may reach a diameter 15-20 m in old free standing specimens. The trunk is relatively short, straight and may reach a girth of 1.5-3.5 m. The bark is hard fissured or scaly and whitish-gray to reddishbrown. The sap wood is grayish-white and the heart wood reddish. The root system consists of a strong taproot and well developed lateral roots. The lateral surface root may reach over 18 m. Vesicular-arbuscular mycorrhiza (VAM) is associated with the rootlets categorized neem as a highly VAM dependant plant species. The leaves are unpaired, pinnate, 20-30 cm long and the medium to dark green leaflets, which number up to 31, are approximately 3-8 cm long. The terminal leaf is often missing. The petioles are short. The shape of mature leaflets is more or less asymmetric. Natural hybrids between A. indica and A. Siamensis, found in Thailand on places where both species grow together, have an intermediate position regarding the shape and consistency of the leaflets. The white, gragrant flowers are arranged in axillary, normally more or less drooping panicles which are up to 25 cm long. The glabrous fruits are olive- like drupes which vary in shape from elongate ovea to nearly roundish and whenfound in Thailand on places where both species grow together, have an intermediate position regarding the shape and consistency of the leaflets. The white, gragrant flowers are arranged in axillary, normally more or less drooping panicles which are up to 25 cm long. The glabrous fruits are olive-like drupes which vary in shape from elongate ovea to nearly roundish and when ripe are 1.4-2.8 x 1.0-1.5 cm. They are green when young and yellowishgreen to yellow, rarely reddish when mature. The fruit skin (exocarp) is thin and the bitter sweet pulp (mesocarp) is yellowish-white and very fibrous. The mesocarp is 0.3-0.5 cm thick. The white hard 'shell (endocarp) of the seed encloses one, rarely two and very rarely three elongated seed kernels having brown testa.

## **Geographic Distribution**

Francile

The neem is native of Indian subcontinent, it is widely distributed by introduction, mainly in the drier (arid) tropical and subtropical zones of Asia, Africa, the Americas, Australia and the South Pacific islands. In India it is widely distributed in many states. In Myanmar it is very common in the central parts of the country. In the South Pacific neem occurs in the Fiji Islands. In Australia it was first introduced about 60-70 years ago. In Indonesia, neem exists mainly in the low-lying northern and eastern parts of Java and in the frier islands to the east (Ball, Lombok, Sumbawa). In the Philippines it was introduced during the seventies and eighties of the last century. In China, A. indica was planted on subtropical island of Hainan and southern china. In Nepal neem trees are found in the southern, low-lying areas (Tarai region). In Sri Lanka it is widespread in the drier northern parts of the island.

( Angela

जास्त भुकेची समस्या दुर होते. दिवसभर 2, 3 बदाम खाल्ल्यास फार भुक लागत नाही त्यामुळे आहार कमी केला असल्यास फायदा होतो.

बदाम खाल्याने बरे होणारे रोग – Almond's Role in Non-Communicable Diseases

- 1. रक्तदाब उच्च रक्तदाब असलेल्या रुग्णांनी योग्य प्रमाणात सेवन केल्यास नैसर्गिकरीत्या रक्तदाब प्रमाणात राहण्यास मदत होते .शरीरातील विविध नाडयांच्या क्रियागमनात सकारात्मकता आणतो.
- 2 . मधुमेह -डायबिटीज असलेल्या रुग्णांनी रात्री पाण्यात भिजवलेले बदाम सकाळी खाल्याने शरीरातील शुगर आणि इन्सुलिनचे प्रमाण वाढत नाही. आणि थकवा कमी होण्यासाठी मदत होते . बदाम प्राकृतिक दृष्ट्या साखर युक्त नसते त्यामुळे याचा वापर मधुमेहीरोगी चांगल्या प्रकारे करू शकतात.

बदाममधील प्रतिरोधके हु द्याच्या कार्यावर परिणाम करून त्यात उपयुक्त सुधार करतात. त्यामुळे रक्तातील साखर शरीराबाहेर टाकल्या जाते त्यामुळे मधुमेहावर नियंत्रण मिळवता येते. शरीरात ईन्सुलिन प्रतिरोधक शक्तीस नियंत्रीत करतो त्यामुळे रक्तात शर्करेचे प्रमाण नियंत्रित केले जाते.

3 पचनक्रिया मंदावणे – जर व्यक्तीची पचनक्रिया मंदावली असेलतर बदाम खल्ल्याने त्यात बरीच सुधारणा होते.

बदामात जीवनसत्वे A हे फारच उपयोगी ठरतात. या जिवनसत्वामुळे अन्नपचनात मदत मिळते रोज १-२ बदाम सेवन केल्यास पचनक्रिया सुकर आणि नियंत्रित होते. शरीरातील पचनतंत्रात बिघाड निर्माण करणा-या हानिकारक जिवाणुंना नष्ट करण्यास साहाय्यक ठरतो. बदामाची साल आतडयांच्या संप्रेरकांना नियीमत व नियंत्रीत स्वरूपात स्त्रवण्यास मदत करते. 2014 साली इंस्टीट्यूट ऑफ फुंड सायन्स अँड टेक्नॉलॉजी चायना ने अध्ययनातुन हे सिध्द केले की बदाम शरीरात पचनास लाभदायक जीवाणुंना वाढविण्यासाठी उपयुक्त ठरते त्यामुळे अन्नपचनात चांगली मदत मिळते.

4 कोलेस्ट्रोल - बदामातील ॲंटिऑक्सिडंट घटका मुळे शरीरातील कोलेस्ट्रोल कमी होण्यास मदत होते.

Almonds मधील खनिजतत्व शरीरातील विविध पोषकतत्वांना शोषणास मदत करतो त्यामुळे शरीरास आवश्यक पोषकतत्व शोषुन त्याचे योग्य पोषण प्राप्त केले जाते यामुळे शरीराचा स्तर नियंत्रीत केला जातो.

Name

: Kanchan Jagannath Lulhe

Std

FYBA

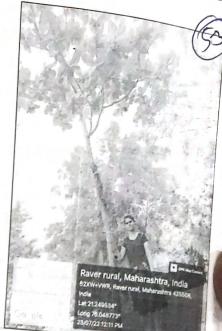
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: 71

College Name : Shri.Vitthalrao Shankarrao Naik Arts, Commerce

& Science College, Raver

Name of the Plant : Almond



## बदामचे गुणकारी फायदे.

प्रातन काळापासुन लोक बदामचे सेवन करत आहेत, व त्यांच्या गुणांचा फायदा घेत आहेत. खास करून बुद्धीची क्षमता वाढावी यासाठी बदामचे सेवन जास्तीत जास्त केल्या जाते .

बदाम – Almonds हा एक सुकामेवा आहे. हे फार गुणकारी व शरीर उर्जावर्धक मानले जाते. प्राचीन काळापासुन इजिप्तमध्ये तसेच आशियाई देश यामध्ये मुख्यतः आपल्या भारत देशात बदाम फार आवडीने सेवन केल्या जातो . भारतीय आयुर्वेदात बदामाचे औषधीगुण फार महत्वाचे मानले जातात.आयुर्वेदानुसार बदाम हा प्राकृतिक गुणांचा भंडार आहे. यात अनेक खनिजे व पोषकतत्व असतात. बदाम मधुमेह आणि अल्झायमर सारख्या रोग टाळण्यासाठी अगदी लाभदायी मानल्या जाते.बदामाचा वापर वेगवेगळया प्रकारे केला जातो. याचा वापर गुणकारी खाद्यपदार्थ म्हणून केला जातो. यास आपण सरळ खावुनही पोषकतत्वे मिळवू शंकतो.

Almonds चा वापर वेगवेगळया प्रकारे केला जातो. याचा वापर गुणकारी खाद्यपदार्थ म्हणून केला जातो. यास आपण सरळ खावुनही पोषकतत्वे मिळवू शकतो.

- बदाम तेलाचा वापर केसांसाठी पोषक मानला जातो. केसाची काळजी घेण्यासाठी हे उत्तम मानल्या
- बदामाची पावडर बाॅडी लोशन आणि कोल्ड क्रिम म्हणूनही वापरता येते. कच्च्या दुधात याची पेस्ट करून त्वचेवर लावल्यास त्वचा कोमल व चमकदार बनते.
- चेह-यावर बदाम पावडर व मध आणि कच्चे दुध मिसळून लावल्यास थंडीत चेहरा कोमल व ताजातवाना होतो.
- शरीरात कोलेस्ट्राॅलचे प्रमाण आवश्यकतेपेक्षा जास्त झाल्यास नियमित बदाम सेवन केल्यास फायदा होतो.
- वजन कमी करण्यास बदाम लाभदायी मानले जाते.
- शरीरातील चरबी कमी करण्यास बदाम लाभदायी मानल्या जाते. यात कमी कॅलरी असतात व हे एक तैसर्गिक पोषक असंल्यामुळे डायटिंगमध्ये याचे सेवन लाभकारी ठरते.

Name :- Vrushali Eknath Mahajan

Std :- F. Y. B. Com

College Name :- Shri V. S. Naik college Raver.

plant Name :- Aloevera

plant Name In Other Languages :-

Korfhod, Gheekumari.

Botanical Name :- Aloevera

Family :- Asphodelaceae

Special :- A vera

Kingdom :- Plantae

Other :- Asparagales

Location :- Home garden



- Shape of leaves :- Aloevera has think., fieshy leaves. The leaves are
- Lanceshaped of leaves :- pea green
- Chemical composition: Aloevera gel consists mainly of water (>98%) and polysaccharides, including pectin, cellulose, hemicellulose, glucomannan, and acemannan
- Active ingredients in Aloe Vera Levaes :- The leaves of Aloe Vera have three leyers. The outrmost layer consists of 15-20 cells this protective layer synthesizing carbohydrates and proteins The major components incude anthraquinones, chromones, polysaccharides, and enzymes. The elements present in the gel are Al, Ba, Ca, Fe, Mg, Na, P, Si, etc.
- Ues of aloe Vera :- 1. Burn Treatment
- 2 Heal Bruses Fasterv 3. Take the sting or itch of an insect bites away 4.Reduce tissue damage from frostbite 5. Allenate rashe 6. Moisturizer 7. Prevent pimple 8. Brighten skin- help pigmentation 9. Hepl digestion, stomach uncers, and soothe stomach pain 10. Drinking can aid in reducing cholesterol.
- Aloevera as medicine: These polyphenols, along with several other compounds in Aloe Vera, help inhibits the growth of certain bacteria that can cause infection in humans. Aloevera is known for its antibacterial, antiviral and antiseptic properties. This is part why it may help heal wound and treat skin problems.

## Environmental Studies Project

## Nerium Oleander (Kanher)

Student Name: Nikhil Kanhaiyalal Mali

· Class F.Y.Bcom

Collage Name: V.S.Naik Collage Raver.

Plant Name: Nerium Oleander.

· Local Name: Kanher.

· Family: Cascabela Thevatia.

• Plant Name In Other

Language:Kanaviram.

Location: my colony

Shape Of Leaves: It Leaves Are Long,
 Lance Shape And Leaves Between 8 To 10
 Long Inch Long

• Colour Of Leaves: Green



- Chemical Composition: A Water Extraction Of Cushed Leaves Two New Cardiac Acid, Glyocosid, Koneroside And Neriumoside.
- Uses Of Plant: Approximately 10% Of These Ingestions Are Fatal. Despite The Denger,
  Oleander Seeds Are Use To Make Medicine Oleander Use Form Heart Conditions,
  Asthume, Epilepsy, Cancer, Painful Menstrual Periods, Leprosy, Malaria, Ringworm,
  Indigestion, And Venereal Disease, And The Cause Abortions.

Use To Made Medicine: Despite The Danger, Oleander Seed And Leis Are Some Time Use To Make Medicine Oleander Is Used Form Hear Problems, And Other Condition. And Also Use Form Covid-19 Period. When Used Orally All Parts Of The Oleander Plant.



Johnson

## An environment project

Name: Mrudula Chhotulal Bhide

Class: F.Y.B.sc(Computer)

· College Name: V.S. Naik College, Raver



Plant Name: Rose Plant

Scientific Name: Rose Mister Licoln

• Plant Name in Other Language:

1. French: Rose

2. Swedish: Reste Sig

3. Italian: Rosa

Family Gramineae: Rosaceae

Kingdom: Plantae

Chemical Composition: The chemical composition is 72 calories,
 10.9g of carbohydrates, 1.84g of proteins, 0.28g of ether extract, &
 3.5g fiber

Shape Of Leaves: Oval leaflets that are sharply toothed

## **Medicinal Values of Rose Plant:**

The medicinal parts of the plants are the flowers, petals, rose hips, root, root bark and essential oil. Essential oil, Vitamins and Minerals which include Vitamins A, B, E and K and potassium and iron from the key medicinal components. The extract of rose plant especially act as an antidepressant, antibacterial, antifungal, antiseptic, anti-inflammatory, digestive stimulant, kidney tonic and menstrual regulator. Mainly from the family Rosaceae certain flower like R.canina, R.arkansana, R.laevigata, R.gallica, R.damascena, R.rugosaand, R.multiforaexhibit wide range of medicinal effects.

## **Traditional Uses of Rose Plant:**

The hips of wild rose have very high concentration of Vitamin C, almost thrice that of the citrus fruits have. The Chinese use the flower to prepare a drink which acts as an energy stimulant, blood tonic and also works in case of digestive irregularities. Petals of R.damascena are steam distilled to produce true Bulgarian rose oil used in 96 percent of all women's perfumes. Medicinally it is used to alleviated depression and anxiety.

Menuele

Aide.





Name: Gayatri Sanjay Chaudhari

Class FYBsc

College Name : V.S.Naik College Raver

Plant Name: Kanher

Plant Name In Other Language: Cascabela Thevetia

Latin name :Nerium Oleander

Family: Dogbanes

Location: College campus, Garden, Near by home, Near by temple

Shape of Leaves: Its Leaves are long ,lance shaped and green in colour

leaves

waxy coating to reduce water loss. Its stem is green turning grayas

it ages.it grows to heights between 6.5 and 19.5 tall Itslarge size

Colour of Leaves: Leavesare prominent pinnate midribs above and short

petioles. They are leathery and dark green in colour

Chemical Composition: A water extraction of crushed leaves of Chemical Composition: A water extraord. The main fraction NeriumOlender yield 2.3% of a crude polysaccharide. The main fraction NeriumOlender yield 2.3% of a crude polysaconamination of galacturonic formattion of the polysaconamination of the polysac

acid besides rhampose arabinose and galactus Topical Use: Anvirze is an aqueous extract of the plant Nerium Oleande which has been utilized to treat patients with advanced malignancies other medical uses of Nerium Oleander include treating ulcer, haemorrhoids leprosy to treat ringworm, herpes and abscesses. Despite the danger Oleander seeds and leaves are used to make medicine Oleander is used for heart conditions, asthma, epilepsy, cancer, painful menstrual periods leprosy, malaria, ringworm indigestion and venereal disease, and to cause absorption.

Kanher as Food: when taken by mouth oleander is likely unsafe for anyone to take by mouth. It can cause nausea, vomiting, diarrhoea, weakness headache, stomach pain, serious heart problems and many other side effects. Taking Oleander leaf Oleander leaf tea or Oleander seeds has deadly poisonings

Kanher as Medicine: Despite the dangers Oleanderis of great medicine importance and used for heart conditions, asthma, epilepsy, cancer, paint menstrual periods, leprosy malaria, ringworm, indigestion and venerel disease and to cause as well as drugs derived from this plant is used treatment of cancer and the Despite the danger Oleander seeds and leave are sometimes used to make medicines Oleander is used for heal problems, cancer, skin problems and other conditions Neriumindicumis important medicinal plant is now used for as a folk remedy in some region India and other countries in traditional Chinese medicine, the flowers leaves of Neriumindicumhave been used to simulate cardiac muscles



## An Environment Project

Name - Runali Kailas Chaudhari Class - F. Y. B. Sc

College Name - V. S. Naik. College

#### Raver



- Plant Name Oliender Plant
- Commen Name Kanher , Lal Karen ,
   The Oleander
- Plant Name In Kaner(Hindi), Erra
   Other Languages Ganneru, Jannerat
   (Kanail Telgu)
- Latin Name Cascabel Thevetia
- Family. Apocynaceae
- Sub family Apocynoideae
- Tribe Nerieae horribnos mendrol begural rebusalo.
- Species N.Oleander bas not septent anov pair bas
- Order Gentianales

6,

n -

- Binomial Name Nerium oleander L
- Synonyms Nerium indicum mill
- Location college camp
- Plant form shrub
- Hight of plant 2-6m(6.6-19,7lt) tail.
- About plant -
- plant leaves The leaves are in pairs of whorls of three, thick and leathery, dark-green, narrow lanceolate. 5-12 cm (2.0-8.3 in) long and 1-3.5 (0.39-1.38 in ) broad, and with an entire margin filled with minute recirculate venation Wed typical of eudicots. Leaves are light green and very glossy when young, before maturing to a dull dark green
  - plant stem Stem that splay outward as they mature ,first year stem have a glaucoma blood, while mature stem have a grayish bark
  - plant flowers The flowers grow in clusters at the end of each branch, they are white .pink to red. 25-5cm (0.98-1.97in)diameter ,with a deeply 5lobed fringed corolla round the central corolla tude

Use of oleander plant - Oleander seeds and leaves are used to make medicine. Oleander is used for heart condition, painful menstrual period, leprosy, malaria and ringworm, indigestion and venereal disease

Phaudhaey.

## \* ENVIRONMENT PROJECT \*2022\*



## \*\_NAME : KAKADE AKSHAY MADHUKAR

## \* CLASS: F.Y.BSC [CHEM]

- Plant Name Cycas
- · Scientific Name Cycas
- · Plant Name in
- · Other language kulem, cikli, tsikllar
- · Family Cycadaceae
- · Kingdom Plantar
- · Location At. College campus

Chemical Composition -

The isolated compounds from both species include 14 bifiavonoids, three lignas, three flavan -3-ols, two flavon -c-glucoside, two nor-isoprenoids, and one flavonone

- Shape and Leaves The leaves are long,
   tough and pinnately compound with long, thin
   leaflets . Unlike a fern, the leaves look tough
  - 1)The cycad plants have a long history of uses
    - Cycad seeds are used to treat hypertension, musculoskeletal disorders gastrointestinal distress, cough and amenorrhea
      - · Benefits of Cycas -

of use as food and medicine

·Uses of Cycas -

- as a source of food cycad plants is a significant source of food filled with nutrients ...
- 2) helps to treat wounds..
- 3) Use of a source of clothing fiber...
- 4) can extract oil out of its seeds..

Thank you.

Watall "

Menzail

### BOS (PHYSICS)-Faculty of Science & Technology Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

Class: T. Y. B. Sc. Subject: Physics Choice Base Credit System (With effect from June 2020)

The Board of Studies in Physics has unanimously accepted the revised syllabus (as per CBCS pattern) prepared by different committees, discussed and finalized in the **Online Workshop on Curriculum Development in Physics at T. Y. B. Sc.** held on15<sup>th</sup> and 16<sup>th</sup> May 2020.

The titles of the papers for T.Y.B.Sc. (Physics) are as given below:

Sem	Course type	Course code	Course title	Cre dits	Total hrs /week	Total teaching periods	Tota marl	
							CA	UA
	Disciplin	PHY 501	Mathematical Physics	3	3	45	40	60
	e specific	PHY502	Solid State Physics	3	3	45	40	60
	Course (DSC)	PHY 503	Atomic and molecular physics	3	3	45	30	60
		PHY 504(A) Or	Electronics-II Or	3	3	45	40	60
V		PHY 504(B)	Instrumentation -II					
	Skill Enhance ment course	PHY 505	Solar Energy and applications	3	3	45	40	60
	(SEC)							
	DSE Elective course (Any	PHY 506(A) PHY 506(B) PHY 506(C)	Technical Electronics- I or Refrigeration and Air conditioning- I or Vacuum Technology-I or	3	3	45	40	60
	one)	PHY 506(D) PHY 506 (E)	Microprocessor-I or Programming in C++ I					
	DSC CORE	PHY 507	Physics Practical I	2	4 (per batch)	60	40	60
	Practicals	PHY 508	Physics Practical II	2	4 (per batch)	60	40	60
		PHY 509	Physics Practical III or Project	2	4 (per batch)	60	40	60
	Non	AC 501(A)	NCC	No credit	2	30	100	
	credit	AC 501(B)	NSS	Credit				
	audit course (Any one)	AC 501 (C)	Sports			ř .		
			Total credit	24				

Sem	Course type	Course code	Course title	Cre dits	Total hrs /week	Total teaching periods	Tot	rks
							CA	UA
	Disciplin	PHY 601	Quantum mechanics	3	3	45	40	60
VI	e specific Course (DSC)	PHY602	Material Science	3	3	45	40	60
		PHY 603	Nuclear Physics	3	3	45	30	60
		PHY 604	Modern Physics	3	3	45	40	60
	Skill Enhance ment course (SEC)	PHY 605	Basic Instrumentation Skills	3	3	45	40	60
	DSE Elective course (Any one)	PHY 606 (A) PHY 606 (B) PHY 606 (C) PHY 606 (D) PHY 606 (E)	Technical Electronics- I or Refrigeration and Air conditioning- II or Vacuum Technology-II or Microprocessor-I or Programming in C++ II	3	3	45	40	60
	DSC CORE Practicals	PHY 607	Physics Practical I	2	4 (per batch)	60	40	60
		PHY 608	Physics Practical II	2	4 (per batch)	60	40	60
		PHY 609	Physics Practical III or Project	2	4 (per batch)	60	40	60
	Non credit audit course (Any one)	AC 601(A)	Soft skill	No credit	2	30	10 0	
		AC 601(B)	Yoga				U	
		AC 601(C)	Practicing Cleanliness					
			Total credit	24				

# Raver ParisarShikshanPrasarakMandal's Shri. V. S. Naik Arts, Commerce and Science College, Raver Dist-Jalgaon

### **Department Of Physics**

T.Y.B.Sc.- (2021-22)

#### List of Projects

Sr. No.	PRN Number	Name of Student	Name of Project
1	2019015400297914	Chaudhari Priyanka Laxman	Study of LDR with different variants
2	2019015400297292	Patil Dipti Ravindra	Study of LDR characteristics and applications
3 :	2016015400367043	Bhuse Himanshi Yogeshwar	Conventional and Non conventional sources of energy
4,	2019015400297895	Dhande Purva Prashant	Energy calculation and solar applications
5	2019015400298001	Dhande Vaishnavi Yogesh	Non conventional energy needs and sources
6 ,	2019015400300346	Misar Bhupendra Sunil	Growth of zinc oxalate crystals by gel technique
7	2019015400297992	Nemade Achal Kamlakar	Crystal growth of zinc oxalate crystals in gel
8	2019015400296466	Suryawanshi Vivek Virendra	Crystal growth of cobalt oxalate crystals by gel technique



(Dr. M. M. Patil) HHead

Department of Physics sics

Shri V.S.Maik Arts, Commerce & Science College, Raver Dist-JalgRaver Parisar Shikshan Prasarak Mandal's

# RAVER DIST. JALGAON DEPARTMENT OF PHYSICS

LABORATORY CERTIFICATE

Date: 28 /04/ 2022

This is certified that,

## Miss. Priyanka Laxman Chaudhari

Exam Seat No 344039 has satisfactory carries out the Project in Physics as

Study of LDR with different Variant.

For the purpose of T. Y. B. Sc. A. Y. 2021-2022

Prof. S. U. Patil

BATCH-IN-CHARGE

Prof. M.M. Patil

HEAD OF THE DEPT.
PHYSICS

### \* ACKNOWLEDGEMENT \*

Take this opportunity to express our sincere thanks to our project guide **PROF. S.U.PATIL** for providing their valuable time and giving valuable information about the project.

I also thankful of Dr. P. V. Dalal, for his encouragement and motivation.

I also thank to Dr. V. B. Suryawanshi, Prof. M.M. Patil and Lab assistant Mr. P.K.Mahajan for helping me constantly in completing project work.

I also thank to all classmates for their encouragement.

RAVER:-

Date: - 29/04/22

Miss. Priyanka Laxman Chaudhari

Raver Parisar Shikshan Prasarak Mandal's

# RAVER DIST. JALGAON DEPARTMENT OF PHYSICS

LABORATORY CERTIFICATE

Date: 28 /04/ 2022

This is certified that,

## Miss. Dipti Ravindra Patil

Exam Seat No 344040 has satisfactory carries out the Project in Physics as

Study of LDR Charecteristics and Application.

For the purpose of T. Y. B. Sc. A. Y. 2021-2022

Prof. S. U. Patil

**BATCH-IN-CHARGE** 

Prof. M.M. Patil

HEAD OF THE DEPT.
PHYSICS

EXAMINAR

### **\*** ACKNOWLEDGEMENT **\***

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I also thank to all classmates for their encouragement.

RAVER:-

Date: - 29/04/22

Miss. Dipti Ravindra Patil

Raver Parisar Shikshan Prasarak Mandal's

# RAVER DIST. JALGAON DEPARTMENT OF PHYSICS

## LABORATORY CERTIFICATE

Date: 28 /04/ 2022

This is certified that,

## Mr.Bhupendra Sunil Misar



Exam Seat No

has satisfactory carries out the

Project in Physics as

## Growth of Zink Oxalate By Gel Technique.

For the purpose of T. Y. B. Sc. A. Y. 2021-2022

Prof. S. U. Patil

**BATCH-IN-CHARGE** 

Prof. M.M. Patil

HEAD OF THE DEPT.
PHYSICS

EXAMINAR

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AVER:-

ate:-

Bhupendra Sunil Misan

# RAVER DIST. JALGAON DEPARTMENT OF PHYSICS

LABORATORY CERTIFICATE

DEPARTMENT OF PHYSICS

Date: 28 /04/ 2022

This is certified that,

## Miss. Aachal Kamalakar Nemade

Exam Seat No 344045 has satisfactory carries out the Project in Physics as

# Growth of Zinc Oxalate in a Gel

For the purpose of T. Y. B. Sc. A. Y. 2021-2022

**BATCH-IN-CHARGE** 

## **※ ACKNOWLEDGEMENT ※**

Take this opportunity to express our sincere thanks to our project guide **PROF**. **S.U.PATIL** for providing their valuable time and giving valuable information about the project.

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RAVER:-

Date:-

Miss. Aachal Kamalakar Nemade

ANemale

# RAVER DIST. JALGAON DEPARTMENT OF PHYSICS

LABORATORY CERTIFICATE

Date: 28 /04/ 2022

This is certified that,

# Mr. Himanshi Yogeshwar Bhuse

Exam Seat No

has satisfactory carries out the

Project in Physics as

Conventional and Nonconventional Source.

For the purpose of T. Y. B. Sc. A. Y. 2021-2022

Prof. S.W. Patil

**BATCH-IN-CHARGE** 

Prof. M.M. Patil

HEAD OF THE DEPT.
PHYSICS

EXAMINAR

## **※ ACKNOWLEDGEMENT ※**

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RAVER:-

Date:-

Bhuse Himonshi Yogeshwar

Orghise

# RAVER Dist. JALGAON DEPARTMENT OF PHYSICS

LABORATORY CERTIFICATE

Date: 28 /04/ 2022

This is certified that,

# Mr.Bhupendra Sunil Misar

Exam Seat No

has satisfactory carries out the

Project in Physics as

Growth of Zink Oxalate By Gel Technique.

For the purpose of T. Y. B. Sc. A. Y. 2021-2022

Prof. S. U. Patil

BATCH-IN-CHARGE

Prof. M.M. Patil

HEAD OF THE DEPT.
PHYSICS

EXAMINAR

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RAVER:-

)ate :-

Bhupendra Sunil Misar

# RAVER DIST. JALGAON DEPARTMENT OF PHYSICS

LABORATORY CERTIFICATE

Date: 28 /04/2022

This is certified that,

## Miss. Purva Prashant Dhande

Exam Seat No 344042 has satisfactory carries out the Project in Physics as

Energy Calculation and Solar Application.

For the purpose of T. Y. B. Sc. A. Y. 2021-2022

Prof. S. U. Patil

BATCH-IN-CHARGE

Prof.M.M. Patil

HEAD OF THE DEPT.
PHYSICS

EXAMINAR

# **※ ACKNOWLEDGEMENT ※**

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I also thank to all classmates for their encouragement.

RAVER:-

Date:-

Miss. Purva Prashant Dhande

# RAVER Dist. JALGAON DEPARTMENT OF PHYSICS

LABORATORY CERTIFICATE

Date: 28 /04/ 2022

This is certified that,

# Miss. Vaishnavi Yogesh Dhande

Exam Seat No 344043 has satisfactory carries out the Project in Physics as

Nonconventional Energy Needs and Sources.

For the purpose of T. Y. B. Sc. A. Y. 2021-2022

Prof. S. U. Patil

**BATCH-IN-CHARGE** 

Prof. M. M. Patil

HEAD OF THE DEPT.
PHYSICS



महाराष्ट्र MAHARASHTRA

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बायर अ म ८८०... नाराख है हि हि । बा प्राथित स्तीहिट एस नारिक छता। मा स्तिक्य श विताहा... अशिद्धाक्ष्य भी लक्ष्मण सद्धाकिय पाटी मा स्वाप स्वयं स्ययं स्वयं स्ययं स्वयं स

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# MEMORANDUM OF UNDERSTANDING

(For educational and social purposes only without any legal binding)

This memorandum of understanding is signed between:



RPSPM'S

Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver – 425 508, (M.S.), India Affiliated to North Maharashtra University, Jalgaon.. NAAC Accredited B+ with 2.65 CGPA

AND



Seva Sadan Mahavidyalaya, Burhanpur Affiliated to Devi Ahilya Vishwavidyalaya Indore. NAAC Accredited B+ with 2.64 CGPA

1

To disseminate and advance knowledge by providing instructional, research and extension facilities in such branches of earning as it may deem fit and it shall endeavour to provide students and teachers the necessary atmosphere and facilities for the promotion of:

- 1. Innovations in education leading to new methods of teaching and learning, and integral development of personality.
- 2. Studies in various disciplines
- 3. Inter-disciplinary and multi-disciplinary studies
- 4. National integration, secularism and international understanding.

NOW THEREFORE THE, ACTING PRINCIPAL, SHRI VITTHALRAO SHANKARRAO NAIR ARTS, COMMERCE AND SCIENCE COLLEGE, RAVER AND THE PRINCIPAL, SEVA SADAN MAHAVIDYALAYA, BURHANPUR

Have intended, agreed and consented to the following terms and deeds in pursuance of a common intent to promote and develop the study.....

Make provisions for research and for the advancement and dissemination of knowledge

To organize and to undertake extra-mural studies and extension services

## FIELD OF COOPERATION:

- a) Access of books, research journals, periodicals and e-facilities available in the Library with prior permission of the Principal and the Librarian.
- b) Access of sports facilities and guidance with prior permission on the Principal and the
- c) Both the institutions shall evolve a mutually acceptable schedule to develop programs,
- d) The said academic interaction and intellectual assimilation may include-
  - Faculty/staff development and exchange: ii.
  - Exchange of research students:
  - Seminars, research, conferences and workshops: iii. iv.
  - Collaborations in the sharing of academic data, scientific data, characterization facilities intellectual property, articles and publications:

# 2. EXCHANGE OF RESEARCH STUDENTS/TEACHERS:

A. Reciprocal arrangements based on mutually acceptable terms shall be accomplished to give an impetus to collaborative research and joint projects. Teachers, researchers, guides, and students of both the institutions shall be encouraged to work in tandem in the laboratories, workshops, faculties and departments of both the institutions.

B. Issues relating to travel, boarding, lodging, miscellaneous expenses shall be incorporated in this Para and shall vary according to the rules, regulations and policies of every institution.

#### 3. MISCELLLANEOUS:

- a. The details for the efficacious implementation of this Memorandum of Understanding shall be jointly worked out on mutually acceptable terms within the parameters of the policies, rules and regulations of both the institutions.
- b. The parties to this memorandum may, by mutual consent, add modify, amend, delete, review or revise any term(s) and condition(s) of this agreement.
- c. The MOU shall remain in force for a period of five years from the date of its signature and seal, and may be terminated by either side by giving a six months notice to that effect in writing. However, notwithstanding the notice of the intent to terminate the memorandum, all rights, obligations and corresponding duties and subsisting therein shall be respected and mandated till the finalization and accomplishment thereof.
- e. The parties to this MOU undertake to treat as CONFIDENTIAL AND PRIVILEGED information of the other institution, which is so classified in advance. The terms of confidentiality and mode of disclosure shall be as per mutually acceptable terms.

f. This MOU shall require the ratification of the competent academic/executive body of both the institutions.

Signed at Burhanpur on this Friday of 29th June, 2018

Marobia....)

signatory, the Principal on behalf of Seva Sadan Mahavidyalaya, Burnanpur

Date:

**ACTING PRINCIPAL** 

Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarrao Nalk: Arts, Commerce & Science College. Raver. Dist-Jalgaon (M.S.) 425508

Authorized Signatory, The, Acting Principal, RPSPM's Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver

Seal:

Date:

Witnesses:

2.



महाराष्ट्र MAHARASHTRA

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लायसेन्स स्टॅम्प वेंडर,रावेर ला.नं. १५/१९

### MEMORANDUM OF UNDERSTANDING

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This memorandum of understanding is signed between:



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AND



Sage University, Khilod Kartal, Indore-Dewas Bypass Road, Rau, Indore, M. P., 459021 Registered under the MadhyaPradesh Society Registrikaran Adhiniyam 1973 (No. 44 of 1973)

We, both research institutes will come together to emerge as a scientific profession with the aim of developing the theoretical implications of science and not its application. Our research scientists will establish leadership by acquiring expertise in this area. The development of scientific studies prompted a desire to reinvent the scientific discipline by strong research to achieve pure science. Both of us research institutes can establish new dimensions in this field by jointly doing remedial work.

NOW THEREFORE THE PRINCIPAL, SHRI VITTHALRAO SHANKARRAO NAIK ARTS, COMMERCE AND SCIENCE COLLEGE, RAVER AND THE REGISTRAR, SAGE UNIVERSITY, RAU, INDORE

Have intended, agreed and consented to the following terms and deeds in pursuance of a common ntent to promote and develop the study
OR
Make provisions for research and for the advancement and dissemination of knowledge
OR
To organize and to undertake extra-mural studies and extension services
OR
)
FIELD OF COOPERATION:

- a) Access of books, research journals, periodicals and e-facilities available in the Library with prior permission of the Principal and the Librarian.
- b) Both the institutions shall evolve a mutually acceptable schedule to develop programs, hold seminars and exchange visits.
- e) The said academic interaction and intellectual assimilation may include-
  - Faculty/staff development and exchange:
  - Exchange of research students: ii.
  - Seminars, research, conferences and workshops: iii.
  - Collaborations in the sharing of academic data, scientific data, characterization facilities intellectual property, articles and publications:

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- This MOII shall manying the

institutions.
Signed at Rau Indore on this Styoday day of 12 feb 1 2022
( All hy 2/2/22
Authorized signstonistic Registrar on behalf of Sage University, Rau, Indore, M. P. Seal: SAGE University
Seal: SAGE University
Date:
( <del>9</del> <del>1</del> )
10-1

Authorized Signatory, The, Principal, RPSPM's Shri V. S. Naik

College, Rave

Seal:

Date:

PRINCIPAL

Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarrao Naik Arts, Commerce & Science College. Raver. Dist-Jalgaon (M.S.) 425508

Witnesses:

Dr. Banjean Linghal, Director IaAc. My Mr. Rajesh Ku. Nagar, coordinator, pho cell, luy

1. Organizing Department: IQAC Department

2. Name of the Event: Workshop of Application of Management Information System

3. Date of the Event: 22 Nov. 2019

4. Total number of Participants: 37

5. Name of the Coordinator: Dr. S. R. Chaudhari

#### **Report of the Event**

Workshop on Application of Management Information System was organized on 22 Nov. 2019 by IQAC, Shri V. S. Naik College, Raver. Mr. Shubham Gavhane, Business Development Manager, Twinkle IT Solutions Pvt. Ltd, Pune and Shiddhant Mhaske, Business Exhicutive, Twinkle IT Solutions Pvt. Ltd, Pune were invited as the resource persons. They provided necessary information about the use and applications of MIS software for academic purposes. They further provided in details information about several useful applications such as attendance management, learning material distribution, overall reports, result analysis, online examination, workload and syllabus management etc.



सभा नंबर :-

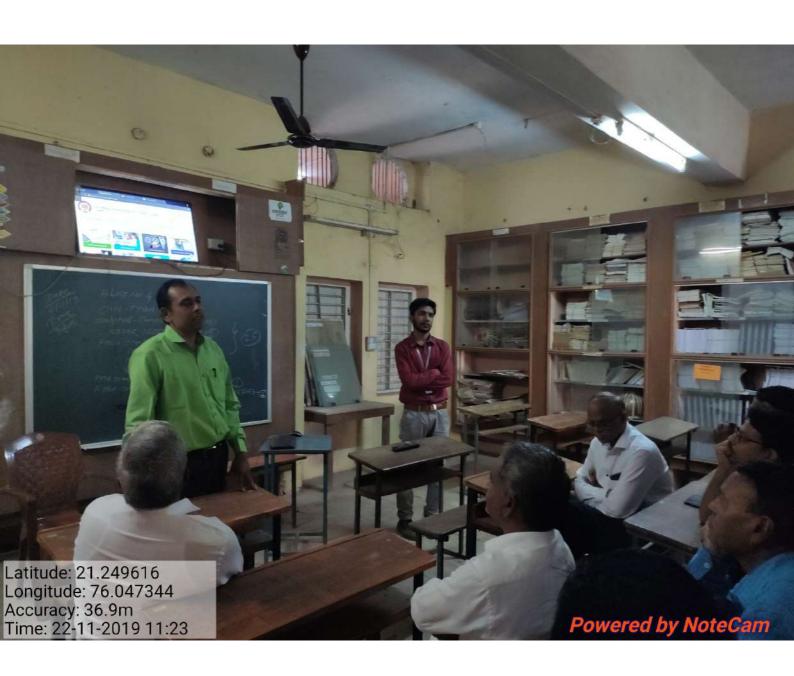
Workshop on MIS 22-11-2019

सभा नबर :-	MOSKS	3P On M15 22-11-2019
विषय नं.	विषय	ठराव
6102 (	Today at	11.00 am Workshop is
organized	on the subject	Let. Applications of Management
Informatio	n system. I, e r	IIS. Following teaching &
non-teachia	ng staff is Pr	esent.
) Princip	al Dr. P. V. D	alal. Dal
2) Mr. s	hubham Gavhane	Business Development Manager glave
3) Dr. J	M. Patil	nearly.
4) 177. 1	M. M. Patil	MANUAL MA
5) MT. N	1. S. Patil	ZAON
6) DT. A	. N. songr	Exam. work (Fgizpur)
7) Dr. F	G. Pati)	
8) Mr. 1	. v. Pautil	abli .
g) Mr.	V. D. Patil	well
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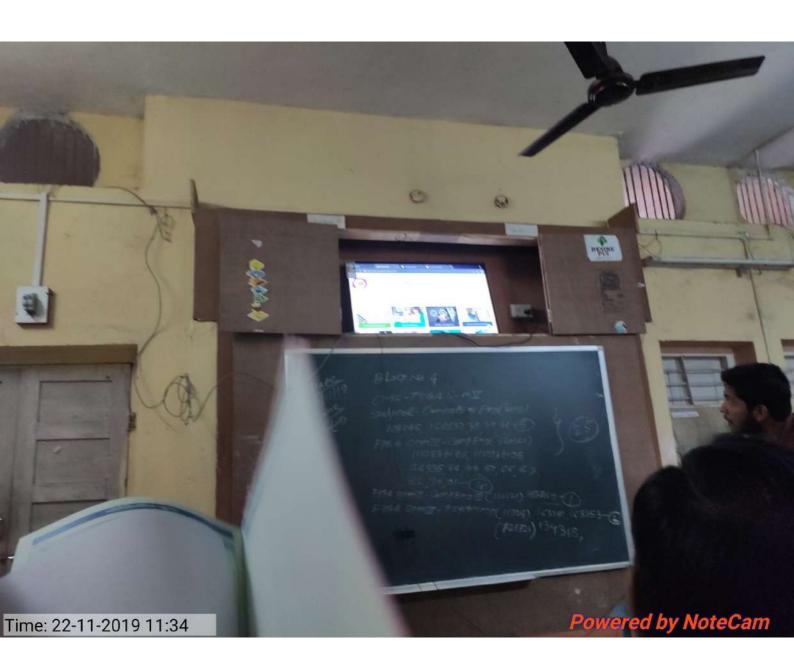
































Grade: B

# B. Raghunath Arts, Commerce and Science College, Parbhani INTERNAL QUALITY ASSURANCE CELL

ONE WEEK NATIONAL ONLINE FACULTY DEVELOPMENT PROGRAM

Creating High-Impact Work Culture

6th May 2020 to 11th May 2020



#### CERTIFICATE OF PARTICIPATION



This is to certify that Dr.Avinash Nathu Sonar of shri.V.S> Naik College, Raver has successfully completed One Week National Online Faculty Development Program on Creating High Impact Work Culture organized by Internal Quality Assurance Cell of B. Raghunath Arts, Commerce and Science College, Parbhani from 6th May to 11th May 2020.

Regd. No. BRC-IQAC/FDP-2020/237053



Dr. Rajesh Deshmukh FDP Coordinator Asst. Prof. of Botany Mr. Wamankumar Wani Organizing Secretary IQAC Coordinator Dr. Vilas Sonawane Convener Principal, BRCP



Raver Parisar Shikshan Prasarak Mandal's Se Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver, Dist. - Jalgaon (M.S.)

Seva Sadan Education Society's
Seva Sadan Mahavidyalaya,
Dist - Burhanpur (M. P.)



Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

"RECENT EMERGENCE IN SCIENCE AND TECHNOLOGY" NATIONAL SEMENARON

"REST-2019"

11th and 12th February 2019

# CERTIFICATE

This is to certify that Dr. / Mrs. / Miss or Ganpat Ramdas shembre

of Shri V.S. Naik College Ravel wist Jalgam has participated / presented poster /

worked as Resource person / Session chair / Member, Organizing Committee in the National Seminar on

"RECENT EMERGENCE IN SCIENCE AND TECHNOLOGY (REST-2019)"

Dr. A. G. Patil

Coordinator

Prof. Anish Patel

Coordinator

Chairman

Prof. Dr. P. V. Dalal

Prin. Dr. A.K. Kapadia
Chairman



।। अंतरी पेटवू ज्ञानज्योत ।।

# Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon



# **AVISHKAR - 2018**

Jalgaon District Level Phase - I (27th December 2018)

Certificate

This is to certify that

Mr./Ms	Madhusudan Murlidhar Patil	Mark Street
has particip	pated and presented the research work (Poster	/Model) in the theme area
☐ Huma	nities, Languages, Fine Arts etc.	
Comm	nerce, Management & Law	
Pure S	Sciences	
☐ Engin	eering & Technology	AND PREICHE
☐ Medic	cine & Pharmacy	
Agrica	ulture & Animal Husbandry	STREET STATE
under the o	category of UG / PG / Post PG / Teacher in	the Jalgaon District Level
Research C	Convention Avishkar-2018 organized by Dh.	anaji Nana Mahavidyalaya,
Faizpur on	27th December 2018.	
anui:	FAIZPUR	211.

Dr. Anil G. Sarode

Coordinator Jalgaon District Level Avishkar-2018 Dr. P. R. Chaudhari

Principal Dhanaji Nana Mahavidyalaya, Faizpur Prof. A. S. Patil

Dy. Coordinator Avishkar-2018 Prof. B. L. Chaudhari

Coordinator Avishkar-2018



# CERTIFICATE

This is to certify that

Mr. Vilas Bhagawat Suryawanshi

of

Shri V S Naik College, Raver

has participated in International Conference on Condensed Matter & Applied Physics(ICC 2017) organized by Govt. Engineering College, Bikaner during Nov. 24-25, 2017 and presented a paper entitled

Spectroscopic Studies of Gel Grown Zinc Doped Calcium Hydrogen Phosphate Dihydrate Crystals



25 November,2017 Bikaner





Knowledge Resource Center Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon - 425001



Raver Parisar Shikshan Prasarak Mandal Shri. Vitthalrao Shankarrao Naik Arts, Commerce & Science College, Raver Dist. Jalgaon

# CERTIFICATE

This is to certify that

Prof./Dr./Mrs./Miss Vilas B. Suryawanshi

Shri. V. S. Naik College, Rowek Dt- Jolgann has attended a Two Day's National Workshop on Development of E-Content for Effective Teaching &

Learning "jointly organized by Knowledge Resource Centre, KBCNMU and Shri V. S. Naik Arts, Commerce & Science College, Rayer on 26th & 27th December, 2019

Date: 27" December, 2019 Place: KBC NMU, Jalgaon

> Dr. Anil N. Chikate Organizing Secretory & Director, Knowledge Resource Centre, KBC NMU, Intgron

Dr. Anil G. Patil

Co-ordinator Shri, V. S. Nalk Arts, Commerce & Science College, Raver Prof. Paresh V. Dalai

Principal, Shri, V. S. Naik Arts, Commerce & Science College, Raver

# Raver Parisar Shikshan Prasarak Mandal's 7. S. Naik Arts, Commerce & Science



1. Organizing Department: Shri V. S. Naik College, Raver and Seva Sadan College, Burhanpur (MP)

2. Name of the Event: National Seminar on Recent Emergence in Science and Technology

3. Date of the Event: 11and 12 FEB 2019

4. Total number of Participants: 133

Name of the Coordinator: Dr. Anil Patil and Dr. Dinesh Patel

#### **Report of the Event**

National Seminar on Recent Emergence in Science and Technology was jointly organized by Shri V. S. Naik College and Seva Sadan College, Burhanpur (MP) from 11 Feb to 12 Feb 2019. The Seminar was inaugurated by Pro Vice-Chancellor, Prof. P. P. Mahulikar KBCNMU, Jalgaon. Dr. P. V. Dalal Chaired the Seminar. Mr Hemantsheth Naik, Chairman of Raver Parisar Shikshan Prasarak Mandal, Raver; Smt. Tarikadevi Thakur, Chairman of Seva Sadan College, Burhanpur (MP); Prof. M. C. Kanade, Secretary of Raver Parisar Shikshan Prasarak Mandal, Raver; Hasmukh Jariwala, Trustee Seva Sadan College, Burhanpur (MP) and Principal, Dr. Anil Kapadia were invited as chief guests. In the Seminar, Researchers from Indian States: Madhya Pradesh, Gujarat, Andhra Pradesh, Tamil Nadu, Uttar Pradesh and Maharashtra Participated actively and presented research papers on several and unique topics. Some of the participants presented posters on the theme of the seminar.





# ॥ अंतरी पेटवू ज्ञानज्योत॥ कवियत्री बहिणाबाई चौधरी उत्तर महाराष्ट्र विद्यापीठ, जळगाव

Kavayitri Bahinabaj Chaudhari North Maharashtra University, Jalgaon

# विकास विभाग

जा क्र. उमवि/११ए/ ७.०४/वि.अर्थसंकल्प /३४३/प.सभा/२०१८

दिनांक: - ०३.०९.२०१८

प्रति.

मा.प्राचार्य,

श्री.विठ्ठल शंकराव नाईक कला,वाणिज्य व विज्ञान महाविद्यालय, रावेर,जि.जळगाव.

विषय:- आर्थिक वर्ष २०१८-१९ मधील अर्थसंकल्पातील अ.क्र. ७.०४ -नुसार 'महाविद्यालयांना परिषदांसाठी अनुदान' या अर्थशिर्षांतर्गत महाविद्यालयांना परीषद/ कार्यशाळा/चर्चासत्र आयोजीत करण्यासाठी आर्थिक सहाय्य बाबत.. प्रितार

संदर्भ:-आपला जा.क्र. ९९/२०१८-१९ दिनांक २८.०७.२०१८ चा प्रस्ताव महोदय.

उपरोक्त संदर्भीय प्रस्तावान्वये, आपण आपल्या महाविद्यालयात "Recent Trends in Science and Technology" या विषयावर दि.११ ते१२ जानेवारी, २०१९ रोजी दोन दिवसीय राष्ट्रीय स्तरावरील चर्चासत्र आयोजनासाठी ₹ १५,०००/- चे आर्थिक सहाय्य मिळणेकरीता कवियत्री बहिणाबाई चौधरी उत्तर महाराष्ट्र विद्यापीठास विनंती केलेली आहे.

यासंदर्भांत प्राप्त आदेशान्वये आपणास कळविण्यात येते की, सिमतीने केलेल्या शिफारशीनुसार कवियती विहणावाई चौधरी उत्तर महाराष्ट्र विद्यापीठाच्या आर्थिक वर्ष २०१८-१९ मधील अर्थसंकल्पातील अ.क्र. ७.०४- महाविद्यालयांना परिषदांसाठी अनुदान' या अर्थशिर्षांतर्गत तरतूदीच्या नियमावलीनुसार आपल्या महाविद्यालयास "Recent Trends in Science and Technology" या विषयावर दि.११ ते१२ जानेवारी, २०१९ रोजी दोन दिवसीय राष्ट्रीय स्तरावरील चर्चासत्र आयोजनासाठी ₹१५,०००/- (रुपये पंधरा हजार मात्र) आर्थिक सहाय्य मंजूर करण्यात आलेले आहे.

तेव्हा, सदरची दोन दिवसीय राष्ट्रीय स्तरावरील चर्चासत्र संपन्नतेच्या पश्चात, माहिती पत्रक, प्रमाण पत्र, चर्चासत्राचा अहवाल, झालेल्या खर्चाची देयके व उपयोगिता प्रमाणपत्र विद्यापीठाकडे पंधरा दिवसाच्या आत दोन प्रतीत (१ मुळ + १ छायांकीत प्रत) सादर करावे. उशिरा प्राप्त झालेली देयके व उपयोगिता प्रमाणपत्राबाबत कोणतीही कार्यवाही करण्यात येणार नाही, याची कृपया नोंद घ्यावी.

तसेच, काही कारणास्तव आपण संदर चर्चासत्र आयोजन केले नसल्यास, त्याबाबत तातडीने पत्राब्दारे कळवावे. टिप:- १. मंजूर आर्थिक रकमेचा कार्यक्रमाचे उद्घाटन व भोजनासाठी येणा-या खर्चाकरीता विनियोग करु नये.

२. विद्यापीठाच्या लेखासंहितेमधील तरतुंदी लक्षात घेता एकाच पुरवठादाकडुन ₹ ५०००/- पेक्षा जास्त खरेदी केली असल्यास वेगवेगळ्या पुरवठादारांचे किमान ३ कोटेशन व त्यांचा तुलनात्मक तक्ता देयकांसोबत सादर करणे आवश्यक आहे.

आपला विश्वासू,

(अ.चि.मनोरे) उपकुलसचिव (विकास विभाग)

प्रत माहितीसाठी : मा.वित्त व लेखा अधिकारी, कवियत्री बहिणाबाई चौधरी उत्तर महाराष्ट्र विद्यापीठ, जळगाव.

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(९१) ०२५ ७-२२५७४२१-४२५ पॅ.क्स : (९१) ०२५७-२२५८४०३ व २२५८४०६ वेबसाइंट : www.nmu.ac.in ई-मेल : beud\_nmu@hotmail.com

beud@nmu.ac.in

#### **Registration Form**

# RECENT EMERGENCE IN SCIENCE AND TECHNOLOGY

"REST-2019"

Name : Prof./Dr./Mr/Ms
Designation : Asst.Prof./Asso.Prof./Prof./Research Scholar
Educational Qualification :
Name of University / College / Institute ;
Address for Correspondence:
City: State:
Phone/Mobile No:
Email:
Area of Specialization :
Title of Paper:
Poster Presentation: Yes / No

Note - Use of Photocopy of registration form is allowed. You can send registration form online at rest2019rvr@gmail.com or restrvr2019@gmail.com with your abstract.

#### Site tour to historical places of Burhanpur

Historically Burhanpur is one of the ancient cities of M.P. named after the famous Saint Hazarat Burhanuddin. Farooqui, dynasty ruled till 1601 and Mughals upto 1720 and thereafter the British rule was established. The world famous Kundi Bhandara (Khuni Bhandara), Jama Masjid, Asirgarh fort, Shahi Qila, Dargah-e-Hakimi, Jain Mandir, Kabir Nirnaya Mandir etc. are fascination monuments which attract tourists from far and wide.

#### How to reach to Burhanpur

On Central Railway between Bhusawal and Khandwa station 54 km from Bhusawal and 69 km from Khandwa

By BUS: -

71 km from Bhusawal and 78 km from Khandwa



From.

#### Principal, Shri. Vitthairao Shankarrao Naik

Arts, Commerce and Science College, Raver, Dist-Jalgaon Pin. 425 508 (M.S.) Phone No. 02584-250447

Email: principalvsn\_rvr@yahoo.in Web site: www.svsncollegeraver.org



Kavayitri Bahinabai Choudhari North Maharashtra University, Jalgaon

#### NATIONAL SEMINAR

On

# RECENT EMERGENCE IN SCIENCE AND TECHNOLOGY

"REST-2019"

#### 11" and 12" February 2019

Jointly Organized By



Rayer Parisar Shikshan Prasarak Mandal's Shri, Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver, (M.S.)



Seva Sadan Education Society's Seva Sadan Mahavidyalaya, Burhanpur (M. P.)

A.Prin. Dr. P. V. Dalaland Mo.: 79878 19272

Prin. Dr. A.K. Kapadia Mo.: 99269 77487

#### Chairmen

Dr. Anil. G. Patil and Prof. Anish Patel Mo.: 99234 42486 Mo.: 98275 27321

#### Coordinators

VENUE

PRAGYA HALL

SEVA SADAN

MAHAVIDYALAYA, BURHANPUR (MP.), 450331

#### Call for Abstract & Poster Presentaion

We invite original unpublished research papers in the broad area of We invite original unpublished research papers in the broad area of Recent Emergence in Physical, Chemical, Earth, Agriculture, Life Sciences, and Environmental Sciences as well as Informatics, Digitalization, Social media, and Food Technologies. Participants intending to present their research papers are requested to send abstract including title of the paper, name of the author & co-authors, name of Institute, email-id and phone number of author. The abstract should be typed with maximum 250 words in English in Times New Roman font size 12 points and line spacing 1.5 on sheet of A4 size in MS-Word. The nbstract should be submitted in soft copy only on email-id at rest2019rvr@gmail.com on or before 20° January, 2019.

Accepted Abstract will get an opportunity for Poster Presentation. The Poster should be of size 1 m in length and 1 m in breadth (1x1 sq.m) Best Two Posters will be awarded by Certificates and Cash Prize 1st - Rs. 1501/- 2nd - Rs. 1001/-

#### Full length paper

Full length paper will be published in Journal of Emerging Technologies and Innovative Research (JETIR) UGC approved number 63975 with ISSN: 23495162 | Impact Factor: 5.87

The research paper should be written by adopting following formats -Page size: A4 size only Text Column: Single texts align: justify Title: 24pt Times New Roman align: centre

Fage Margins: Left-0.51",Right-0.51",Top-0.75",Bottom-0.75"
Font: Use Only Times New Roman for whole paper
Figure caption: Font size- 10", lower case and Write below the figure,

Table Caption: Font-10", lower case and Top of the table, position-centre Paragraph: Paragraph Indentation by -0.2"

Line Spacing: single

Before: 0" After: 0" Header 0.3" footer 0"

The template of research paper in MS-Word format is available on journal vebsite. http://www.jetir.org/

#### Important Dates

Submission of Abstract - 20th January, 2019 -25" January, 2019 Acceptance of Abstract - 27" January, 2019 Submission of Full Length Paper

#### **Registration Fees**

Participants are requested to register their names by sending complete registration form and paying fees electronically or by DD payable at Raver, India in favor of 'Principal, Shri V. S. Naik Arts, Commerce & Science College, Rayer Dist. Jalgaon

Category Research Scholar

Fee Rs. 500/-(Ten, breakfast, 2 lunches & 1 dinner& kit) Rs. 800/- (Tea, breakfast, 2 lunches & 1 dinner& kit) On the Spot Registration Rs. 1000/-(Tea.breakfast, 2lanches & 1 dinner & kit)
Paper Publication Charges Rs. 1000/-

Note- Those who want to get accommodation will have to pay

Rs. 400/- extra for the period of Seminar and will have to intimate in advance on Mo. No. 9764069250

# Details of Online fees transfer

Bank and branch - IDBI Bank, Raver Dist. Jalgaon

48610010002363 IFSC Code IBKL0000486 MICR 425259252

#### Invitation:

DearColleagues

Dear Collegues

It gives an immence pleasure to condially invite you to participate in two days National Level Seminar on "RECENT EMERGENCE IN SCIENCE AND TECHNOLOGY" which is jointly Organized By Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver, Dist. Jalgaon (M.S.) and Seva Sadan Mahavidyalaya, Burhampur (M.P.). This Seminar is to be held on 11° and 12° February 2019. You are requested to attend the Seminar by contributing research papers and taking part in the

#### About the Institution:

Raver Parisar Shikshan Prasarak Mandal, Raver is well known institution of higher education in Rayer Tehsil. institution was established in 1978 by Late, SHRL VITTHALRAO SHANKARRAO NAIK with the vision to provide quality education to rural, tribal and economically backward students.

Our collaborative partner for organizing this Seminar is Seva Sadan Education Society, Burhanpur, registered in 1957 under the registration of Societies Act 1860. Seva Sadan Education Society has done a yesman's service to propagate quality education during the last six decades.

#### About College:

Shri, Vitthalrao Shankarrao Naik, Arts, Commerce and Science college, Raver is established under the purview of Satpura Range, spread in around 23 acres area and located on Ankaleshwar-Burhanpur National High way, It is the premier academic institution and prestigious College of the North Maharashtra region. Our College provides co-education in Arts, Commerce and Science faculties with specialization in Geography, Economics, English subjects of B. A., Commerce in B.Com, and Physics, Chemistry, Mathematics, Computer Science in B.Sc. Level. College is also running two Ph.D. programme in Physics and Chemistry. It has been reaccredited with B+ Grade in the second cycle by NAAC Bangalore, with 2-65 CGPAgrade. with 2.65 CGPA grade

Seva Sadan Mahavidyalaya, Burhanpur is Affiliated to Devi Ahilya Seva Sadan Mahavidyalaya, Burhanpur is Affiliated to Devi Ahilya University since 1995. The college recognized under 2(f) and 12(b) is a multi faculty institute running B.A., B. Com.(Plain and Computer Application), B. Sc. B. C. A., B. B.A., P.G.D.C.A. and Post Graduate in Hindi, Urdu, Commerce, Mathematics, Physics, Economics, Political Science and Ph. D. research facility in Urdu and Hindi. It has been accredited with B+ Grade in the first cycle by NAAC Bangalore, with 2.64 CGPAgrade

#### Seminar Overview:

It is a matter of great pleasure to invite you to participate in two days national level Seminar on "RECENT EMERGENCE IN SCIENCE AND TECHNOLOGY". Science and Technology play vital role in the overall development of any nation, it also helps to solve the problems related to human life. Now a days there are vast development observed in the field of Science and Technology so for that recent emergences in this discipline will be changed the living style of all human society. Todays Information Technology are is a Resultingary en for all researchers. For this purpose be changed the living style of all human society. Todays Information Technology era is a Revolutionary era for all researchers. For this purpose the Seminar will cover the broad area of topic relating to "RECENT EMERGENCE IN SCIENCE AND TECHNOLOGY" which includes invitee talks, research papers related to the subject-Selected papers of participants will be presented during the Seminar and will be published in the UGC listed research journal JETIR. The Scientist, Industrialist, Researchers, Academicians, and post graduate students are encouraged to participate and present their research work in this Seminar.

#### Sub Themes

- Recent Emergence in Physical, Chemical, Health, Earth, Material Social & Life Sciences
- Recent Emergence in Environmental, Sustainable Agriculture, Economical, Geographical, Energy & cliamte change and food security technology
- Recent Emergence in Library & Informatic Sciences

#### Patrons:

#### \* Hon. Prof. P. P. Patil

Vice Chancellor, Kavayitri Bahinabai Choudhari North Maharashtra University, Jalgaon

#### Hon. Hemant Seth Devidas Naik

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TWO DAYS NATIONAL SEMINAR ON

"RECENT EMERGENCE IN SCIENCE AND TECHNOLOGY"

# "REST-2019"

11th and 12th February 2019

Jointly Organized By





Raver Parisar Shikshan Prasarak Mandal's Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College,

Raver, Dist. - Jalgaon (M.S.)

Seva Sadan Education Society's Seva Sadan Mahavidyalaya, Dist - Burhanpur (M. P.)

ABSTRACT BOOK

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Two Days National Seminar on

#### RECENT EMERGENCE IN SCIENCE AND TECHNOLOGY

(REST-2019)

11<sup>th</sup> and 12<sup>th</sup> February 2019

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### **National Seminar on**

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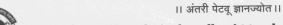
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Dr. Manoj Chopda, Jalgaon





# Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

Umavinagar, Jalgaon - 425 001 (Maharashtra) INDIA (formerly North Maharashtra University, Jalgaon)

> Prof. P. P. Patil Ph.D., F.M.A.Sc. VICE-CHANCELLOR

#### **MESSAGE**

I am happy to know that Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College, and Seva Sadan Mahavidyalaya, Burhanpur are jointly organizing Two days National Seminar on "Recent Emergence in Science & Technology" (REST-2019) during February 11<sup>th</sup> – 12<sup>th</sup>, 2019.

This conference is providing a platform to the teachers, scientists, researchers and students to promote closer interaction on recent emergence in science and technology. The deliberations in this conference will play an important role in providing a useful tool for focusing further research on specific dynamics of science and technology. Eminent academicians and researchers will interact with the participants on the core issues and discuss various important topics related to the theme of the conference.

I wish the National Conference a grand success.

(Prof.P.P.Patil) Vice-Chancellor



# Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

Umavinagar, Jalgaon - 425 001 (Maharashtra) INDIA (formerly North Maharashtra University, Jalgaon)

#### Prof. Pramod P. Mahulikar

M.Sc., Ph.D.

Pro-Vice Chancellor

#### Message

It gives me immense pleasure in writing this foreword for the Two Days National seminar on the most significant theme "Recent Emergence in Science & Technology (REST-2019)", jointly organised by Shri Vitthalrao Shankarrao Naik, Arts, Commerce and Science College, Raver (M.S.) & Seva Sadan Mahavidyalaya, Burhanpur (M.P.) on 11-12 February, 2019.

Our societies are dominated and even 'driven' by ideas and products from science and technology (S &T) and it is very likely that the influence of science and technology on our lives will continue to increase in the years to come. Scientific and technological knowledge, skills and artefacts 'invade' all realms of life in modern society: the workplace and the public sphere are increasingly dependent on new as well as upon more established technologies. Scientific and technological knowledge and skills are crucial for most of our actions and decisions, as workers, as voters, as consumers, etc.

In short, modern societies need people with scientific and technological qualifications at the highest level as well as a general public which has a broad understanding of the contents and methods of science and technology, coupled with an insight into their role as social forces that shape the future. While science and technology are obviously important for economic well-being, they must also see from the perspective of a broadly based liberal education.

I hope that the lectures and deliberations with the resource persons from various institutes, universities and colleges will definitely be beneficial to young researchers and all delegates.

I wish a great success to the National Conference.

Pro-Vice Chancellor

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Prof V. L. Maheshwari, Director, School of Life Sciences, K. B.C.N. M.U, Jalgaon

Keynote Address



Brief Bio Data: Prof V. L. Maheshwari,
Director,

School of Life Sciences, K. B.C.N. M.U, Jalgaon

Enzyme inhibitors: Bioprospecting from nature, characterization and application in pest management

V. L. Maheshwari\*

Director, School of Life Sciences, KBC North Maharashtra University, Jalgaon-425001 (MS)

Enzyme inhibitors have evoked interest as useful tools in study of enzyme structures and reaction mechanisms, therapeutic and biocontrol agents in pharmacology and agriculture. Identification and characterization of these molecules enrich our resources to design crop protection strategies. In particular, plant/microbe-derived proteinaceous inhibitor(s) of insect digestive enzymes appear to be a safe, sustainable and attractive option.

Of the enzyme inhibitors, protease inhibitors (PI) have emerged as an alternative tools to control pest and pathogens and as therapeutic agents for various human microbial, mortal, neurodegenerative and cardiovascular diseases. The disease spectrum in plants is continuously changing and depends on the dynamic nature of pests and crop systems. To circumvent the drawbacks of chemical insecticides, several alternative strategies such as plant breeding, molecular marker linked selection, built in resistance, gene pyramiding and transgenic plants have been developed to control insect pest. Pls are small size defense related proteins that selectively inhibit proteases of invading pathogens or insect pest thereby, limiting essential amino acids for growth and reproduction and emerging as anti-metabolic proteins for their control. We have been working on amylase, protease and lipase inhibitors from plant and/or microbial origin and their applications in pest management and food processing. The present talk describes the isolation, purification, characterization and application in pest management of a protease inhibitor of microbial origin.

A protease inhibitor (PI) was isolated and purified from halo-alkaliphilic *Streptomyces spp.* VLJ2. Its yield in the synthetic medium was optimized by using multiple statistical tools. SDS PAGE of purified PI revealed it to be a heterodimer of two unidentical subunits of 27.5 and 11.08 kDa, which corroborates well with intact molecular mass of 38.5 kDa obtained by GPC and MALDI –TOF. The inhibition of trypsin and chymotrypsin indicated it to be a serine protease type belonging to serpin family. Modification of amino acid showed presence of arginine and free sulfhydryl group at active site. Kinetic studies revealed the non-competitive type of inhibition of trypsin with low Ki value (9.4  $\times$  10–9 M). Activity against *H. armigera* showed significant decline and delay in larval (51%), pupal weights and periods, respectively, prominent physical abnormalities and reduced nutritional indices as a function of treatment. The results suggest that the purified PI has promising pesticidal activity and could serve as a potential candidate gene for transgenic plant research.

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Dr. Chandrashekhar V. Rode, National Chemical Laboratory, Pune

#### **Keynote Address**



Brief Bio Data: Dr. Chandrashekhar V. Rode, FNAE, FMASc Emeritus Scientist, CSIR-National Chemical Laboratory Pune Fellow of National Academy of Engineering (FNAE) Fellow of Maharashtra Academy of Sciences (FMASc) PhD 1993, Pune University

Visiting Professor, University of Roviro I Virgili, Tarragona, Sapin 2012-16 Visiting scientist, AIST Sendai, Japan, in 2002-3 and 2006-2012 JSPS Fellow at Tohoku University, at Sendai, Japan 1995-96

Research area: Catalyst design and development for bio-mass utilization to

value added products. Refereed Publications: > 180, h index: 39, Patents: 23, PhD.s: 34

#### Abstract: Chemo- and Bio-Catalytic Avenues for Bio-Refinery

Crude oil which is a diminishing feed stock has been the source of fuel and synthetic materials of the modern society. A step forward towards achieving sustainability and reduction in carbon footprints is the realization of Biorefinery concept, using renewable biomass feedstock for producing biofuels and chemicals. Such conversions are aimed at producing the high-value products which enhance profitability and in some cases, offer an incentive for fuel production. Biorefining is still largely unexplored territory and presents unique challenges as the bioderived molecules invariably contain more than one oxygen atom. This basic difference from the fossil derived hydrocarbons, demands design of appropriate catalysts with mostly multifunctional sites for efficiently carrying out the cascade type reactions in a single pot. Another interesting feature of bio-derived substrates is that these are multi product reactions (MPR). Hence integration of catalyst design with the optimization of process conditions makes it possible to achieve the desired product distribution. Among various bio-feedstock options, co-generated glycerol in biodiesel production and abundantly available lignocellulosic material at lower cost can be easily converted to a variety of starting materials.

This talk will cover highlights of our recent work on heterogeneous catalysts development for (i) bio-glycerol hydrogenolysis to C3/C2 diols and propanol all of which are commercially important. (ii) carbonylation of bioglycerol with urea to give glycerol carbonate while the transesterification with DMC to give another high value product, glycidol (iii) downstream processing of cellulose derived levulinic acid (LA) to produce γvalerolactone (GVL) (iv) furfural is also a versatile carbohydrate derived starting material for either direct hydrogenation to give a variety of useful products such as furfuryl alcohol (FAL), tetrahydrofurfuryl alcohol (THFAL), 2-methylfuran (2-MF) and 2-methyl tetrahydrofuran (2-MTHF) or via catalytic alcoholysis (esters of LA) / hydrogenation sequence to give GVL (v)self etherification and reductive cascade etherification of 5-(hydroxy methyl) furfural (5-HMF) to cetane enhancers. (vi) bio-catalytic transformation of glycerol to 2,3butanediol and 1,3-propanediol. All these products have extensive applications as commodity chemicals, green solvents, fuel additives and as monomers for a variety of polymeric products. The underlying basic aspect of structure-activity relation required for catalyst design will also be discussed.

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Prof M. P. Deshpande, Dept. of Physics, S. P. University, Vallabh Vidyanagar (Gujarat)



- ➤ Brief Biodata: Teaching experience of 27 years
- ➤ M.Phil. Produced :13
- > Ph.D. Produced :10
- ➤ Ph.D. students working at present : 03
- ➤ M.Phil Student working at present : 02
- ➤ No.of publications at National and International Journals : nearly 125.
- ➤ Worked as Secretary in 4 National conferences conducted by Department.
- Teaching: Solid State Physics, Biophysics, thin films, Nanoparticles at M.Sc. and M.Phil programme.
- Completed 5 major research projects sponsored by DAE-BRNS Mumbai and UGC, New Delhi.

#### Awards and Recognisation:

Received Hari Om Ashram Prerit Shri Bhaikaka Inter University Smarak Trust" award, SARDAR PATEL RESEARCH AWARD, Hari Ohm Ashram Prerit Harivallabhdas Chunilal Shah award for best research paper.

Working as IQAC co-coordinator and Member of Alumni Association of our University, Working as referee for reputed Journals.

Life Member of Indian Physics Association (IPA), Life Member of Indian Association for Crystal Growth (IACG), Materials Research Society of India (MRSI), Associate Fellow of Gujarat Science Academy (GSA), Indian Association of Physics Teachers (IAPT), Working as expert in Departmental Research Committee (DRC) at Veer Narmad South Gujarat University, Surat and Saurashtra University, Rajkot.

#### Research:

We are engaged in synthesizing nanoparticles, thin film deposition and crystal growth of varieties of materials belonging to the group II-VI, V<sub>2</sub>-VI<sub>3</sub>, IV-VI compound semiconductors. Apart from it , we are also synthesizing nanoparticles of metal oxides and metals. These nanomaterials and thin films are characterized for their structural, magnetic and optical properties using XRD, EDAX, TEM, VSM, UV-Vis spectrosocopy, FTIR, Particle size analyzer, Raman Spectroscopy, Photoluminescence etc. For characterizing bulk single crystals we use resistivity measurement, Seebeck coefficient measurement, thermal conductivity and Raman spectroscopy at low temperatures. As far as nanoparticles application is concerned we are focused on to study their antibacterial behavior.

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Prof. Dr Prakash S. Lohar Email: dr\_psjadhav@rediffmail.com



Professor and Head in Zoology & Biotechnology MGSM's ASC College 425107 Dist:Jalgaon Chairman, BOS Zoology (2017-2022) KBC NMU, Jalgaon

Member of Academic Council (2017-2022) Former Member of Senate (2010-2015)

Teaching Experience: 29 years Research Experience: 22 years

Member of 6 National and 8 International Professional/ Academic bodies

#### Abstract

Indian Council of Medical Research (ICMR) published a data indicating that there are 14 lakh cancer patients in 2016. Use of tobacco products is the single most preventable cause of death worldwide. As many as 2,500 persons die every day due to tobacco-related diseases in India. Tobacco (smoked and smokeless) use accounted for 3,17,928 deaths (approx) in men and women in 2018. The five most frequent cancers (ranking defined by the total number of cases) in India between men and women are breast, cervical, oral cavity, liver, lung, and colorectal. These top five account for 47.2 per cent of all cancers. After cardiovascular disease, cancer is the second most common cause of death in India The present study is aimed to elucidate the types of cancer, carcinogens, properties of cancer cells, genotoxicity, metastasis, role of biomarkers in cancer detection and preventive measures

#### Award and Recognition

- Recognized M.Phil./Ph.D guide in Zoology and Biotechnology in KBCNM University, Jalgaon
- Young Scientist Award in International Conference at Lady Doak College, Madurai
- Nation building Award from Rotary International
- Best Teacher Awards from several NGOs and Social Organizations
- Best Paper Presentation Awards in 4 conferences

MoU signed with Govt of Thailand, BioEra, Pune and Moscow State University, Russia

#### Research:

Number of Students awarded M.Phil. = 03

Number of Students Awarded for Ph.D.= 07 + 3

Research Areas: Molecular taxonomy, Diversity o fish, Fresh water Ecosystem, Bioprospection of medicinal plants, Gluconic acid production by Fermentation, prevalence of sickle cell trait in tribal area, hepatocellular carcinoma

- Presented papers at International Conferences 20
- Papers published in international Journal 13
- Papers published in International conference proceedings 04
- Papers presented in National Conference/Symposia/Seminar 28
- Papers published in national Journals with ISBN 08
- Full length Papers published in national conference proceedings 04 (Total papers 76)
- Books published: 10 Included as reference books in more than 45 Indian Universities
- Visited 20 International universities and academic institutes abroad.

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Dr. Rakesh K. Sharma, The M. S. University of Baroda, Vadodara, Gujarat

#### **Brief Biodata:**



**Dr.Rakesh K. Sharma**, is the Professor (Sr.Assistant) of Applied Chemistry Deptt., Faculty of Tech. & Engg., The M. S.University of Baroda, Vadodara (Gujarat).

He completed his M.Sc.(1998) with Organic Chemistry, M.Phil.(2000) and Ph.D.(2002) with Polymer Chemistry from VNSG University, Surat. He has 16 years of teaching and 20 years of research experience.

He is working in the area of Surfactants and Polymer Science. He published 3 book chapters, > 25 international papers, presented 40 papers and delivered 12 invited talks in national/international conferences. He has been a reviewer to many journals of ACS, RSC, Elsevier, Wiley and Taylor & Francis. He has been worked on projects with funding agencies like BARC, UGC, GUJCOST etc. He guided 25 M.Sc. dissertations and two students for their Ph.D.s.

#### Abstract of Talk:

#### Smart Polyarylate Materials: Science, Development and Future Perspectives

Aromatic polyesters (Polyarylates) are counted as high performance materials in electronic and automobile applications due to its excellent thermal stability, résistance to chemicals and good mechanical properties. Polyarylates are difficult to process because of its rigidity which reflects its immiscibility and high melting. Currently, the development of newer polyarylates with better organo-solubility without compromise of its thermal stability is thrust area of research.

In present talk, I will discuss on synthesis, characterization, physico-chemical properties, thermal stability, mechanical and optical behaviour of various polyarylates developed using novel diol monomers. It will cover the present demand and future scope of these polyarylates research for its upcoming end uses.

#### Awards and Recognisation:

- Dr. Sharma was awarded as JRF by UGC, New Delhi under MRP from 1999-2001.
- He was awarded for Best Presenter in teacher category at ICS-2011(Indore).
- Three papers of Dr.Sharma were awarded in Best Research Paper Category.at APCRangotsav-2017 (ICT-Mumbai) and NSAPST-2019(V.V.Nagar).
- Dr. Sharma is a member of Indian Society for Surface Science and Technology (ISSST), Polymer Society of India(PSI), Green Chemistry Network, ACS chapter, Society of Material Chemistry(SMC), and All India Chemistry Teachers(ACT). India.

#### Research:

Dr. Sharma is working in the area of Polymer Chemistry. His keen research interests are.....

- Self-assembly of Block copolymers and their mixtures in solutions: EO-PO based block copolymers and their aggregation behaviour, Effect on the structural behavior of EO-PO based copolymers in the presence of additives, Correlation of classical techniques with advanced techniques like Small angle neutron scattering(SANS).
- PEO-PPO-PEO triblock copolymers (Pluronics) as nano-tools for drug delivery applications.
- Synthesis of Novel Polyester polymers based on Acid chloride monomers

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Dr. S. S. Soni, Professor, Dept. of Chemistry, S. P. University Vallabhvidyanagar (Gujarat)



#### Brief Biodata:

**Prof. Soni**, is working as Professor in Chemistry at Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar, Gujarat. He completed his M. Sc. (Physical Chemistry) and Ph. D. from S. P. University during 1997 and 1999 respectively. He visited many countries for the research work including completed his Post Doctorate in France. So far he guided more than 5 Ph. D. students and handled more than 6 major research project funded by DST, SERB, UGC, UGC-DAE etc. He is a fellow of various national societies including Neutron scattering society, Materials research society etc.

#### Awards and Recognisation:

- Received Best Paper award 2018 from Gujarat Science Academy.
- Recipient of "Sardar Patel Research Award 2018" (Cash Prize of Rs. 10,000/-).
- Honored with *INSA-CAS Bilateral Scientist Exchange Programme 2018* for visiting CHINA for the period of 4 weeks
- Received "IAAM Scientist Medal 2017" for out standing work in the area of nanoscience and technology from International Association of Advanced Materials, Sweden.
- · Received "Young Scientist Award", DST, New Delhi
- Awarded three years (2015-2018) membership of "American Chemical Society"
- Most cited article (J Mol. Catal. A, 2012) during the year 2011 2012 (Elsevier Publication)
- Best Research Paper (Langmuir 2010) Award (Price of Rs. 11,000/-) by Community Science Centre, Rajkot, INDIA
- 1st Rank holder at M. Sc. Physical Chemistry (1999), SPU

#### Research:

#### No. of Ph. D. Students:

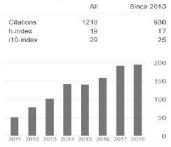
Degree Awarded: 05 Currently Working: 02

#### List of Patent: (No. of Patent = 01)

 Substituted Carbazole based Dyes for Dye Solar Cells and other Optoelectronic devices. Inventors: Kishan B. Faladu and <u>Saurabh SONI</u>

Patent file no. 2609/MUM/2013 dated 7th August 2013 (Accepted in April 2018)

#### <u>List of Publications</u> (No. of publications = 53)



#### **MESSAGE**



Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon, sponsored two days National Seminar on Recent Emergence in Science and Technology (REST-2019) 11<sup>th</sup> and 12<sup>th</sup> February 2019. I express my sincere gratitude to Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon for giving us an opportunity to organize the Seminar. The Seminar is getting enormous response and I feel reassured that this will play a major role in the confluence of academicians and researchers. The enthusiastic response reflects stunch trust and faith in the organization. Our efforts achieve excellence would be accelerated because of this Seminar and will help to strengthen our motto, enhancement of quality higher education for better society and stronger nation.

The organization of this National Seminar would be great learning experience for the faculty and researchers as well.

I am sure that this event will encompass all the vital issues in the field of Science and Technology and will focus on the future prospect in this field.

My warm regards to one and all.

Shri. Hemant Seth Devidas Naik Chairman Raver Parisar Shikshan Prasarak Mandal's Raver



#### Dear scholars and readers

It is a moment of great joy and pleasure that SSMV Burhanpur together with SVSNC, Raver witnessed a *National Seminar on Recent Emergence in Science and Technology*. I want to express my sincere thanks and congratulate all the research scholars and faculty whose research works/ papers are acknowledged and published in JETIR.

The trio under the aegis of KBCNMU, Jalgaon and SevaSadan Education Society, Burhanpur have made the event a remarkable achievement. The persistence and dedication of the advisory committee is impressive and inspiring.

I extent my best wishes on this occasion and hope this Seminar and publication will update its readers with knowledge on various topics and issues on national importance.

> Smt. Tarika Virendra Singh Thakur President

Tarika Sm

SevaSadan Education Society
Burhanpur

## **MESSAGE**



It gives me immense pleasure to welcome all the distinguished resource persons, delegates from different colleges, research students and faculties. It is great privileged and honoured to host this two days National Seminar on "Recent Emergence in Science and Technology" (REST-2019) during 11-12 February 2019 along with Seva Sadan College, Burhanpur (M.P.)

The College is run by Raver Parisar Shikshan Prasarak Mandal, Raver since 1978, which is founded by Late Shri Vitthalrao Shankarrao Naik, therefore named as Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver. It is established with the vision to cater higher education to the socially backward, tribal and women, who had to go Faizpur for their higher education. Now today, around 1000 students are from Arts, Commerce and Science streams, taking higher education in this College.

Many faculty members of our college are holding prestigious positions on various bodies of University. Considering the student centric activities, extension activities, infrastructure, administration and research, NAAC Banglore re-accredited the College and awarded B<sup>+</sup> grade with CGPA 2.65.

The proposed seminar is expected to provide opportunity for the delegates to exchange their novel ideas and experiences with eminent experts during keynote address, plenary talks and poster presentations.

The organization of this Seminar is possible because of financial support from BCUD, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon, due to collaboration made with Seva Sadan College, Burhanpur (M. P.). I am very much thankful to our Management for their whole hearted support and guidance for organizing this Seminar. At the same time want to place on record the acknowledgement towards teaching and nonteaching staff for full cooperation and making this event successful.

Prof. (Dr.) Paresh Vasantlal Dalal



Dear reader's scholars and aspirants,

It gives me immense pleasure to congratulate the organizing committee/participants / scholars whose research paper are being presented in the National Seminar – "REST-2019" (Recent Emergence in Science and Technology) and published in UGC approved journals JETIR (Journal of Emerging Technologies and Innovative Research).

Today the use of technology is inevitable in everyone's life. Innovation in science is the reflection of curious human nature. The purpose of this event is to provide a platform for young minds to nature their brilliant ideas into reality. Hope such efforts will continue in near future too.

I am grateful to KBCNMU, Jalgaon, Publication JETIR and SVSNACS, College Raver for their endeavor and support to make this seminar and publishing a successful event.

Dr. Anil Kapadia

Principal Seva Sadan Mahavidyalaya,

Burhanpur

# Message



I am delighted to welcome you at Seva Sadan College Burhanpur in two days National seminar on "Recent Emergence in Science and Technology" (REST-2019), which is jointly organized by Shri V. S. Naik Arts Commerce and Science College, Raver. (M.S.) and Seva Sadan College, Burhanpur (M.P.).

The main intention of seminar to provide a platform to Researchers, Academicians and students from the different states to share their experience and update the knowledge to explore and what is the present scenario in Science and Technology, keeping this view National seminar will be beneficial to all participants.

Once again welcome to all.

Dr. A. G. Patil

Coordinator REST-2019



Dear readers scholars and aspirants,

I am delighted to present the souvenir of 'REST-2019" (Recent Emergence in Science and Technology). Icongratulate and welcome all delegates and participants for their contribution in seminar.

"The scientist is not a person who gives the right answers, he's one who asks the right questions." In the age of technology, activities like conducting and organizing seminars has been playing a very significant role in promotion and development of information and technology. Seva Sadan Mahavidyalaya and Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver (M.S.) with their joint effort, will make strategy for promoting science and technological development in Burhanpur and Jalgaon district. The main objective to organize this seminar is to share knowledge and ideas among various regions.

I am thank full to KBCNMU, Jalgaon, SVSNACSCollege Raver and JETIR for their endless support in organizing this event.

**Prof. Anish Patel** 

Coordinator Seva Sadan College, Burhanpur

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# BIOPESTICIDAL PROPERTIES OF KERNEL EXTRACT OF SEMECARPUS ANACARDIUM ON GROWTH OF HELIOTHIS ARMIGERA (HUB.)

#### Chetankumar T. Sharma

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#### Abstract:-

The present investigation showed that different doses of kernel extract of *Semecarpus anacardium* in acetone and ethanol solvent causes retardation in the development of the life cycle stages of *Heliothis armigera* (Hub.). The toxicity of the plant extracts studied increases with the increase in its concentration on the larva and pupa. The extracts of *Semecarpus anacardium* has property to reduce the growth of the population of *H. armigera*.

Key-words- Heliothis armigera, Semecarpus anacardium, Ethanol, Acetone.

# TAXONOMIC STUDY OF THE GENUS NAVICULA FROM GIRNA RIVER NEAR JALGAON REGION MAHARASHTRA, INDIA

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#### **ABSTRACT**

Diatoms represent an important class of aquatic phototrophs, it is also important tool for monitoring environmental condition. In this study, we aimed to revolutionized our knowledge and understanding of conventional taxonomy of genus Navicula (Bacillariophyceae) from Girna river near Jalgaon regions of Maharashtra, India. Sample were taken from three locations at Girna river near Jalgaon region. Thirteen species of Navicula were observed under Light microscopic (LM), andidentified till forms level. All *Navicula* species were taxonomically determined and are described for the first time from these areas. They were listed and presented with morphological descriptions, dimensional information and photographic information.

Key words: Morphographic, Girna, Navicula, Taxonomically, Jalgaon, investigation.

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# ASSESSMENT OF BIVALVES AS BIOINDICATOR OF HEAVY METAL POLLUTION IN GIRNA RIVER AT JAMDA

#### A.G. Patil

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**Abstract:** Heavy metal concentrations in whole body tissue of three fresh water bivalve species, *Parreysia cylindrica*, *Parreysia corrugata* and *Corbicula striatella* was analyzed in sample collected from Girna river at Jamda. The analysis of these animals can give an indication of the status of water environment to which they have been exposed. The bioaccumulation of heavy metals in the bivalve's tissues can be used as environmental bioindicator. The heavy metal concentration ( $\mu g/gm$ ) of Fe, Zn, Cu, Pb, Ni and Cd was analyzed to study the bioaccumulation of heavy metals in three bivalve species and their use as bioindicator of heavy metal pollution.

Key words: Heavy metals, Bivalves, Bioindicator, Girna, Jamda.

# STUDY OF ECOLOGICAL ROLE OF GUBRELLA DUNG BEETLE

# Sandhya M Sonawane, Mayur M Sonawane

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## **ABSTRACT**

Dung beetles are beetles that feed partly or exclusively on feces and hence are natural defense mechanism that protects the ecosystem. It represents excellent model organisms because they are key contributors to several ecosystem functions. It play a remarkable role in agriculture by increase foraging palatability, check the breeding of pests and help recycle nitrogen through the soil. Dung beetles are important because they play a critical role in recycling the organic matter in nature, but also because they are on decline now. It aerate and mix the soil by burrowing, and increase the organic matter content of the soil by burying dung. These changes improve the water holding capacity and nutrient availability of the soil, with associated benefits to plants. By burying dung, they also provide an important food source for decomposers, and reduce resources for the larvae of economic insect pests such as bush flies. In the present investigation an attempt has been made to observe the ecological role of dung beetles as scavengers of farmland is very little known to the society. It also improves the soil fertility remarkably by aerating soil and increasing water content.

# CHARACTERIZATION OF ACID SOLUBLE COLLAGEN FROM SKIN OF FRESHWATER FISH (CIRRHINUS REBA)

## Shirsath M. R. and Rathod N. D.

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#### **ABSTRACT**

Freshwater fish *Cirrhinus Spp* play significant role in nutrient sources in all over the world. The skin constituted of 4% of total body weight. Now a day, fish wastes such as skin, scales, bones and fins are major by-products in the fishery and aquaculture industries which have high collagen content. The skin actually contains of 50% collagen which can be useful as material for food as well as other uses. In this study, we revealed the similarities and differences in acid soluble collagen (ASC) into making more effective use of under-utilized resources. Estimated yield of collagens extracted from skin of freshwater fish *Cirrhinus reba* (Hamilton 1822) (Cypriniformes: Cyprinidae)were about 0.9–1.8%.The UV-Vis absorption spectra show it is near to the absorption spectrum of collagen. Fourier transform infrared spectroscopy proved that ASCs are integrated and native. SDS-PAGE pattern showed that ASCs of fish scales are type I collagen, which are composed  $\alpha$ , and  $\beta$  chains. The results suggest that collagen of fish waste skin have the potential to be an alternative source of collagen for various application in the future.

Keywords: ASC, Collagen, Fish skin.

# SYNTHESIS, CHARACTERIZATION OF IRON OXIDE NANOPARTICLES FOR BIOLOGICAL ACTIVITY

Panpatil D. P., Mahajan, P. A., Kachare S.A., and Rathod N.D.

Department of Zoology, Moolji Jaitha College, Jalgaon.<u>nutanr2007@gmail.com</u> Abstract

The synthesis of Iron Oxide nanoparticles (Fe<sub>2</sub>O<sub>3</sub> NPs) are growing exponentially due to its wide application in science and technology on the advance research of nanoparticles by nanotechnology. The objective of present study was to synthesize iron oxide nanoparticles by chemical method using NaBH<sub>4</sub>. The products were characterized by UV, infrared (IR) spectra, and scanning electron microscopy (SEM). The toxicity of iron oxide nanoparticles were evaluated against *Escherichia coli*, and also have toxicity towards fingerlings of freshwater fish *Cyprinus carpio* at higher concentration. This result may pave a way for using the Fe<sub>2</sub>O<sub>3</sub> NPs as retains potential application in pharmaceutical and biomedical industries.

**Keywords:** Nanoparticles, FTIR, UV-Vis, SEM, toxicity

# ANTIDIABETIC, HEPATOPROTECTIVE AND ANTIOXIDANT EFFECT OF HYDROALCOHOLIC EXTRACT OF SYZYGIUM CUMINI IN ALLOXAN INDUCED DIABETIC FISH CHANNA STRIATA.

# Kalyani S. Chatur, Mayur M. Sonawane, Namrata G. Mahajan and Manojkumar Z. Chopda\*

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### **ABSTRACT**

Diabetes mellitus is a syndrome characterized by abnormal secretion of insulin, alteration in the metabolism of carbohydrates and lipids, and is diagnosed by the presence of hyperglycemia. Several medicinal plants and their purified constituents have shown beneficial therapeutic potentials. The present work is carried out to investigate the Anti-diabetic, Hepatoprotective and Antioxidant activity of the seed, the juice and the residual pulp of Syzygium cumini in the allaxon induced diabetic fish *Channa striata*. The seed extract at a concentration of 100 and 250 mg/ml exhibits a Catalase activity significantly  $37.16 \pm 1.403$ and 37.24  $\pm$  0.403 unit respectively, compared to the Catalase activity of 6.205  $\pm$  0.298 units of diabetes induced by Alloxan. The juice extract exhibits dosedependent activity. The glucose level of S. cumini hydroalcoholic extracts of seed, juice and residual pulp were treated with alloxan-induced fishes were significantly increased (Seed 51.82  $\pm$  0.871, 50.72  $\pm$  0.833 mg/dl, Juice 51.53  $\pm$  $0.871, 59.13 \pm 0.716 \text{ mg/dl}$  and Residual pulp54.26  $\pm 0.613, 45.83 \pm 1.240$ mg/dl glucose at 100 and 250 mg/ml concentration), when the results were compared with control group 41.97  $\pm$  0.660 mg/dl. Hepatoprotective results are also significant. We would like to propose that the seed, the juice and the residual pulp of S. cumini contain an appreciable amount of active principle(s) and would potentiate the antidiabetic, hepatoprotective and antioxidant activity synergistically.

**Key words:** *Syzygium cumini*, Antidiabetic, Hepatoprotective, Antioxidant, *Channa striata* 

# IN VITRO THROMBOLYTIC ACTIVITY OF EUDRILUS EUGENIAE.

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### **ABSTRACT**

Thrombosis is the main cause of cardiovascular diseases. Cardiovascular diseases (CVDs) take the lives of 17.7 million people every year, 31% of all global deaths due to the Heart attacks and strokes caused by a vessel blockage by thrombus. Thrombolytic drugs are available in market, however, they cause some side effects and expensive. Therefore, present research work carried out on, *In vitro* thrombolytic activity of earthworm extract (EE) using plasma clot method. Clot lysis is check at various concentrations of extract against the artificially prepared plasma clot. Streptokinase used as standard and sterilized distilled water used as control. The percentage of clot lysis was analyzed by computing the difference between weights of clot. The earthworms extract (EE) at various concentrations exhibit significant activity *i.e.* 29.95  $\pm$  1.96 and 31.70  $\pm$  0.57% at the concentration 0.050 and 0.1mg/ml was parallel to the standard drug 31.80  $\pm$  0.20 %. Hence, it may conclude that, the earthworm extract have the potential to dissolve clot, therefore, it is urgent need to isolate the molecule which is therapeutically beneficial in future use.

Key words: Cardiovascular diseases, Earthworm extract (EE), Thrombolytic activity.

# CURATIVE ROLE OF CAFFEINE ON COPPER INDUCED HISTOPATOLOGICAL ASSESMENT OF HEPATOPANCREATIC CELLS IN FRESH WATER BIVALVE, *LEMELLIDENS CONSOBRINUS* P. R. Mahajan

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### **ABSTRACT:**

The present study describes antioxident effect of caffeine (1,3,7-Trimethlaxanthine) against copper sulphate induced histopathological alteration on hepatopancreas in an experimental model, the fresh water bivalve, *Lamellidens consobrinus*. The effect of CuSO<sub>4</sub> and caffeine were studied under three groups. Group A bivalves was maintained as control, Group B was exposed to chronic LC 50/10 doses of copper sulphate (2.12 ppm) for 18 days, while group C bivalves were exposed to respective chronic concentrations of heavy metals with 5 ml/lit caffeine. The changes are observed at 6, 12 and 18 days. In hepatopancreatic structure showed more disintegration of basement membrane due to damaged epithelial cells, disruption of hepatic tubules, and increase in internal luminar area in bivalves exposed to copper sulphate as compared to those exposed in copper sulphate along with caffeine. The probable antioxident role of caffeine is discussed in the paper.

Key words – Copper sulphate, Hepatopancreas, Lamellidens consobrinus, Caffeine

# GEARS AND CRAFTS USED IN SIDDHESHWAR RESERVOIR, HINGOLI DISTRICT, MAHARASHTRA, INDIA Niture S D

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### **ABSTRACT**

The Siddheshwar reservoir is a medium sized reservoir of about 2574 ha area, constructed on Purna River at Rupur camp Tq.Aundha Nagnath, Dist, Hingoli and near village Siddheshwar Tq, Aundha Nagnath., Dist, Hingoli in 1968. Fish fauna of reservoirs in Marathwada region has received the attention of Valsangkar (1980), Desai (1980). However Sakhare (2002), Niture (2008) worked on Fishing methods employed in Yeldari reservoir of Marathwada region. The present study deals with the study of gears and crafts used for fishing in medium sized Siddheshwar reservoir of Hingoli district Maharashtra, for a period of 2 years, during 2011 and 2012. The important Indigenous gears used in this reservoir are Gill Net, Cast Net, Drag-Bag Net (Zorli Net), Hook and Line, etc. The crafts used are Thermocol rafts, and Air filled tubes for fishing.

**Keywords-** Fishing methods, Siddheshwar reservoir, Gears and crafts

# KARYOTYPE ANALYSIS OF FEMALE RAT (RATTUS RATTUS) FROM AMALNER, (MAHARASHTRA)

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### **ABSTRACT**

A survey of literature on karyotype analysis of female black rat (*Rattus rattus*) indicates that there is no unique consensus on number and morphology of chromosomes. Several workers have reported the diploid chromosome number (2N)in black rat as =38, 40 and 42. It was found that different strains of laboratory rats showed differences in the morphology of chromosomes. Because of the fragment demonstration of chromosomes polymorphism and the geographic variations at its karyotype, the black rat (Common house rat) has proved to be an interesting animal for chromosomal studies. The present investigation was undertaken with an objective of determining its diploid chromosome number and describing the nature of its chromosomes. The *Rattus rattus*was administered with 0.02% of colchicine for inducing c-mitosis. After 2 hours of colchicinetreatment, the rat was sacrificed by using anesthetic ether and dissected out the femurs. Karyotype analysis was carried out following the method given by Yosida *et al.*, (1965). The present experimental results indicated that the diploid chromosome number of *Rattus rattus* 2n=38 and the karyotype formula is 16m + 4sm+ 16a + 2X.

**Key Words:** Chromosomes, Karyotype, *Rattus rattus* 

# DETERMINATION OF POSTMORTEM INTERVAL (PMI) BY STUDY OF LIFE CYCLE OF LUCILIA SERICATA IN RAINY SEASON Pawar H. M.

Maharaj J.P. Valvi Arts and shri. V. K. Kulkarni Science College Dhadgaon, Dist-Nandurbar.

#### **ABSTRACT**

Life cycles of blow flies are commonly used for PMI estimation. In rainy season very few of calliphorid fly species are active. In Rainy season *Calliphoravicina* and scuttle flies are active. In Dhadgaon region *Luciliasericata*(Calliphoridae) is the commonly found fly in rainy season. Posterior spiracles are used as identification marks of this fly. Its life cycle is completed in fourteen days. So it becomes possible to determine the time of death even in case of long PMIs. Length, width, weight and photograph of each stage are useful for the determination of PMI. Colour change in pupal stage is also useful.

Key words: Postmortem interval, life cycle, blows flies, Luciliasericata.

# A CASE STUDY OF LIVING BIRDS AND THEIR POPULATION IN INDIA Dr. N.H.Desale

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#### **ABSTRACT:**

Birds are one of the links of food chain in ecosystem. A large proportion of normal food of bird consists of insect, fishes, including many that are highest degree injurious to naturally or man and his concern. Fly catcher, Green beef eater, and Sparrow etc. are destroyers some insect pests, which are harmful to the agriculture as well as human beings. Some birds are valuable scavengers. These are very useful for to make clean environment. Birds contribute the cross fertilization of flowers and the production of fertile seeds and they also continuance of healthy generation of the trees. Ethically and morally we have no authority as human being for our comfort to create unsafe environment to other species of nature that have equal right to live with nature in peace as much as human race. In less than 100 years of scientific and technology advancement a period which is insignificant in the life of universe, the environment has degraded to dangerous level. This was protected for millions of years. Henceforth, we should take a pledge to advocate science and technology through only system that guaranteed safe environment. In recent years great concern has been noticed on the dangers of Environment polluting, arising as side effected rapid industrialization, it should be understand that today's development should become tomorrow's destruction. The natural disturbances such as Seasonal variations, Rainfall, Snowfall, Disasters, etc. and Man-made disturbances such as Festivals, Washing, Bathing, Boating, Drainage, Deposition of fill materials, Tilling of crop production, Logging, Mining, Construction, Run-off, Pollution, Eutrophication, Domestic animals etc.

**Keyword**: Environment threats, on bird population

# SEASONAL VARIATIONS, CORRELATION AND BIODIVERSITY INDICES OF FISHES IN HARSOOL-SAVANGI DAM, DISTRICT AURANGABAD (M.S.), INDIA. Sunil Eknath Shinde

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#### ABSTRACT: -

Fishes are important element in the economy of many nations as they have long been a stable item in the diet of many people. They constitute slightly more than one-half of total number of approximately 54,711 recognized living vertebrate species; there are descriptions of an estimated 27,977 valid species of fishes. Biodiversity is essential for stabilization of ecosystem protection of overall environmental quality for understanding intrinsic worth of all species on the earth. Fish biodiversity of river essentially represents the fish faunal diversity and their abundance. River conserves a rich variety of fish species which support to the commercial fisheries. The present study concerns seasonal variations, correlation coefficient and biodiversity indices of fishes during January to December 2009 in Harsool-Savangi dam, Aurangabad [M.S] India.

A Total of 15 fish species were recorded of which 3 orders, 4 families and 12 genera. The order cypriniformes found dominant with 11 species, followed by perciformes 3 species and siluriformes with 1 species. We present percentage wise compositions, biodiversity indices, correlation coefficient and population density of these fish's taxa. Maxima were recorded in summer and minima in monsoon. Correlation coefficient indicates show high significant positive and negative relationship (p < 0.01 level) and also show significant positive and negative relationship (p < 0.05 level).

**Keywords**: Fishes, Seasonal variations, biodiversity indices, percentagewise compositions, correlation and Harsool-Savangi dam.

# FAUNAL DIVERSITY OF NEMATODE PARASITE OF GALLUS DOMESTICUS L. FROM TRIABLE DISTRICT NANDURBAR (M.S.) INDIA D.P.Jaiswal<sup>1</sup> And G.H.Balde<sup>2</sup>

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**ABSTRACT**: The present study of nematode parasite according to prevalence in their abundance in the host *Gallus gallus domesticus* L from triable distric Nandurbar (M.S.) India. Nandurbar is one of the tribal districts of Maharashtra State. A total 300 hosts intestine were collected and brought into laboratory from different localities of Nandurbar District. During June 2016 to May 2017 for one annual cycle, out of 300 host, 101(33.66%) were infected with 133 nematode parasite. On intestinal examination of the two species of genera *Ascaridia* Duj 1845 and *Heterakis* Duj 1845 are recovered. Seasonal variation also have great impact on occurrence of these nematode parasite. The high incidence of infection had recorded in monsoon continued by decreasing in winter and summer. The domestic fowl was highly infected by *Ascaridiagalli* (32%) as compared to *Heterakis gallinarum* (12.33%). There is no report available regarding the population dynamics of nematode parasite of domestic fowl from this region. This information will essentially be helpful for the researcher and local veterinarians to develop strategies for both treatment and control of these nematode parasite affecting native poultry.

Keywords: Domestic fowl, Nandurbar, Nematode Parasite, Faunal Diversity.

# SEASONAL VARIATION OF MUSCLES GLYCOGEN CONTENT IN MAJOR CARP CATLACATLAFROM JALGAON DISTRICT REGION Shaikh H.M. and Patel Y.E.

Department of Zoology, Igra's H. J. Thim college of Arts and Science Jalgaon.

### **ABSTRACT:**

Present study dealswith seasonal variation of muscles glycogen content in major carp *Catlacatla* fish from Jalgaon district in north Maharashtra region (M.S.). Fish muscles content little amount of carbohydrates in form of glycogen. Seasonal variation of glycogen content in fish muscles have been studied in both sexes in relation to maturation cycle. During study observed that glycogen content in muscles maximum during summer season when fishes attend full maturity whereas minimum during pre-monsoon season. The glycogen content muscles in fish rises from July to August when fishes undergoes to breeding season in both sexes of *Catlacatla* fish.

Keywords: Seasonal variation, Glycogen, Catlacatla,

# TAXONOMETRICOBSERVATION OF CESTODEMONIEZIA (B.) KHANDESHENSIS N. SP. INFECTING CAPRA HIRCUS (L.)

# Suryawanshi, <sup>1</sup> R. B. and Kalse, <sup>2</sup> A. T.

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## **ABSTRACT**:

The present paper deals with the description of a new species of genus *Moniezia*, Blanchard, 1891 subgenus Blanchariezia, Skrjabin and Schulz, 1937, viz. *Moniezia* (*B.*)*khandeshensis* n. sp. The present tapeworm differs from all other species of genus *Moniezia* (*B.*) in having scolex large, squarish in shape, with four suckers; neck medium; mature segment broader than long, with double set of reproductive organs; testes 52 in number; cirrus pouch oval in shape, cirrus thin; vas deferens thin, wavy; ovary medium, inverted cup shaped; vagina thin tube, posterior to the cirrus pouch; receptaculum seminis medium, spindle shaped; ootype small, round; genital pores bilateral, medium, oval; longitudinal excretory canals wide; interproglottid glands 15-19 in number; vitelline gland large, oval in shape and gravid proglottids large, rectangular with numerous round eggs.

**Keywords:** Capra hircus, new species, Moniezia (B.) khandeshensisn.sp., Dhule.

# METEORITIC LAKE IN BULDHANA MAHARASHTRA, INDIA CONSERVE AND PRESERVATIVE MEASURE Rathod.M.P

HOD, Dept Of Zooogy, M.J. College, Jalgaon drmprathod 05@gmail.com ABSTRACT:

Impact crater site, at the Lonar lake dist Buldhana, India where a huge meteoritic hit about 50.000 years ago into our planet earth making saucer shaped deep underside, to attract the attention of scientists, tourists and pilgrimage, working on different aspect. Roughly 150 known meteoritic impact sites on the earth, Lonar crater is the only one that hit and developed during impact. Thus it is one of the heritage sites and well preserved and a unique site which attracts the attention of scientists, to realize the lake on moon. The lake which was created by a meteor hitting the earth during the Pleistocene epoch is a salt water lake in Buldhana district of Maharashtra, India. All scientists, such as astronomers, geologist's biologists, archeologists, have reported several studies on various aspect of Lake Ecosystem. Today at this site scientifically and archeological facing many problems due to manmade activities like pollution along the lake which emphasized in this presentation. This study suggested that dilution from drainage of city, and manmade activities should be monitored at this lake

Keywords,-meteoritic lake, conservation, pollution

# STATUS OF HEAVY METALS IN SAPRAR DAM, MAURANIPUR (JHANSI) UTTAR PRADESH, INDIA

#### **Ashish Kumar**

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### **ABSTRACT**

Water is the most important part of the natural heritage. It is one of the abundantly most available in nature. It is an essential constituent of all animal and vegetable matter and forms about 75% of the matter of Earth. It is most important ecological systems, human health, food production, and economic development. Dam and their accompanying reservoirs generally are designed to be multi functional structures. By definition, a dam is created due to depression on land in which water accumulates from all around. The saprar dam is situated at Kuraicha goan of Mauranipur, Jhansi district of Uttar Pradesh. The dam is contructed on Saprar & Gargoru River. This is the main tributary of Dhasan river. The dam is located at latitude 25° 14'23"N and logitude 79° 11'47"E. It is multipurpose type of project like irrigation, water supply and fish production. In 1947 saprar dam construction started and it completed in the year 1952. The catchment area is 363.52sq.mile. The total length of dam 3900m and maximum height above foundation is 16.76m. Total spillway capacity is 1143.23(cum).T The study was carrid out to determine the concentration of Pb,Zn,Cu, and Cd in saprar dam, Mauranipur (Jhansi) Uttar Pradesh. Which cover to 2005 ha. Saprar dam is source of water supply for Irrigation purpose, fish production and drinking water supply. Heavy metals bioaccumulated and biotransferred both by natural and anthropogenic sources. The contamination by heavy metals in plants and water is one of the major issues to be faced throughout the world. In this study was carried out to determine the impact of some heavy metals namely Pb, Cd, Cu, and Zn in composite water sample of saprar dam of Mauranipur Jhansi (U.P.). This study was carried Out of months of March 2017 to March 2018. The samples were collected and prepared in the laboratory according to standard method Atomic Spectrophotometer technique was used for estimation of heavy metals. The observed values were with safe limits in ppm for heavy metals laid down by BIS, WHO, ICMR. The main aim of this study is to evaluate the levels of heavy metals concentration in dam water.

Keywords- Water, Heavy metals, Saprar dam, Human activities, Pb, Cd, Cu and Zn,

# SCOLIID WASPS (INSECTA: HYMENOPTERA: SCOLIIDAE) OF MAHARASHTRA

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### **ABSTRACT:**

Studying insect diversity is a kind of difficult task as they are known to occupy a wide range of diverse microhabitats and contributing in ecosystem services of many kinds. To apply the conservation strategies the comprehension of diversity is a foremost prerequisite. The present endeavor is an attempt to study the Scoliid wasps of Maharashtra region. The present paper mentions 18 species belonging to 8 genera of the family Scoliidae (Insecta: Hymenoptera). They were collected from different parts of Pune and Kolhapur districts in the Northern Western Ghats of Maharashtra. Of these, *Campsomariella (Annulimeris) annulata annulata* (Fabricius, 1793), *Phalerimeris phalerata turneri* (Betrem, 1928), *Liacos erythrosoma erythrosoma* (Burmeister, 1854), *Megascolia (Regiscolia) azurea hindostana* (Micha, 1927), *Scolia (Discolia) picteti* (Saussure, 1855) and *Scolia (Discolia) quadripustulata* (Fabricius, 1782) are new to the Scoliid fauna of Maharashtra state. This study also imparts the collection of Scoliid fauna reported by some other workers previously. Synonyms and distributional data for each species are included.

Keywords: Distribution, Hymenoptera, Kolhapur, Pune, Scoliidae, Western Ghats.

# ROLE OF CORIANDER (CORIANDRUM SATIVIUM L.) ON ACCUMULATION AND DEPURATION OF MERCURY IN BELLAMYA BENGALENSIS( L.)

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## **ABSTRACT:**

Present study aimed to examine the usefulness of Coriander (*Coriandrum sativium L.*) extract for elimination of heavy metal bioaccumulated in the whole body tissue of the experimental model animal gastropod snail *Bellamya bengalensis (L.)* The accumulation and elimination of mercury (Hg) was examined by exposing the snail *Bellamya bengalensis(L.)* to 0.173ppm (HgCl<sub>2</sub>) mercuric chloride with and without Coriander (*Coriandrum sativium L.*) extract for 7, 14, 21 days. After 21 days treatment the snails were allowed to cure naturally in normal water and with coriander extract up to 21 days separately. The whole body tissue samples were taken out after every 7 days for metal analysis. There was a gradual increase in heavy metal content with increase in exposure period for mercury. The concentration of mercury during depuration was found to be decreased with increase in period. However the recovery was faster in those which are treated with coriander extract as compaired to those which are allowed to cure naturally in normal water. The aim of present study was to highlight the antioxidation, heavy metal detoxification, elimination and chelating aspects of coriander.

**Keywords:** Coriander, Heavy Metal, Mercury, Bioaccumulation, Depuration, Gastropod, *Bellamya bengalensis L.*).

# BIOCHEMICAL ALTERATIONS IN GLYCOGEN CONTENT OF FRESHWATER SNAIL, BELLAMYA BENGALENSIS DUE TO CYPERMETHRIN INTOXICATION

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2 – Pratap College, Amalner Dist. Jalgaon, M.S. India. <u>dv2ahirrao@gmail.com</u> **ABSTRACT:** 

Effect of sub lethal concentration of pyrethroid pesticides Cypermethrin on ovary of aquatic snail, *Bellamya bengalensis* was evaluated. The histochemical and biochemical analysis for 15 days exposed snail was made in the present work. The amount of biochemical components was greatly influenced in the range of 9.31% to 53.69% by Cypermethrin which causes depletion in glycogen level. The maximum depletion of glycogen content observed during the pre-reproductive period after 15 days of exposure span.

Keywords: Cypermethrin, Bellamya bengalensis, Ovary, Glycogen.

# STUDIES OF HEMATOLOGICAL ALTERATIONS IN RABBITS DURINGAFLATOXICOSIS

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### **ABSTRACT:**

Aflatoxins are a secondary toxic fungal metabolites which commonly grow on human food and animal feeds. To study effects of aflatoxin, adult in bread rabbits were fed a diet containing 7.5 mg aflatoxin / kg feed for 90 days. A time dependent response was observed suggesting cumulative toxicity during aflatoxicosis. For haematological studies, blood samples from ear-pinna of rabbits were collected on 0, 7, 15, 30, 45, 60, 75 and 90 days of treatment and used. Results revealed that feeding aflatoxin contaminated diet caused a significant reduction In erythrocytes count and haemoglobin content. The decreases in RBC count and haemoglobin were continuous and time dependant. But the % reticulocyte count registered a time dependent increase during aflatoxicosis. Significant increase was recorded on 15th day of treatment and thereafter. Morphological alterations included Change in size of the erythrocytes. The number of small sized cells while the number of medium cells increased aflatoxicosis. Decreased.During No definite trend was evident in big cells. Initial Increase in number of big cells (7 and 15 days) was followed with a decrease. Huch decrease in counts was noted on 30th and 45th day of treatment. Also average sized cells showed Increase except at 45th day of treatment where a decrease was recorded. Blood samples were also examined for total and differential counts of leucocytes. An Initial upsurge in total count was followed with time dependent significant decrease. The highest share of neutrophils and lymphocytes were accounted during differential counts of leucocytes. An initial upsurge followed by time dependent continuous decrease in number of neutrophils, eosinophils, basophils and monocytes were also noted during aflatoxicosis. But only neutrophils Lymphocytes count showed statistically significant count registered an initial decline with time dependent increase.

Keywords: Aflatoxin, Aflatoxicosis, Erythrocytes, Rabbits.

# CHECKLIST OF AVIAN FAUNAL DIVERSITY OF JALGAON DISTRICT REGION, MAHARASHTRA, INDIA.

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### **ABSTRACT**

Birds are found throughout the world and essential animal group of an ecosystem. They are the biological control agents to control the different kind of pests. The present investigation was carried out to document the status of avian fauna of Jalgaonregionduring the one year from Oct., 2017 to Sept., 2018.Birds serve as one of the best environmental indicators. Total number of 45 bird species belonging to 10 orders and 23 families were recorded.

**Keywords:** Avian fauna, Diversity, Jalgaonand North Maharashtra.

# POPULATION DYNAMICS IN ZOOPLANKTONS FROM NAKANA LAKE, DISTRICT – DHULE (M.S.)

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## **ABSTRACT**

Nakana Lake is manmade water body, situated in vicinity of Dhule; North-Western corner of Maharashtra, constructed on Panazara River. Its main purpose of construction is for drinking water supply, irrigation and aquaculture. It harbours variety of micro and macro organisms. Among micro-organisms, primary consumers of food chain, i.e. Zooplankton were recorded from above water reservoir. Populations of zooplankton were divided in to four groups. Out of which, 7 species belong to Rotifera (28 %), 6 species belongs to Cladocera (24 %), 9 species belongs to Copepoda (36 %) and 3 species form Ostracoda (12 %). Throughout the study period copepoda was found to be dominant. It is further reported that the species Cypris (25 Org/L) had shown maximum number in month of December of 2013. Seasonal fluctuation, density and diversity indices were recorded in consecutive year research- Feb, 2013 to Jan, 2015.

**Keywords:** Vicinity, Panzara, Aquaculture, Copepoda, Density.

# DIVERSITY OF BUTTERFLIES FROM DARA DAM (UNAPDEVI) OF SHAHADA TALUKA OF NANDURBAR DISTRICT (M.S).

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#### **ABSTRACT**

An appraisal of butterfly species diversity was made using in Dara dam of Shahada tahsil. Butterflies are good biological indicators of habitat quality. Lepidoptera (Moth and butterfly) is second most abundant order after the order coleoptera (beetle). Generally, the butterflies are known to be the most beautiful and attractive insect in the biosphere. Additionally, the butterflies are the important pollinators to most agricultural crop plants. Survey has been done on the butterflies Dara Dam of Shahada Taluka of Nandurbar District. In this study 48 species of butterflies have been recorded. These 48 species of butterflies are belonging to 7 families and 10 genera.

Keywords: Butterflies, Diversity, Dara dam, Unapdevi, Shahada.

# BIO-EFFICACY OF SOMECARPOUSANACARDIUMEXTRACTS AGAINST CALLOSOBRUCHUS CHINENSIS L. (COLEOPTERA: BRUCHIDAE) ON PHASELOUS ACONITIFOLIUS GRAINS.

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# **ABSTRACT:**

The study was carried out to determinepotential biopesticidal effect of *Somecarpousanacardium* fruits extract against the store grain pest *Callosobruchus chinensis* L. infestation in *Phaselous aconitifolius grains*. The dryfruits were used for extraction with Chloroformsolvent. Result indicates that raw fruit oil was most effective grain protectant for controlling the attack of pest.

**Keywords:** Efficacy, fruits extract, Callosobruchus chinensis, somecarpous anacardium.

# TAXONOMERIC EVALUATION OF A NEW AVIAN CESTODE COTUGNIA(CESTODA: DAVAINEIDAE) INFECTING GALLUSGALLUSDOMESTICUS

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\*\*\*Dept.of Zoology,Dr.P.R.Ghoghare Science College,Dhule. (<u>dr.ajit\_kalse@yahoo.co.in</u>) **ABSTRACT**: -

The genus *Cotugnia* was erected by Diamare (1893) with the type of species *C. diagonopora* collected from domestic fowl. Four specimens of cestode parasites were collected from the intestine of *Gallus gallusdomesticus* Shirpur, Dist. Dhule. The present cestode have Scolex large in size, rectangular in shape, rostellum is armed with numerous hooks, testes 90-100 in number, oval in shape, ovary medium in size with irregular margin, vagina ventral to cirrus pouch, ootype small, oval. It was compared and differs from six species and consideredas a new species, *Cotugniashindeae*.

**Keyword:** -Cotugnia, Gallus gallusdomesticus, Ovary.

# "ZOOPLANKTON DIVERSITY AND THEIR SEASONAL VARIATIONS OF LONDHARE DAM SHAHADA TALUKA DISTRICT NANDURBAR (M.S.) INDIA".

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Abstract:-Zooplanktons are the microscopic animals that act as a primary and secondarylinks in the food webs of all aquatic ecosystem. Zooplankton diversity is one of the most important ecological parameters in water quality assessment. Zooplankton is good indicators of the changes in water quality because they are strongly affected by environmental conditions respond quickly to changes in water quality. The present paper focused on the zooplankton abundance and diversity of Londhare dam, Shahada Taluka, District Nandurbar, (M.S.) during the period June 2012 to May 2014. A total of 42 species of zooplankton were recorded belonging to 27 general which divided into four groups. Among these Rotifera comprise of 24 species (35.61%), Cladocera 08 species (32.74%), Copepoda 06 species (25.42%) and Ostracoda 04 species (6.23%). Numerically Rotifera was dominant group throughout the study period. The season wise zooplankton analysis showed that the number of population was maximum in summer, moderate in monsoon and lowest during winter.

Keywords:-Londhare dam, Zooplankton, Seasonal variation, diversity.

# VARIATIONOFOOCYTESDIAMETER ANDHISTOLOGICALCHANG ES IN GONADS OFFRESHWATER BIVALVE CORBICULA STRIATELLADURINGPRE AND POST MONSOON SEASONIN MARATHWADA (M.S.INDIA).

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### **ABSTRACT**

Many species of bivalve molluscs abundantly found in Indian waters can sustain regularly & very productive Fisheries in India. Particularly in Maharashtra state. Indiocious *Corbicula Striatella*the gonads commonly occur among the intestinal loops in the base of the foot. Several environmental factors such as temperature, lunar periodicity, depth, mechanical factor light intensity, genetic & hormonal control. The maturation of gonads is also dependent on the richness of food supply which depends on climate. Generally the reproductive cycle of bivalve mollous can population includes activation, growth and gametogenesis.

The gonad tissue were removed and processed for preparation of paraffin blocks. Dehydration of gonad was done through serial grades of ethyl alcohol while xylene was replaced by toluene during the process. The tissues were embedded in paraffin was at 580C. The sections of gonad were cut out  $6-7~\mu m$  thickness. The histological sections of the gonad throughout the study revealed that gonad consists of numerous follicles innervated by the connective tissue and muscles. The amount of connective tissue present was found to depend upon the state of maturity of the gonads.

**Keywords**: Corbicula Striatella, Gonads, Histology, Monsoon season.

# ASSESSMENT OF BIVALVES AS BIOINDICATOR OF HEAVY METALS POLLUTION IN THE YELDARI DAM, INDIA

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## **ABSTRACT**

The freshwater bivalves are the ideal species of organisms for an assessment of heavy metal pollution in freshwater ecosystem. The objective of the present study is to determine the heavy metal pollution (Zn, Cu, Pb, Cd and As) in the Yeldari dam by using the bivalves species, Lamellidens corrianus, Lamellidens marginalis and Indonaia caeruleus of the same habitat. Heavy metal concentrations in surface water, soil sediment and whole soft body tissue of freshwater bivalve, Lamellidens corrianus, Lamellidens marginalis and Indonaia caeruleus was examined in sample collected from four sampling sites of Yeldari dam. The bioaccumulation of heavy metals in the bivalve's tissues can be useful for the detection of polluted area and can be used as environmental bioindicator. In the present study it was observed that heavy metal concentrations in whole soft body tissue of freshwater bivalve, Lamellidens corrianus, Lamellidens marginalis and Indonaia caeruleus was highest than heavy metal concentrations in surface waterand soil sediment. Therefore freshwater bivalves(Lamellidens corrianus, Lamellidens marginalis and Indonaia caeruleus)is beingproposed as sentinel organism for monitoring of heavy metal pollution (Zn, Cu, Pb, Cd and As) in freshwater of Yeldari dam.

**Keywords:** Heavy metals, Bivalves, Bioaccumulation, Yeldari dam.

# BIRD DIVERSITY IN AND AROUND THE HATALEDAM, TALUKACHALISGAON, DISTRICT OF JALGAON, MAHARASHTRA.

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### **ABSTRACT**

Hatale dam is nearer to Hatale village in ChalisgaonTaluka in Jalgaon District of Maharashtra State, India. It belongs to Khandesh and Northern Maharashtra region. It belongs to Nashik Division. It is located 92 KM towards South from District head quartersJalgaon. 17 KM from Chalisgaon.330 KM from State capital Mumbai.Hatale is surrounded by KanandTaluka towards South, BhadgaonTaluka towards North ,PachoraTaluka towards East , KhultabadTaluka towards South.

Birds play prominent and diverse role in religion, and popular culture. They have their functional role in the ecosystem as potential pollinators and scavengers and are rightly called as bio-indicators. All birds are not aquatic but few of them reside on the bank of reservoir. Birds are important group of aquatic food chain. They feed on vegetation, fishes and other animals of the reservoir (Donaret. al 2012). In India, small water-storage reservoirs or tanks are a distinctive feature which provides important feeding and nesting areas for a wide range of water birds (Grimmettet al. 2001).

In this work attempt has been made to record the bird diversity in winter season especially to record the migratory bird diversity of this dam. This bird diversity of Hatale dam was studied from December 2018 to January 2019. Total 45 species including water birds and the land bird were recorded belonging to the different 21 families and 09 orders during the study period.

**Keywords:** Bird diversity, Hatale Dam, TalukaChalisgaon, Jalgaon, Diversity, Status

# Recent Emergence in Science and Technology 2019

# IMPORTANCE OF CONSERVATION OF BUTTERFLIES AND MOTHS C.V. Wankhede

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ABSTRACT:Butterflies and moths are the diverse group of insects belonging to the order Lepidoptera. Butterflies conjure up images of sunshine, the warmth and colour of flowery meadows, and summer gardens teaming with life. Moths are one of the most diverse groups of insects on earth, ranging from spectacular Hawk-moths to small, intricately patterned Footman moths. Butterflies play an important role in pollination after honeybees by pollinating a major portion of economically important crop, 3/4 part of staple crop in world, and more than 75% of flowering plants etc. The oldest fibre industry that is silk industry is also dependent on these Lepidoptera. Butterflies are also an indicator of environmental health and the ecosystem service providers from the starting level. Around hundred species of butterflies are at the verge of extinction in India. If the butterfly population decline—then it will directly affect the agriculture industry. There are many reasons why butterflies and moths are important, both in their own right but also as quality of life indicators. The following attributes form the rationale for conserving butterflies and moths around the world. In the present article some measure and ways are to be discussed for importance of conservation of Butterflies and Moths.

Keywords: Butterflies, Lepidoptera, Insects, Hawk-moth, Footman moth

# BIODIVERSITY OF MOSQUITOES (ORDER- DIPTERA) OF DHULE DISTRICT AND THEIR ECONOMIC IMPORTANCE.

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**ABSTRACT:**Mosquitoes are very dangerous pest of man & his belongings. These causing millions of death due to various diseases like Malaria, Filaria, Yellow -Fever, Encephalitis, Dengue, Swine-flue etc. It occurs as vector in all diseases.

Keywords- Culex, Aedes, Anophelcs, Nematocera,

# IN VITRO STUDY OF ANTIOXIDANT ACTIVITY OF AEGEL MARMELOS, CASSIA FISTULA AND PSIDA CORDIFOLIA

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### **ABSTRACT:**

Traditional pharmacopoeias included the discoveries of novel compounds isolated from plants with pharmaceutical value. Several medicinal plants extracts were screened for antibacterial, anti-inflammatory, antioxidant, anthelmintic, anti-amoebic, antischistosomal and antimalarial activity, as well as psychotropic and neurotropic properties. Medicinal plants and their products are used as antioxidants in traditional and modern medicines with prior scientific authentication. In the present study, attempts have been made to elucidate and validate the antioxidant activity of the knowledge related to the comparative bioprospection of medicinal plants *Aegel marmelos*, Cassia *fistula* and *Psida cordifolia*. Total phenolic and flavonoids content, free radical scavenging activity, superoxide dismutase, catalase activities estimated and comparatively evaluated in plants selected.

**Keywords:** Aegel marmelo, Antioxidant activit, vitro study

# ISOLATION AND SCREENING OF THERMO AND OSMO-TOLERANT ETHANALOGENIC FUNGI FROM DECAYING WOOD OF MALKAPUR REGION

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## **ABSTRACT**

We have reviewed various papers from the literature. Conventional fermentation requires improvisation to increase production of ethanol, the microorganism dose not have wide range of resistance against abiotic stress. We isolate strain of fungi which have wide range of resistance against abiotic stresses. Isolates were subjected to assess the sugar utilization spectrum by using different sugars in various concentrations. Isolates, was found to have wide sugar utilization spectrum and hence selected for the further analysis i.e. Thermo and osmo-tolerance.

**Keywords:-**Ethanol, fungi, Abiotic stress,

# STRUCTURINGOFOILS USING AMIDE BASED GELATORS

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### **ABSTRACT:**

Structuring liquid oils has become an active area fresearch in the past decade, mainly due to pressures to reduce saturated fat intake and eliminate trans fats from our diets. However, replacing hard fats with liquid oil can lead tomajor changes in the quality of food products. Recent strategies to impart solid-fat functionality to liquid oils include the addition of unusual compounds to oil, leading to itsgelation. Several long chain compounds are found to have gelation abilities. This study highlights the use of amide based organogelators for gelation of oils.

# STUDIES OF ACOUSTIC PROPERTIES OF CLOBETASOL PROPIONATE IN 10% SODIUM CHLORIDE AT DIFFERENT TEMPERATURE.

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### **ABSTRACT:**

Acoustical properties have been measured for Clobetasol propionate in aqueous sodium Chloride at different temperature. The measurement have been perform to evaluate acoustical parameter such as adiabatic compressibility ( $\square$ s), Partial molal volume ( $\square$ v), intermolecular free length ( $L_f$ ), apparent molal compressibility ( $\square$ ), specific acoustic impedance (Z), relative association ( $R_A$ ), salvation number (Sn) and also studied the molar polarization.

**Keyword:** - Ultrasonic velocity, intermolecular free length, relative association.

# SYNTHESIS, SPECTROSCOPIC CHARACTERIZATION, ANTIBACTERIAL AND ANTIOXIDANT ACTIVITY OF BENZYLIDENE-ANILINE DERIVATIVES

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### **ABSTRACT:**

A Benzylidene-aniline derivative was prepared through condensation of substituted aniline with different salicylaldehyde. These Benzylidene-aniline derivatives were characterized by elemental and spectroscopic method including IR, UV–vis, H NMR and ESI-MS. furthermore explored for their antibacterial activity against *Staphylococcus griseus* as gram positive bacteria, *Salmonella typhi* as Gram negative bacteria by disc diffusion method and the antioxidant activities of these compoundswere determined by hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) scavenging activity. The biological activity data of benzylidene-aniline derivatives show promising antibacterial activity.

**Keywords:** benzylidene-aniline derivatives, antibacterial and antioxidant activity.

# P<sup>H</sup> – METRIC STUDY OF SUBSTITUTED HETEROCYCLIC DRUGS WITH TRANSITION METALS IN MIXED SOLVENT

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**ABSTRACT:** In the present work, the interaction of transition metal ions with substituted heterocyclic drug Clarithromycin in 70% ethanol-water mixture at 303.15K has been studied by pH metric method. The interaction has been studied at 0.02M ionic strength by Bjerrum method as adopted by Calvin & Wilson. The data obtained is used to estimate the values of protonligand stability constant (pK) and metal-ligand stability constant (log K). The above study shows 1:1 and 1:2 complex formations takes place with substituted heterocyclic drug.

**Keyword:** Stability constant, substituted heterocyclic drug.

# NANOCRYSTALLILNE CDS THIN FILM AS ANTIREFLECTION COATING PURPOSE

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**Abstract:** The nanocrystallilne CdS thin film was prepared by chemical bath deposition technique. X-ray diffraction (XRD), Field emission scanning electron microscopy (FESEM) and EDAX techniques were use to the confirmation of the material, surface morphology and elemental composition of the thin films. Optical studies investigate that prepared nanocrystallilne CdS thin film use for antireflection coating. The results are discussed and interpreted.

**Keywords:**Chemical bath deposition technique nanocrystallilne CdS, antireflection coating.

# METAL COMPLEX OF BENZIMIDAZOLE CONTAINING QUINOLINONE DERIVATIVE: SYNTHESIS, SPECTROSCOPIC, THERMAL AND ANTIMICROBIAL STUDIES

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### **ABSTRACT:**

We have synthesized ligand base approach benzimidazole containing quinolinone compound i.e. 7-hydroxy-4-methyl-1-[(2-thiazol-4-yl)-1H benzimidazole-5yl]-quinolin-2-(1H)-one and studied their metal complexiation with Copper. The synthesized ligand and metal complex was screened for antifungal activity and antibacterial activity against some Grampositive and Gram-negative bacteria.

Key words: Benzimidazole, Thiabendazole, Coumarin, Quinolinone and metal complex.

# STUDIES ON THERMODYNAMIC STABILITY CONSTANT OF AMINO ACIDS WITH YB(III) COMPLEXE.

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### **ABSTRACT:**

The thermodynamic stability constant of the complexes were also calculated. The formation of complexes has been studied by Job's method. The results obtained of stability constant were good agreement. The metal-ligand and proton–ligand stability constant of Gd(III) with amino acids (L-GLutamic acid + serine) were determined at various ionic strength in 1% potassium chloride solution by pH metric titration. NaClO<sub>4</sub> was used to maintain ionic strength of solution.

**Keyword:** Amino acid, Stability constant, ionic strength.

# SYNTHESIS AND EVALUATION OF DIFFERENT 3-SUBSTITUTED CHALCONE WITH SCREEN THEIR BIOLOGICAL PROPERTIES"

# Gautam P. Sadawarte, Department of chemistry

B.P. Arts, S.M.A. Science and K.K.C. Commerce College, Chalisgaon, Jalgaon (M.S.)  ${f ABSTRACT}$ :

Within the realm of medicinal chemistry, synthesis plays a pivotal role in any drugs research and development endeavor. Diabetes Mellitus is associated with impaired glucose metabolism that leads to increases blood glucose level and free radicals production. Unfortunately none of the present drug in management of metabolic disorder are unimpeachable. Metaformin increases the risk of lactic acidosis, Sulphonylureas result in hypoglycemia and Acarbose increases flatulence and bloating. A new series of chalcone was prepared. The reaction of substituted benzaldehide with different acetophenone and alcoholic KOH. The purity of new compound was cheak by TLC and their structure confirmed by IR and H¹NMR. The target compound evaluated for their biological properties

# NANOCOMPOSITESTHIN FILMS AS GAS SENSOR APPLICATION

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#### **ABSTRACT:**

In present work nanocomposites thin films were prepared by spray pyrolysis technique. As prepared thin films were studied using XRD and FE-SEM and. The film sprayed for composition of  $WO_3$ - $V_2O_5$  (Sample =S2) was observed to be most sensitive (S = 1130) to  $SO_2$  at 350 °C. The sensor shows quick response (4 s) and fast recovery (8 s) time. The results are discussed and interpreted.

**Keywords:** Spray Pyrolysis, WO<sub>3</sub>-V<sub>2</sub>O<sub>5</sub> nanocomposites, SO<sub>2</sub> gas sensing, quick response, fast recovery

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# CONDUCTOMETRIC STUDIES ON MICELLAR PROPERTIES OF DODECYLDIMETHYLAMMONIUM BROMIDEIN PRESENCE OF ADDITIVES AT VARIOUS TEMPERATURE

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## **ABSTRACT:**

Specific conductivity of aqueous solutions of dodecyldimethylammonium bromidehas been determined in the temperature range of 25-45°C. The critical micelle concentration (cmc) and ionization degree of the micelles,  $\beta$ , were determined from the data. Thermodynamic functions, such as standard Gibbs free energy,  $\Delta G^0_m$ , enthalpy,  $\Delta H^0_m$ , and entropy,  $\Delta S^0_m$ , ofmicellization, were estimated by assuming that the system conforms to the mass action model, was estimated from the temperature dependence of  $\Delta H^0_m$ . An enthalpy-entropycompensation phenomenon for the studied system has been found.

**Keywords:** conductivity, critical micelle concentration, dodecyldimethylammonium bromide, enthalpy, entropy and standard Gibbs free energy, temperature dependence.

# ENHANCE SONOPHOTOCATALYTIC DEGRADATION OF SAFRANINE USING NIOBIUM PENTOXIDENANO CATALYST.

# Vilas K. Mahajan and Gunvant H. Sonawane\*

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## **ABSTRACT:**

The degradation of safranine in aqueous solution using sonophotocatalytic degradation was investigated. Emphasis was given on the effects of different operating conditions viz. catalyst concentration, pH, initial dye concentration and reaction time on safranine dye degradation. The extent of sonophotocatalytic degradation was increased by increasing pH, initial dye concentration and increasing catalysts loading. Ultrasound assisted photocatalysis was found to be more efficient than the respective individual processes due to the enhancement in the formation of reactive hydroxyl radicals as well as the possible ultrasound-induced increase of the active surface area of the catalyst. The sonophotocatalytic efficiency was increased in basic conditions (40 mg/L of dye concentration, 100 mg/g of Nb<sub>2</sub>O<sub>5</sub> concentration, and 150 W ultrasonic powers and at pH 10). The kinetic study shows that adsorption follows pseudo-second-order kinetics. Adsorption was also described by Langmuir and Freundlich isotherms. Adsorption isotherm found to follow Langmuir isotherm. The monolayer coverage capacity was observed to be 52.63 mg/g for sonophotocatalytic degradation. The amount of dye adsorbed was 100 mg/g for 0.2 g/L sonophotocatalyst dose at 40mg/L dye concentration.

# SYNTHESIS, IDENTIFICATION AND ANTIBACTERIAL POTENCY OF AZO DYES HAVING QUINOLIN-8-OL AND ACTIVE METHYLENE MOIETY

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## **ABSTRACT:**

In the present study we have reacted the five aryl diazonium salts prepared from nitro substituted anilines and amino substituted benzoic acids and coupled with Quinolin-8-ol and Active methylene group of pent-1,4-dione respectively. Synthesized compounds are then identified by FTIR Spectroscopical method. The final product, I to V formed has potential to use as azo dyes and as an intermediate in other synthetic procedures or transformations along with this they exhibits good biological activities.

**Keywords:** Active methylene group; diazonium salt; antibacterial activity; nitroanilines and azo dye.

# STUDIES OF STABILITIES OF SCHIFF BASE OF MANNICH BASE WITH METAL IONS IN MIXED SOLVENT 303.15 K BY PH-METRIC METHOD.

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### **ABSTRACT:**

The formation of complexes of mannich base of (N-(3,4-dihydroxyphenyl)) (2-oxocyclohexyl)methyl)isonicotinohydrazide) with metal ions at constant ionic strength ( $\mu = 0.1M$ ) in 70% ethanol was investigated at 303.15K by pH-metric titration. The values of protonligand stability constant (pK) and metal-ligand stability constant (logK) obtained from the data. It is observed that the metal ions form 1:1 and 1:2 complexes with mannich base of N-(3,4-dihydroxyphenyl) (2-oxocyclohexyl)methyl)isonicotinohydrazide).

**Keywords:** Stability Constant, pH metry, mannich base.

# ULTRASONIC VELOCITY, DENSITY AND VISCOSITY OF BINARY LIQUID MIXTURE OF 1-BUTANOL AND 1-PENTANOL WITH O-NITROTOLUNE AT 303.15 AND 313.15K.

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## **ABSTRACT:**

Ultrasonic velocity, density and viscosity were reported for binary mixture of 1-butanol and 1-pentanol with O-nitro toluene over an entire range of composition at 303.15 and 313.15 K. The experimental data were used to calculate the excess molar volume, viscosity deviation and deviation in isentropic compressibility. The result was interpreted in terms of molecular interaction studies between the components of binary mixture. The deviation in ideal mixing law in most of calculated parameters are negative. This reveals the nature and magnitude of intermolecular interaction between unlike molecules and electron donating alkyl group.

**Keywords:** - Ultrasonic velocity, Density, Viscosity Excess molar volume, viscosity deviation, Isentropic Compressibility.

# ACOUSTICAL PROPERTIES ANALYSIS OF SYNTHESIZED SCHIFF BASE OF PYRAZOLONE MOIETY IN MIX SOLVENT AT 303 K USING INTERFEROMETER

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## **ABSTRACT:**

The density and ultrasonic velocity of synthesized Schiff base using (5-hydroxy -3-methyl-1-(2, 4 dinitrophenyl)-pyrazol-4-yl)(phenyl)methanone and amine an analyzed using interferometer. 70% dioxane-water solvent is used for investigation at 303k. Data obtained are used to calculate different Acoustical parametersuch as solvation number (Sn). Relative association (RA) specific acoustic impedance (Z), apparent molalcompressibility( $\phi$ k), intermolecular free length (*Lf*), Partial molal volume( $\phi$ v), and adiabatic compressibility( $\phi$ s).

**Keywords:** Schiff base. Interferometry, 5-hydroxy 3-methy 1-(2,4-dinitrophenyl) pyrazol 4-yl] (phenyl) methanone, Acoustical parameter.

# ADSORPTION OF BRILLIANT GREEN BY CORDIA MYXA: THERMODYNAMIC MODELING

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### **ABSTRACT:**

In this research the Brilliant Green (BG)was removed from aqueous solution using *Cordia myxa* leaf powder (CMLP) as a biosorbent. The biosorbent was characterized by FTIR and SEM techniques. The effect of various factors such as: pH, agitation timeand temperature were tested. The adsorption data were applied to thermodynamic parameters. The thermodynamic study revealed that the CMLP had negative  $\Delta G^{\circ}$  values therefore the adsorption processes were spontaneous and feasible. The positive values of both  $\Delta H^{\circ}$  and  $\Delta S^{\circ}$  revealed that the adsorption processes were endothermic with the increased randomness at the solid-liquid interfaces. It was found that the CMLP is an efficient and cheap biosorbent in removal of dye.

**Keywords:** Brilliant Green, *Cordia myxa*, thermodynamic.

# MINIMIZATIONS OF CHEMICAL WASTE GENERATED BY LABORATORY ACTIVITIES IN UNIVERSITIES AND COLLEGES Sajid A. Malak

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#### **ABSTRACT:**

Most laboratory activities in teaching institutes, contribute to the generation of small quantities of waste. Contaminated chemical bottles; contaminated broken (or damaged) laboratory glass; mercury-contaminated, broken (or damaged) thermometers; synthesis of organic compounds and derivatives, disposal of acids, metals, solvents enter into the environment. This article explore the ways to minimize this problem and identifies possible solutions, directives and guidelines; in order to minimize the generation of waste; waste minimization procedures such as reduce, reuse and recycling of chemicals.

**Keywords:** Laboratory chemical waste, Minimization of waste

# SYNTHESIS OF DIQUATS THEIR RESOLUTION AND DERIVATIZATION

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### **ABSTRACT:**

Diquats are introduced by scientists from Imperial Chemical Industries as powerful herbicides in 1958.<sup>1</sup> Diquat and paraquat are very useful an electron deficient systems building blocks for supramolecular chemistry<sup>3</sup> as well as in design of electron-transfer systems. Diquats have helical geometry and robust configurational stability to allow studies of the two separate enantiomers with opposite helicity. We synthesized the various diquat having an active methyl group and derivatized by Knovenagel condensation reaction towards the helical/helicene like diquat dyes. The synthesized diquats and their derivatives were characterized by Mass, IR and <sup>1</sup>H/<sup>13</sup>C-NMR analysis.

# IONIC LIQUID: GREEN CATALYST FOR SYNTHESIS OF FLUORINATED SPIRO [INDOLE -THIAZOLIDONES] AS AN ANTIHISTAMIC AGENT.

# A.V. Shinde

Maharaj J P Valvi Arts Commerce & amp; Shri V.K.K. Science College, Dhadgaon,

# **ABSTRACT:**

Ionic Liquid containing nitrogen based organic reaction 1- Methyl imidazolium and inorganic anion such as BF 4, PF 6 used as a catalyst and reaction medium for synthesis of florinated Spiro [3H Indole-3, 2 thiazolidine] in 90-95 % yield One —pot enviermentally, benign Micro wave induced technique synthesized compound have been evaluated for their ability to inhabit contraction induced by histamine on gunia pig ileum.

**Keywords:** Ionic Liquids, Catalyst, Synthesis, Green Approach.

# SYNTHESIS OF (THIAZOL-2-YL)DIAZENYL) DERIVATIVES FROM 2-AMINO THIAZOLE AND THEIR SOLVATOCHROMISM STUDY

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#### **ABSTRACT:**

We report herein synthesis of substituted (thiazol-2-yl)diazenyl) derivatives in two steps. Initially diazotization of 2-aminothiazole was takes place in presences of sodium nitrite, then this diazotized product undergo coupling reaction with substituted aromatic compounds, yield azo dyes in good yield. We increased the yield by adjusting the pH to 7-8 by addition of base. The synthesized dyes were characterized by IR and <sup>1</sup>H-NMR spectral analysis. The UV-visible study shows effects of solvent polarity on the maximum absorption wavelength. The results shows that most of the dyes showed positive solvatochromism, when the solvent is changed to a more polar solvents. All synthesized dyes were screened for their antibacterial activity against *Escherichia coli*, *Pseudomonas aeruginosa*, *staphylococcus aureus* and *Salmonella typhi* by well diffusion method. Some synthesized dyes shows good antibacterial activity. The synthesized dyes were found to give various shades of red.

**Keywords:** Azo dyes, coupling reaction, diazotization, solvatochromism.

# SOLVENT FREE SYNTHESIS OF BIS (INDOLYL) METHANES USING GRINDING TECHNIQUE

## Rakesh P. Chaudhari1, Ganesh R. Chaudhari1, Bharti P. Koli1

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### **ABSTRACT:**

Tartaric acid was found to be a mild, efficient acid catalyst in electrophilic substitution reaction of indoles with carbonyl compounds to afford the corresponding bis(indolyl)alkanes in excellent yieldsusing Tartaric acid as a catalyst. In the present work, various electrophilic substitution reactions of indoles with several aldehydes were carried out using grinding technique. The present method is the mild reaction conditions, short reaction times, easy work-up, high to excellent yields, The products were characterized by FT-IR, 1H-NMR

## NANOSENSORS: CHEMICAL AND ENVIRONMENTAL APPLICATIONS

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**Abstract:** A device that can detect changes in the physical stimulus and convert them into signals that can be measured or recorded is called a sensor. Nanotechnology has inherent potential in the production of unique materials, new equipment and systems with molecular level control and the usage of material features in nanometer scales. Therefore, the use of Nano-sized objects such as a variety of nano material to detect the various chemicals and pollutants in the environment is the part of interest. The various metal oxides are studied as the nano sensors. The utility of the said nano sensors is attracting the researchers in the present era.

Keywords: Mixed metal oxides, Nano material, Material Chemistry, Synergism

# PHYSICO CHEMICAL STUDY OF AGRICULTURAL WASTE WATER AFTER TREATMENT OF SOME NATURAL ADSORBENTS

#### Patil Madhuri Satish

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## **ABSTRACT:**

In present situation water issue become a big problem. Large number of water bodies gets polluted. Discharge of agricultural waste in natural water bodies are harmful to flora and fauna of aquatic system as well as human life, It is necessary to perpetuate the cleanness and purity of water bodies. In this study agricultural waste water is treated with natural adsorbents like dried powder of cotton plant branches and dried powder of banana leaves and peels. Physio-chemical parameters of agricultural waste water were analysed before and after treatment with adsorbents and record very good results

**Keywords:** Agricultural waste water, Adsorbents, Water Pollution.

# SYNTHESIS OF BIOLOGICAL ACTIVE MACROCYCLICTETRADENTED METAL COMPLEXES

# Pradip B Wagh

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## **ABSTRACT:**

Macrocyclic compounds have attracted increasing interest owing to their mixed soft-hard donor character, versatile coordination behavior and in the understanding of molecular processes a series ofmacrocyclic complexes is synthesized by template condensation of Isatin and 1,3-diaminopropane in ethanolic medium in the presence of transition metal ions such as Co(II), Ni(II), Cu(II) and Zn(II) all chlorides salts used for synthesis of metal complexes. The synthesized complexes have been characterized with the help of molar conductance, magnetic susceptibility measurements, IR, electronic, and <sup>1</sup>H-NMR Spectroscopic technique. On the basis of studies made a six coordinated octahedral geometry has been proposed for all these complexes. The synthesized complexes were also screened for their antifungal activity against human fungal pathogen Candida albicans and most of them have been found to exhibit significant antifungal activity.

Keywords: Macrocyclic, Antifungal, Isatin.

# SYNTHESIS OF SOME SUBSTITUTED 3,4-DIHYDROPYRIMIDIN2(1H)-ONES WITH ANTI-BACTERIAL AND ANTI-FUNGAL ACTIVITIES

## R. R. Dharamkar\*, Y. K. Meshram

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### **ABSTRACT:**

A simple and economic synthesis of 3,4-dihydropyrimidin-2(1H)-ones by using phosphoric acid. Phosphoric acid has been found to be mild and efficient reagent for synthesis of dihydropyrimidones and its corresponding thio-analoges in refluxing ethanol.

**Keywords:** One pot synthesis, Phosphoric Acid, Dihydropyrimidones.

## APPLICATION OF SCHIFF BASE AS A FLUORESCENCE SENSOR

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## **ABSTRACT:**

Schiff bases are obtained from condensation of primary amines with carbonyl compounds. There are several applications of Schiff bases which include not only antimicrobial or antifungal activity but also in chemo-sensor for detection of metal ions. In this review article the applications of Schiff bases in fluorescence sensor are summarized.

eywords: Schiff base, fluorescence and sensor	

# Effect of molecular weight of PEG on the cloud point of Polyoxyethylene (10) oleyl ether (Brij-97). - A Thermodynamic approach

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<sup>1,2</sup> Department of Chemistry, Kisan Arts, Commerce and Science College, Parola, Dist- Jalgaon. (425111).

## **ABSTRACT:**

The cloud point (CP), temperature for aqueous solution of Polyoxyethylene (10) oleyl ether (Brij-97) and in the presence of added polymer PEG<sub>4000</sub> and PEG<sub>6000</sub> at various concentrations was investigated. It is observed that CP of Brij-97 decreases with increasing concentration. At fixed concentration of surfactant the cloud point of Brij-97-PEG<sub>4000</sub> mixed system shows decreasing order/trend with increasing concentration of PEG<sub>4000</sub>, while the cloud point of Brij-97-PEG<sub>6000</sub> mixed system shows increasing trend with increasing concentration of PEG<sub>6000</sub>. The thermodynamic parameters of these pure and mixed systems are determined at different additive concentrations. The standard Gibb's free energy, enthalpy and entropy were found to be positive for both PEG<sub>4000</sub> and PEG<sub>6000</sub>. The overall clouding process was endothermic and non-spontaneous. The CP of pure Brij-97 was found to be decreased from 56.2 to 54.5 with increasing concentration of Brij-97 from 0.5% to5%. The cloud point of mixed system shows decreasing trends with increasing concentration of Brij-97.

**Keywords:-** Cloud point, nonionic surfactant, phase separation model thermodynamic parameters.

## REVIEW: A MEDICINAL HERB ZIZYPHUS XYLOPYRUS (RETZ) WILD

## Nilesh A. Mahajan and A.P.Rajput

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### **Abstract:**

Ayurveda is the system of traditional medicine. The origin of Ayurveda is found in Upveda and Atharvaveda. Ayurveda is the traditional way to cure diseases without any side effect. In western countries people are beware of side effect of synthetic drugs. Traditional medicine plays an important role in our daily life. Zizyphus species have lots of medicinal importance. Zizyphusxylopyrus is one of the species of Zizyphus genus have medicinal importance, like antidiorrhoeal, antidepressant, potentsedative, in treatment of liver problems weakness etc. Phytochemical study of this plant showed the presence of alkaloids, glycosides, carbohydrates , steroids and sterol ,tannins, proteins and amino acid ,triterpenoids , and flavonoids. The present review is the way to know the phytochemistry and traditional uses of the species Zizyphusxylopyrus.

**Keywords:** ZizyphusXylopyrus.

# A REVIEW ON IN VITRO APPROACHES TOWARDS POMEGRANATE IMPROVEMENT IN INDIA

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### **ABSTRACT:**

Pomegranate (*Punicagranatum* L.) is highly delightful edible fruits which mostly grown in the tropical and subtropical regions of the world. Pomegranate not only cultivate as edible fruit but also for pharmaceutical and ornamental uses. During the past years, protocols for *in vitro* propagation were established for number of fruit trees. For woody fruit trees, conventional breeding techniques find quite difficult, slow and time consuming. Therefore it is an emerging prerequisite to establish efficient protocols for regeneration and somatic embryogenesis which is applicable in genetic transformation technology. In present review article we try to focus on *in vitro* approaches towards improvement of pomegranate using most significant and reputed research articles which were published in University Grant Commission (UGC) approved journals.

# INVASION OF ALIEN PLANTS IN VADODA RANGE FOREST OF MUKTAINAGAR, DISTRICT JALGAON.

# Geeta P. Patil and Sandeep T. Barde

Department of Botany,

Arts, Commerce and Science College, Bodwad.Dist. Jalgaon.

#### **ABSTRACT:**

According to present exploration in Forest area of Muktainagar, about 78 alien angiospermic plant species were identified which belonging to 30 different families and 65 genera. Nativity, life form, and habit were also recorded. About 23% of the invasive alien species contributes from Africa (18) and 10% from Tropical America. About 97% alien species areDicot and only 3% are Monocot. Family Asteraceae and Poaceae contributed more species (08 species each), followed by Papilionaceae .Herbsare dominant (41 species) than Trees (22 species), followed by shrubs and climber.

**Keywords**: Vadoda range forest, alien species, angiospermic plant.

# EFFECT OF ANNONA SQUAMOSA AND ZIZIPUS XYLOPYRUS ON MORTALITY OF SITOPHILUS ORYZAE

Vaishali Mali<sup>1</sup>, Kajal R.Patil<sup>1</sup>, Geeta P. Patil<sup>2</sup> and Chetankumar.T.Sharma<sup>3</sup>.

- 1. Arts, Commerce and Science College, Bodwad
- 2. Department of Botany, Arts, Commerce and Science College, Bodwad.
- 3. Department of Zoology, Arts, Commerce and Science College, Bodwad

### **ABSTRACT:**

Losses of stored grain due to infestation by storage pest are the most serious problem today. It causes huge economic loss. India experiences several losses in storage of food grains which is 10 to 20 percent as per the records. Present investigation shows the mortality of store grain pest *Sitophilus oryzae* by using leaves and seeds Powder of *Annona squamosa* and leaves powder of *Zizipus xylopyrus*. Treatments with different concentrations show significant mortality of insect pest.

Key-words- Sitophilus oryzae, Annona squamosa and Zizipus Xylopyrus

## DIVERSITY OF MACROFUNGI FROM NORTH MAHARASHTRA-I

S. Y. Patil

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### **ABSTRICT:**

Macrofungi (Mushrooms) are an important and integral component of the ecosystem. Mostly mushrooms are fleshy, sub fleshy or sometimes leathery, umbrella like sporophore, saprophytic in nature. The survey was conducted in rainy and winter season of 2015 in 3 different places which included Mountains, Grassland and Forest areas of North Maharashtra. A total number of fourteen species belonging to eight genera were recorded viz. Amanita longistriata, Amanita phalloides, Clavicorona pyxidata, Cyathus striatus, Dacropinax spathularia, Daedalea quercina, Daedalopsis confragosa, Geastraum triplex, Lenzites betulina, Leucocoprinus luteus, Inonotus tomentosus, Laccarria campanella, Panellus stipticus, Polyporous curtipes, Ramariopsis kunezi and Ramaria sp. were found rarely.

**Keywords:** Mushrooms, *Ramaria*, North Maharashtra.

### PLANT INVASION IN INDIA AS REVEALED FROM TANTRASARAH

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### **ABSTRACT:**

Exotic and adventive plant species form important components of native flora. Their occurrence in foreign lands is a result of human migration and daily necessities of life. They ultimately turn into an integral part of human culture prevalent in the area of invasion. Some such plant taxa have been gleaned from the ancient Sanskrit script *viz.*, Tantrasarah. The text of Tantrasarah explains employment of various plant species or their products in different rites and worships. The present authors could notice total 24 exotic species belonging to 24 genera and 17 angiospermic families. They belong to different continents, countries and geographical regions of the world including America. Majority of them (18 species) are cultigens exclusively. Only three species run exclusively in wild. Another three species are either cultigens or wild ones. These taxa are conceived as a reflection of Indian contacts with other parts of the world directly or indirectly.

Keywords: Plant Invasion, India, Tantrasarah.

### LEAF ANATOMICAL STUDIES IN SOME RUBIACEAE-II Patil, C. R. and D. A. Patil

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#### **ABSTRACT:**

The present paper of leaf anatomical studies of hitherto unstudied14 species belonging to nine genera of the family Rubiaceae. The leaves are dorsiventral and mostelyhypostomatic except *Naucleaparvifolia*. The endomorphic features of leaf are epidermis, hypodermis,mesophyll cells,ground tissue, vascular supply, occurrence of collenchyma and sclerenchyma, apart from, cells inclusion like rosette crystals, granular matter, crystal sand and tannin. All these anatomical features are employed inidentification of the species investigated. They are discussed comparatively and their taxonomic value is pointed out.

**Keywords:** Leaf Anatomy, Taxonomy, Rubiaceae

## EFFECT OF STORAGE CONTAINERS ON THE PERCENT INCIDENCE OF ASPERGILLUS SPECIES

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#### **ABSTRACT:**

The aim of present study is carried out to know the effect of storage containers on the percent incidence of *Aspergillus* species. Storage containers play an important role in preventing or multiplying the original seed mycoflora in stored seeds of different crops. In order to confirm the seeds were stored in irrespective containers at room temperature for the period of three months. The seeds were analyzed for their load of *Aspergillus* species by using Potato Dextrose Agar plates. Different *Aspergillus* species, isolated from seeds of jowar and groundnut. The seeds of both the crops (jowar and groundnut) showed maximum incidence of *Aspergillus* species that were stored in the tin boxes followed by polythene bags while, the seeds stored in cloth bags and gunny bags yielded less number of *Aspergillus* species.

**Keywords**: Aspergillus sp, PDA plates, Storage containers, Storage seeds

### BIOCHEMICAL CHARACTERIZATION OF THE PLANT EXTRACT OF $ACHYRANTHUS\ ASPERA\ L.$

#### Shaikh Firdos Jamal Shafiuddin

H.J. Thim college of Arts and science, Mehrun Jalgaon.

### **ABSTRACT:**

Phytochemical and biochemical screening of *Achyranthus aspera L.*(Aghada) belonging to family Amaranthaceae , was carried out for its medicinal value. A qualitative phytochemical analysis was done for the presence of bioactive molecules alkaloids flavonoids, glycosides, phenols, quinone , saponin ,tannin, terpenoids. Nutrients protein , total carbohydrates, total phenols reducing and Non - reducing sugars were assessed using standard procedures. Different observation revealed the presence of biologically active compounds and nutrients .

**Keywords**: Medicinal plants, Achyranthus aspera, Biochemicals, bioactive molecules

## DIVERSITY OF GENUSCLOSTERIUM NITZSCH FROM MANGRUL DAM OF JALGAONDISTRICT ,MAHARASHTRA S.A.Patil

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#### **ABSTRACT:**

The present communication deals with themorpho-taxonomic enumeration of 15 taxa of genus ClosteriumNitzsch belonging to 07 species,07 varities and 01 forma from Mangrul dam (21<sup>0</sup> 19' 45"  $72^{0}$ Maharashtra. N: 15" E) Jalgaon district, Of these Closteriumacutum(Lyngb.)Breb.var. linea(Perty) West et West, Cl. dianaeEhr. brevius(Wittr.) Petkoff, Cl. dianaeEhr.var. pseudodianae(Roy) Krieg, Cl. moniliferum(Bory) Ehr. var. malinvernianiforme(Gronble) Kossinskajaare reported for the first time from Maharashtra and ClosteriumdianaeEhr. var. dianaef. dianae added to Indian desmid flora. Rests are reported for the first time from this dam.

Keywords: Closterium, Diversity, Taxa, Mangrul dam, Maharashtra

PHYTOCHEMICAL EVALUATION AND CHROMATOGRAPHIC SCREENING OF LEAF AND BARK METHANOLIC EXTRACT OF DALBERGIA LANCEOLARIA SUBSP. PANICULATA (ROXB.) THOTH.

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#### **ABSTRACT:**

Dalbergia lanceolaria subsp. paniculata (Roxb.) Thoth. is a very important medicinal plant in the deciduous forest. It is large tree belongs to the family Fabaceae and is commonly called asDandusa, Kaurchi, or Sondhara. Whole parts of the plant are rich in secondary metabolite, which impart miraculous medicinal uses to the plants.

Phytochemical evaluation using different test showed that the presence of alkaloids, carbohydrates, proteins, flavonoids, glycosides, triterpenoids, saponins, steroids, tannins and starch in bark and leaves methanolic extracts of the plant. This study also estimated the Rutin and Qurecetin present in the methanolic leaf and bark extract of the Dalbergia lanceolaria subsp. paniculata (Roxb.) Thoth. through HPTLC method. The solvent system used for the quantification of the flavonoid was Toluene: Ethyl acetate: Formic acid (6: 4: 0.8 v/v/v). The max Rf values of quercetin and rutin were 0.49 and 0.04 respectively and compared with leaves and bark extract. The unique HPTLC fingerprint analysis of leaves and bark extract of the plant can be used as a diagnostic tool for the correct identification of the plant. The present HPTLC profile is useful in differentiating the species from the adulterant and also a good estimator of genetic variability in plant populations.

**Keywords**: Dalbergia lanceolaria subsp. paniculata (Roxb.) Thoth., Phytochemical evaluation, HPTLC analysis,

### OCCURRENCE AND INTENSITY OF POWDERY MILDEW ON SOME PLANTS OF FAMILY PAPILIONACEAE (KHANDESH REGION)

### Vasantrao P. Pawar<sup>1</sup>And Shivaji.P.Magar<sup>2</sup>

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#### **ABSTRACT**

Powdery mildew fungi have been known to heavy loss to various crops every year throughout India and across the world. To study on a through survey was carried out of Khandesh region, District Jalgaon,viz Jalgaon, chalisgaon, Pachora, Bhadgaon, Jamner, Bhusawal, Yawal, Raver, Chopada and Amalnerin order to assess the incidence and severity of the disease on some plants of family Papilionaceae. It was revealed from the study that the plants such as *Lablab purpureus*, *Cajanus cajan*, *Vignamungo*, *Vigna radiata* and *Vigna unguiculata* showed moderate to mild infection in different localities of Jalgaon District whereas *Lablab purpureus*, *Cajanus cajan*, *Vignamungo*, *Vigna radiata* and *Vigna unguiculata* showed mild infection in different localities of district Jalgaon during the study. However, no infection was observed in some areas of the Khandesh region on plant of family papilionaceae surveyed during the study. The overall study reveals the need for the management strategies at the early stage before the disease can spread widely.

Keywords: -Powdery mildew fungi; occurrence; Papilionaceae; Khandesh region

### OCCURRENCE OF PERFECT STATES OF THREE POWDERY MILDEW DISEASE IN CULTIVATED PLANT

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Shri V. S. Naik Arts, Commerce and Science College, Raver.

#### **ABSTRACT:**

Perithecial production in Three fungi of powdery mildew, Spherothecafuliginea, Erysiphecichoracearum and Leveillulataurica is reported on Lageneria siceraria, Cucurbitapepo and Trigonella foenum – graceum. respectively from Yawal (M.S.) These studies showed that, powdery mildew caused by Spherothecafuliginea on Lageneria siceraria, Erysiphecichoracearum on Cucurbitapepo and Leveillula taurica is Trigonella foenum – graceum.

**Keywords-**Fungi, Plant

### TAXONOMIC STUDY OF GENUS SCIRUPS LINN. FROM BEED DISTRICT OF MAHARASHTRA

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#### **ABSTRACT:**

The genus is comparatively large comprising more than 200 species distributed throughout the world and represented by over 25 species in India (Clarke, 1893). In the present study morphological characters, illustrations and key for identification of 8 species of genus *Scirpus* Linn.from Beed District of Maharashtra State have been studied.

Keywords: Scirpus, Taxonomic study, Illustrations, Beed district, Maharashtra

### ALGAL GENUS *OEDOGONIUM* LINK FROM NORTH MAHARASHTRA,INDIA

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### **ABSTRACT:**

The present paper deals with the description of 13 taxa of algal genus Oedogonium Link belong to class Chlorophyceae (green algae) collected from North Maharashtra region.during year 2018. From these 13 taxa, 4 taxa viz. O. bharuchae, O. indicum, O. lautumniarum f. gracilis and O. smithii var. narayanpurenes are reported for the first time from Maharashtra, Seven taxa viz. O. abbreviatum var. abbreviatum, O. lautumniarum f. lautumniarum, O. laeve, O. macrandrium var. hohenackerii, O. pseudopyriformae, O. rosenvingii and O. subintermedium are additions to Oedogonium from India and two taxa viz. O. ellii sps nov. and O. obpyriformae sps nov. are new to Science.

### ETHNOBOTANICAL STUDIES OF SELECTED MEDICINAL PLANTS IN BHUSAWAL TALUKA

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#### **ABSTRACT:**

An Ethnobotanical survey was conducted in Bhusawal Taluka. Ethnobotanical studies are often significant in revealing locally important plant species especially for crud drug. Based on information from rural people, about ninety-five species with medicinal properties were collected. The detailed information about these identified medicinal plants taxa namely Hemidesmus indicus, Dragia volubilis, Achyranthes aspera, Tylophora asthmatica, Pergularia demia, Plumbago zylanicum, Lantana camera, Vernonia cinerea, etc. and their brief description along with ethnobotanical information such as family, local name, part used and preparation of medicinal plant treatment.

**Keyword**: Ethnobotanical survey

### A PRELIMINARY SURVEY ON ALGAE (EUGLENINEAE AND MYXOPHYCEAE) FROM SEWAGE FROM BHUSAWAL CITY.

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### **ABTRACT:**

Algae are natural inhabitants of water and serves as indicators of water quality in various ways. Sewage water contains 1-6 times more of organic matter which enhance the growth of algae. Present communication includes Most of taxa of Euglenineae and Cyanophyceae collected from sewage water, moist soil near to sewage pools/puddles / nallies of Bhusawal city. Present communication includes genera like *Euglena* Ehr., *Phacus* Dujardin, *Microcystis* Kuetz., *Chroococcus* Naeg., *Gloeocapsa* Kuetz., *Aphanocapsa* Naeg., *Aphanothece* Naeg., *Synechocystis* Sauv. *Merismopedia* Meyen, *Arthrospira* Stizenb., *Spirulina* Turpin em. Gardner, *Oscillatoria* Vaucher, *Phormidium* Kuetz., *Lyngbya* Ag., *Nostoc* Vaucher, and *Anabaena* Bory.

**Keywords:** Algae, sewage, Bhusawal, Euglenineae and Myxophyceae

### PHYTOCHEMICAL, FOURIER TRANSFORM INFRARED SPECTROPHOTOMETER (FTIR) AND GAS CHROMATOGRAPHY: MASS SPECTROSCOPY (GCMS) STUDIES ON *ISCHAEMUM PILOSUM* (KLEIN.EX WILLD.) WT

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#### **ABSTRACT:**

Ischaemum pilosum (Klein.ex Willd.) Wt belonging to the Poaceae Family locally known as "Kunda" commonly distributed in crops as a weed. Many medicinal uses have been reported in literature for this plant with much folk information. The current work deals for finding actual acts and facts, ingredients in plant with phytochemical technique for scientific validations. Preliminary phytochemical test for secondary metabolites has been done to extracted leaves powder in different solvent by standard protocols to detect the presence of Alkaloids, Phenols, Terperns, fatty acids etc. Proximate analysis, UV, FTIR and GC-MS test has been done as per well referenced protocols on the leaf extract of Ischaemum pilosum. The results revels very positive significance data from all phytochemical analysis, proximate analysis, UV Visible spectral peaks, FTIR peach starch and Functional groups and found various phytochemicals are detected in GC-MS peaks, which farther gives structure by library matched and found that included, Phenol, ,4-bis(1,1-dimethylethyl), Pentanoic acid, 5-hydroxy, 2,4-di-tbutylphenyl esters, E-15-Heptadecenal, 1-Hexadecanol, n-Hexadecanoic acid, l(+)-Ascorbic acid 2,6-dihexadecanoate, Palmitic anhydride, Cycloeicosane, Cis-13-Octadecenoic acid and Triacontane like compounds were recorded.

**Keywords:**Ischaemum pilosum, Phytochemistry, Fourier Transform Infrared spectrophotometer (FTIR) and Gas Chromatography: Mass Spectroscopy (GCMS)

### STUDIES ON AGRICULTURAL HYPHOMYCETOUS FUNGI FROM SOILS OF JALGAON, MAHARASHTRA

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- # Department of Botany, Late. Shankarro Gutte Gramin Arts, Commerce and Science College, Dharmapuri, Tal. Parli, Dist. Beed, MS, India.

### **ABSTRACT:**

The work emphasis on diversity and role of hyphomycetous fungi in agricultural soil's of Jalgaon. Agricultural soil is one of the important habitats for microorganisms like fungi, bacteria, algae and nematodes, etc. The filamentous fungi are the major contributors to the soil biomass. It has found that more number of genera and species of fungi exists in soil than any other environment. This work will elaborate the same. In the Jalgaon agricultural soil is deep gray in color very fertile and it responds very well to irrigation. The loamy soil consists of deposits of river slits. The major crops produced in the district are banana and cotton. The other crops are chick pea, pigeon pea, sorghum, wheat, groundnut and sugarcane. The citrus and guava also an important crops of Jalgaon. Microscopic examination of soil has shown that fungi are present both as spores and mycelium. Study of incubated soil plates stained with lacto-phenol cotton blue has shown that most of the colonies develop from soil particles.

Keywords: Hyphomycetous fungi, Agricultural soil, fungal Diversity

### THE ETHNO-MEDICO STUDIES OF PLANTS OF TRIBAL AREAS FROM YAWAL –PAL WILDLIFE SANCTUARY AREA IN SOUTHERN SATPUDA RANGES

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### **ABSTRACT:**

The Ethno-medico studies of 60 important medicinal plants from Yawal-pal wildlife sanctuary area were carried out during the period of 1991 to 1995. These medicinally important plants are utilized in curing the several chronic diseases viz., wounds, ailments in stomach, severe headache, patients suffering from diabetes, scorpion bites, diarrhea, kidney stones, ulcer, paralysis etc. During this investigation period the survey was done andfound out that, the main tribal people inhabiting in the region are dhanke, dhavale, mankar, nahile, pavara, talawi pavara, talawi bhil and data was collected from these tribals after discussion.

Keywords: Ethno-Medico, Tribals, Chronic Diseases, Wildlife Sanctuary

# NANOTECHNOLOGY APPLICATIONS: CURRENT AND FUTURE NANOTECHNOLOGY APPLICATIONS NANOMATERIALS, NANO-ELECTRONIC NANO-MEDECINE AND BIO NANOTECHNOLOGY APPLICATIONS

<sup>1</sup>Sachin J Nandre, <sup>2</sup>Sanjay S Sonawane and <sup>3</sup>Rajendra R Ahire

#### **ABSTRACT:**

Currently, nanotechnology is described as revolutionary discipline in terms of its possible impact on industrial applications. Nanotechnology offers potential solutions to many problems using emerging nanotechniques. Depending on the strong interdisciplinary character of nanotechnologythere are many research fields and several potential applications that involve nanotechnology. *In this section we provide a brief overview about some nanotechnology and nanoscience current developments*. Obviuosly it can't provide an exhaustive report of the developments in nanoscience and nanotechnologies in all scientific andengineering fields.

We are going to consider three main categories (broad nanotechnology categories).

**Keywords** – Nanowire, carbon tubes nanopowder

### STUDY OF CU- ZNSE THIN FILM SCHOTTKY BARRIER JUNCTIONS J. V. DHANVIJ

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### **ABSTRACT:**

The samples were prepared on glass substrates by sequential thermal evaporation process at a base pressure of 10<sup>-5</sup> torr. Schottky barrier junctions of Al-doped n-type Zinc selenide (ZnSe) thin films have been fabricated with Cu on glass substrates. The current-voltage characteristics of Cu- (n) ZnSe/Al junctions show non-linear behavior with rectifying characteristics. From the current-voltage characteristics, the parameters such as ideality factor, saturation current density and barrier height were measured. The rectifying nature of I-V Characteristics with soft reverse current of the fabricated structures indicated the existence of barrier between the films of Cu and (n) ZnSe .Both types of junctions were found to possess a high ideality factor. The barrier height of the junction was found in the range of 0.804 to 0.809 eV. It is seen that heat treatment of the device slight lowers the diode ideality factor and increases the barrier heights.

**Keywords:** Thermal evaporation, Barrier height, Diode ideality factor, Schottky barrier

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### "OPTICAL AND PHOTOCONDUCTIVITY PROPERTIES OF CD<sub>x</sub>PB<sub>1-x</sub>S THIN FILMS"

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D.D.S.P. Arts Comm. and Science College, Erandol, Dist: Jalgaon Maharashtra, India. **Abstract:** 

In present work  $Cd_xPb_{1-x}S$  thin filmswere grown by simple solution growth technique. Prepared thin films were analyzed by different techniques. The effect of x composition on the d optical band gap studiedwere conducted using UV spectroscopy. The results are discussed and interpreted.

**Keywords:** Cd<sub>x</sub>Pb<sub>1-x</sub>S thin films, chemical bath deposition and electrical properties

### XRD, FTIR AND SEM STUDIES OF GEL GROWN BARIUM TARTRATE CRYSTALS

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#### **ABSTRACT:**

In the present research work barium tartrate (BaC<sub>4</sub>H<sub>6</sub>O<sub>6</sub>) single crystals have grown successfully by sol gel technique at room temperature. The optimum growth conditions were optimized by varying various parameters such as pH, concentration of the gel solution, setting time of the gel solution and concentration of the reactance. The test tubes were used as crystallization vessels while silica gel as a growth media. The grown crystals are characterized by XRD, FTIR and SEM. The crystalline nature of grown crystal was confirmed using powder X-ray diffraction techniques. The functional groups present in the crystals were identified using FTIR analysis. The scanning electron microscope reveals the morphology of the crystal having tetragonal structures.

Keywords: Gel technique, Barium Tartrate, XRD, FTIR, SEM

### GAS SENSING PERFORMANCE OF NANOSTRUCTURED NIO THIN FILMS

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#### **ABSTRACT:**

A simple and inexpensive spray pyrolysis technique was employed to deposit nanostructured NiO thin films from nickel chloride hexadihydrate solution on to the glass substrates heated at 350 °C. The sensing performance of the films was tested for various hazardous gases. The sensor showed high gas response (S = 678 at 250 °C) on exposure of 10 ppm of NO<sub>2</sub>. Its response time was short ( $\sim$ 8 s) and recovery was also fast ( $\sim$ 12 s). The results are discussed and interpreted.

**Keywords:** Nanostructured NiO, NO<sub>2</sub> gas sensing, response and recovery time

### MICROSTRUCTURE ANALYSIS OF THIN FILMS AS GAS SENSOR APPLICATION

### Sharad B. Patil a and R. H. Bari b\*

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#### **ABSTRACT:**

Nanostructure thin films were prepared by spray pyrolysis technique. Structural, elemental composition and microstructure properties were investigate by using XRD, EDAX and TEM. The NO2sensing performance of these films were systematically studied. The instant response time and fast recovery are the main features of this sensor. The results are discussed and interpreted.

Keywords: Spray Pyrolysis, nanostructured thin films, analytical technique, gas response

### BIOGAS SENSING PERFORMANCE OF NANOSCALE METAL OXIDE POWDER

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### **ABSTRACT:**

In this work nanoscalemetal oxide powderprepared by simple co precipitation technique. Prepared nanoscale metal oxide powder was characterized by different analytical techniques. Nanoscale powder exhibits the biogas sensor with fast response and recovery time. The results are discussed and interpreted.

**Keywords:** Nanoscale, metal oxides, Biogas, Sensing Mechanism.

### STUDIES ON NANOCRYSTALLINE TERNARY THIN FILMS

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<sup>a</sup>Department of Physics, Z. B .PatilArts, Com. and .Science. College, Dhule Maharashtra, India. **ABSTRACT** 

Nanocrystalline ternary thin films grown by CBD technique. Different characterization techniques were employed for this study. For the confirmation of the material, surface morphology and elemental composition of the thin films prepared thin films analysed by X-ray diffraction (XRD), Field emission scanning electron microscopy (FESEM) and EDAX The results are discussed and interpreted.

Keywords: CBD technique, Analytical techniques,

## COMPARATIVESTUDY OF THERMAL STABILITY OF STRONTIUM DOPED BARIUM TARTRATE CRYSTALS BY SILICA GEL TECHNIQUE

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#### **Abstract**

In the present research work, the single crystals of strontium doped barium tartrate (SrBaC<sub>4</sub>H<sub>4</sub>O<sub>6</sub>) crystals were grown by single diffusion technique. The optimum growth conditions for (SrBaC<sub>4</sub>H<sub>4</sub>O<sub>6</sub>) crystals were optimized by varying various parameters such as pH of the gel solution, gel concentration, gel setting time, concentration of the reactance. The platy shaped crystals were obtained in silica gel at room temperature. The effect of Strontium (Sr) doping on the barium tartrate (BaC<sub>4</sub>H<sub>4</sub>O<sub>6</sub>) has been studied. The XRD pattern shows that (SrBaC<sub>4</sub>H<sub>4</sub>O<sub>6</sub>) crystals are polycrystalline, having orthorhombic structure. The SEM pictures reveal that these crystals are grown by layer deposition. Thermo Gravimetric Analysis (TGA) curvesshow the percentages of the weight loss in the different stages of decomposition of barium tartrate. Differential Scanning Calorimetry (DSC) curvesshow the phase transformation due to loss of water molecules and formation of stable anhydrous (SrBaC<sub>4</sub>H<sub>4</sub>O<sub>6</sub>) crystals.

Keywords: Sol gel technique, Strontium, Barium, XRD, SEM, TGA, DSC.

## STUDY OF OPTICAL AND STRUCTURAL PROPERTIES OF SNO<sub>2</sub> THIN FILMS GROWN ON GLASS SUBSTRATE BY CHEMICAL BATH DEPOSITION TECHNIQUE

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### **ABSTRACT:**

Tin Oxide (SnO<sub>2</sub>) thin film was deposited on a glass substrate by simple and economical chemical bath deposition technique at the temperature between 55 to 60 °C. The X-ray diffraction of the deposited film showed that the film posses amorphous nature. The energy dispersive analysis of X-rays of the thin film confirmed that synthesized thin film is stoichiometric. The grain size in the annealed film, obtained from the XRD analysis was 1.10 nm. The optical band gap determines from the optical absorbance spectrum analysis. The scanning electrons microscopy of the thin film showed that the substrate is well covered in deposited film. The pH of the deposited film was adjusted using ammonia. The deposition time was varied between 60 to 70 minutes.

**Key-words:** CBD, Thin Films, characterization etc.

### GAS SENSING PERFORMANCE OF PURE AND RUTHENIUM MODIFIED CR<sub>2</sub>O<sub>3</sub> THICK FILMS

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**Abstract**- Thick films of pure chromium oxide  $(Cr_2O_3)$  were prepared by screen-printing technique. Pure  $(Cr_2O_3)$  thick films were almost insensitive to reducing gases. The surfaces of thick films of pure  $Cr_2O_3$  were modified by dipping them into 0.01 M aqueous solution of Ruthenium chloride  $(RuCl_3 \cdot 5H_2O, 0.01M)$  for different intervals of time followed by firing at  $500^{0}C$  for 30 min. Firing results into the oxidation of RuCl<sub>3</sub> additive into RuO. The characterizations and the gas sensing properties of pure and surface activated  $Cr_2O_3$  thick films were investigated. The surface activated  $Cr_2O_3$  (20 min) thick films were observed to be sensitive to 1000 ppm of LPG at  $250^{0}C$ . The effects of microstructure, gas response, selectivity, response time and recovery time were studied and discussed.

**Keywords-**RuO-activated Cr<sub>2</sub>O<sub>3</sub>, , thick film, LPG sensor, gas response

### ROLE OF COBALT DOPING ON THE GAS SENSING PROPERTIES OF IN<sub>2</sub>O<sub>3</sub> THICK FILMSENSORS

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### **Abstract**

Pure and Cobalt doped (Co-doped) In<sub>2</sub>O<sub>3</sub>thick film sensors were synthesized via Flux route and doping by dipping technique, respectively. Scanning electron microscopy, X-ray diffraction, and energy-dispersive X-ray spectroscopy were used to characterize sensor morphology and structure. Carbon monoxide (CO) sensing performance analysed in the range of temperatures and concentrations showed that Co-doped In<sub>2</sub>O<sub>3</sub>sensors exhibit significantly enhanced sensitivity and rate of performance with the response and recovery times of 5 s and 10 s, respectively. Combined with excellent selectivity and linearity, these properties make the fabricated sensors a good candidate for practical CO sensing.

**Keywords:**Co-doped, doping by dipping, sensors, sensitivity, response time, recovery time

## SYNTHESIS OF A-FE<sub>2</sub>O<sub>3</sub> NANOPARTICLES BY USING A SIMPLE TEMPLATE-FREECHEMICAL METHOD AT LOW TEMPERATURE K.G.Kolhe<sup>1</sup>,Dipak Bauskar<sup>2</sup> and H.M.Baviskar<sup>3</sup>

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#### **ABSTRACT:**

The  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> nanoparticles without any templates were obtained by calcinations of the  $\alpha$ -FeOOH precursor in air at 200°C for 3 h. The precursor of  $\alpha$ -FeOOH was successfully synthesized by a simpletemplate-free and inexpensive chemical method at low temperature (40°C). In a typical synthesis procedure, the precipitating agent CH<sub>3</sub>COON a which allows hydroxylions during the reaction and FeSO<sub>4</sub>, 7H<sub>2</sub>Oused as the source of Fe<sup>2+</sup>. The formation of as-synthesized  $\alpha$ -FeOOH and  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> after calcination was confirmed by X-ray diffraction technique (XRD), The XRD pattern of the calcined sample in Fig. demonstrates that the formation of single-phase  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> anoparticle shave a wide range of applications.

**Keywords:**  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>nanoparticles.

## POLY(o-ANISIDINE)-BARIUM TITANATE NANOCOMPOSITEFORMATION BY CHEMICALMETHOD K.G.Kolhe

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#### **ABSTRACT:**

Nowadays conducting polymers are keeping a mile stone importance in the area of material science. Also organic/inorganic nanocomposites have been a center of scientific interest andactive research due to their excellent potential for widespread technological applications. In recent yearsdifferent nanocomposites of conducting polymers with oxide particles have been synthesized. These nanocomposites are known for their wide applications in the field of gas and humidity sensors. In the present work, poly(o-anisidine)-barium titanate (POA-BaTiO<sub>3</sub>) nanocomposite was synthesized, by an *in situ* chemical polymerization of oanisidine in the presence of BaTiO<sub>3</sub>nanoparticles. The resulting nanocomposite was characterized by X-ray diffraction (XRD) which attributes that electrolyte pH significantly affects the synthesis of POA-BTO nanocomposite.

### IMPACT OF MANGANESE IONS ON THE GEL GROWN BRUSHITE CRYSTALS

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#### **ABSTRACT:**

The impact of manganese on the growth of urinary brushite crystals was studied using the spectroscopic techniques, which includes optical microscopy, SEM, FTIR and EDAX. It was found that, manganese ions transform the morphology of brushite crystals from rectangular plate shaped crystals to star shape, T shape dendratic crystals. In SEM, the layer by layer growth pattern, focus the influence of manganese ions on the growth of brushite crystals. In FT-IR spectroscopy, the intense reflection was only observed at lower frequencies, while very low intensity reflection peaks was in higher frequency region. The observed changes in the vibrations were due to the impact of manganese ions. EDAX revealed that the grown crystals was mixed composition.

Keywords: Urinary Crystals, Doped Brushite, Agar Gel, Single diffusion.

## EFFECT OFIRON DOPING ON STRUCTURAL, MICROSTRUCTURAL AND GAS SENSING PROPERTIES OF NANOCRYSTALLINE ZNSNO<sub>3</sub> THIN FILMS PREPARED BY SPRAY PYROLYSIS TECHNIQUES

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#### **ABSTRACT:**

This work presents the effect of iron doping on the structural, microstructural and electrical properties of zinc stannate (ZnCl<sub>4</sub>·5H<sub>2</sub>O, 99.9% pure, Merck made, Germany) thin films, prepared by spray pyrolysis method. The thin films were prepared by doping ferric chloride (FeCl<sub>3</sub>·4H<sub>2</sub>O, 99.9% pure, Merck made, Germany) having three different small volume ratios: 1 ml, 2.5 ml and 5 ml, in order to study the iron doping dependence of the structural and microstructural properties of thin films. These properties were characterized with X-ray diffraction (XRD) and Transmission Electron Microscope (TEM). In our study, XRD pattern indicates that ZnSnO<sub>3</sub>has a perovskite phase with face exposed hexahedron structure. The 2.5 vol % iron doped ZnSnO<sub>3</sub>thin films exhibited better gas response and rapid response—recovery characteristics to hydrogen. Further, it has been shown the gassensitivity of the iron doped ZnSnO<sub>3</sub>gas sensor depends upon its grain size.

**Keywords:** pervoskite oxide, effect of iron doping, hydrogen sensing properties

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### PERFORMANCE OF GAS SENSORS OF NANOCRYSTALLINE THIN FILMS

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### **ABSTRACT:**

An attempt is made to focus on the gas sensors which are applicable and used inelectronic systems for detection of toxic and harmful gases to date. Among the environmentally hazardous gases namely; NO<sub>2</sub>,CO<sub>2</sub>, NO, N<sub>2</sub>O, H<sub>2</sub>S, CO, NH<sub>3</sub>, CH<sub>4</sub>, SO<sub>2</sub> the CO<sub>2</sub>; NO<sub>2</sub>are the most dangerous gases in terms of Threshold Limit Value (TLV) of 3 ppm. Therefore the appropriate gas sensors have been investigated to measure the low concentration limit of each hazardous gas. Semiconducting metal oxides are the good candidates due to their low cost, high sensitivity, fast response, relatively simplicity of use and ability to detect a large number of gases.

Keywords: Sensors, environmentally hazardous gases, gas sensing performance parameter.

### PHOTOLUMINESCENCE AND PHOTOCONDUCTIVITY PROPERTIES OF NANOCRYSTALLINE SEMICONDUCTOR THIN FILMS

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#### **ABSTRACT:**

In this work we havefocus on the effects of the concentration of a base (NH $_3$ ) and a complexing agent (triehtylamineTEA)) on the photoconductive characteristics and growth mechanism of nanocrystalline CdS thin films synthesizedby using the chemical bath deposition technique. Highly photoconductive nanocrystalline CdS thin films were successfully grown on glass substrates at 70  $^{0}$ C. Photoluminescence studies showed that all nanocrystalline CdS thin films we studied had asignificant amount of sulfur vacancies and that those vacancy energy states were responsible forthe high photoconductivity values.

**Keywords:**CBD technique,Photoluminescence,Photoconductivity.

## GROWTH AND CHARACTERISATION OF NICKEL OXALATE CRYSTAL S.U.Patil,

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### **ABSTRACT:**

Nickel oxalate crystals were grown using agar-agar gel. The crystals were grown by single diffusion gel techniques using agar gel. The growth was studied under different parameters. The parameters like size of test tubes, gel and reactants concentration, aging period, found affecting the growth. The nucleation was controlled by using such parameters to get optimum conditions. Such grown crystals were found in different shape and size. The surface morphology, Optical microscopy and IR was studied.

**Keywords:** Crystal growth, Gel method, Agar gel, Optical microscopy, IR.

### USE PATTERN OF LIBRARY COLLECTION AND SERVICES BY STUDENTS: A CASE STUDY OF LAW COLLEGE, OSMANABAD

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**ABSTRACT:** This study investigates user satisfaction of law students of Law College, Osmanabad (Maharashtra). The study focuses on information required by the students and satisfaction level, what resources they require, methods for locating information, library collection, services and facilities available in the library. A descriptive survey method was used & the data was gathered through the questionnaire completed by 180 students, the users' opinions and suggestions have been collected in this study for data collection process.

**Keywords:** Users study, Collection Development, Library Services, Best Practices, College Library, LAW, INFLIBNET and N-LIST.

### MARKETINGSTRATEGY OF ENGINEERING COLLEGE LIBRARY SERVICES IN AURANGABAD

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### **Abstract:**

The concept of marketing not only involves the buying and selling for financial gain but also the achievement of organizational objectives successfully. The present paper defines the concept of Engineering College Library, Marketing, Marketing Management process and Marketing Engineering College Library Services. In the authors of this article attempts to touch the Engineering College Library system for marketing his library & library services. This paper also deals with the eight Engineering College libraries data including collection, staff, library timing & collection etc.

**Keywords:** Aurangabad, Market Segmentation, Market, Marketing Mix, Marketing, Engineering College Library Services & Engineering College library.

### USE OF MOBLIE APP's IN LIBRARIES Mr.Gajbe Sumedh Shamrao

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#### **ABSTRACT:**

In the 21<sup>st</sup> century plays a vital role in the ICT Technologies. Now days the ICT impact on Libraries are unpredictable. We are already come over with digital library, Virtual libraries, OPAC, Consortiums and so on. In this way the mobile application is also playing important role in our library professionals. This paper deals with the mobile application in the 21<sup>st</sup> century libraries.

**Keywords:**ICT Technologies,ICT impact on Libraries, Digital library, Virtual libraries, OPAC.

### Digital Reference Service in libraries of NIT Colleges in India: A Study Amol Dewaji Khobragade\* and Dr. Pranali B. Gedam\*\*

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#### **ABSTRACT:**

Reference and information services have always been the main component of library services. They provide personalized assistance to library users in accessing suitable information resources to meet their needs. Digital reference service is an emerging trend of traditional reference service. Easily accessible digital reference service has become one of the hallmarks of the library and information services. The paper highlights how new visage of traditional reference service is developing as a natural solution to keep pace with comprehensive technological environment. It discusses about the basic concepts, elements of digital reference service and give in detail modes, the advantages, limitations, and some details regarding various digital reference services.

### **Keywords**

Reference, Reference service, Digital, Digital reference, Digital Service, Digital reference services, information communication technology (ICT).

### MAPPING OF E-INFORMATION LITERACY IN SBNM INSTITUTEOF POLYTECHNIC, AURANGABAD

### Chavan Vishakha D, Madansing D. Golwal

Librarian, SBNM Institute of Polytechnic, Aurangabad, <a href="mailto:pathrikarsr@gmail.com">pathrikarsr@gmail.com</a> <sup>1</sup>Law College, Osmanabad (Maharashtra), mgolwal4@gmail.com / 09423392801 **ABSTRACT:** 

We are living in the information age. Information is the basic requirement for every human activity and it is important as food, air and water. Information in itself has no value, but its value lies in its communication and use. Information Literacy (IL) is the key competency for the Information age. The Library has a leadership role in the development of information literate, the effective embedding of information literacy programmes within the mainstream of the learning process require close co-operation between all stakeholders. Information Literacy is increasing important in the present contest of the information explosion and concomitant uncertainties about it authenticity, validity, and reliability. The present paper is to highlight the concept of literacy, Information literacy and to specify objective, hypothesis, limitations, methodology, analysis and finding of the study.

**Keywords**: Literacy, Information Literacy, SBNM Institue of Polytechnic, Aurangabad, Internet and Information and Communication Technology (ICT).

### EVALUATION OF OPAC USE IN J. T. MAHAJAN COLLEGE OF ENGINEERING, FAIZPUR: A SURVEY

### <sup>1</sup>Yogaraj S. Firke, <sup>2</sup>Dr. Govardhan P. Aute

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**Abstract:** The paper deals with the application and uses' of online public access catalogue (OPAC) in J. T. Mahajan College of engineering library affiliated to Dr. BabasahebAmbedkar Technological University, Lonere (DBATU). A questionnaire was developed and distributed randomly to 240 students. Users returned 192 completed questionnaires for analysis. The main objective of study is to find out the satisfaction of user about OPAC service. It is not unexpected that the library user turns toward the OPAC. When they searching as it is what they are familiar with and what they know.

Keywords: OPAC, Libraryuser, IT.

### **Exploring the New Emergence in Library Resources Management and Services: A Study**

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### **ABSTRACT:**

In the 21<sup>st</sup> century the libraries has changed their all activities and moved from traditional to modern era. In the traditional era due to the lack of technology the publication was very few and for limited person the information was written on stones, cloths, metal wall's, clay tablets, animal skin, etc. and preserved on so as to get information about society, culture. The Library profession is constantly changing since the past two decades due to emerging trends, technologies and techniques which are used in libraries for information handling and providing services to users. Due to this change, libraries are also shifting their collections, services, facilities and practices based on e-resources. Information Technology changed the scenario and eliminated the weaknesses of traditional libraries to the maximum level. This paper focused on the impact of Information and Communication Technology on library resources management and services through the Web 2.0 tools.

**Keyword:** ICT, Library resources management, Library Automation, Information Technology, Library Software packages, Web 2.0 tools.

### USE OF SOCIAL NETWORKING SITES AMONG THE STUDENTS OF SCIENCE SHRI V. S. NAIK COLLEGE, RAVER: A STUDY

### Mukhyadal B. G. Librarian

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#### **ABSTRACT:**

This study was carried out to investigate the use of social networking sites among the undergraduate Science faculty students of Shri V. S. Naik Arts, Commerce and Science College Raver. In the context of today's electronic media, social networking sites have come to mean individuals, using the Internet and web application to communicate in previously impossible ways. This is largely the result of a culture-wide paradigm shift in the uses and possibilities of the internet itself.

**Keywords:** -ICT, Social Networking Sites, Social Media, Web 2.0

### Citation Analysis of Ph.D. Thesis in Chemistry Submitted to Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

### Dr. Chandrakant Satpute

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### **ABSTRACT:**

For The present study covers 61 theses, each thesis with an average citation of 12078 in North Maharashtra University, Jalgaon. Including the all citations the various types of citation for example Books, Reports, Government Publication, Thesis, Research Articles etc. It has been described variously as significance impact utility and effectiveness, but no one has succeeded in defining it in a more tangible term.

**Keywords**: Citation analysis, Bibliometric, Ph.D. theses, Chemsity, Authorship pattern, Ranking of journal

### **Automation of Academic Libraries: Barrier and its Solution**

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#### **ABSTRACT:**

The main objective of this paper is to find out the important of library automation in this information technology environment. It can be help to the save the time, space and man power of administrative and library user. The benefits of Library automation are both to the library staff and the users as it level of job stress on the staff timely provision of up to date information to the users. These papers are to portrait the level library automation and reveal the problems faced by the librarians. The technology, both hardware and software would be expensive and unaffordable. The cost of hardware and software depends on the level of automation. From the user point of view cataloguing system is most important and also forms the base for other library activities. This paper disused on, meaning of automation, what is library automation, barriers for library automation and its solution.

**Keyword:** Automation, Academic Libraries, Library Automation, Problems for library automation, Solutions.

### BIBLIOMETRIC STUDY OF NANOTECHNOLOGY, SCIENCE AND APPLICATION (2014-2018)

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ABSTRACT: A bibliometric analysis of the Nanotechnology, Science and Application journal for the period of 2014-2018 has been conducted. The present study deals a bibliometric analysis of 34 papers published in the Nanotechnology, Science and Application Journal on SCOPUS during the period 2014- 2018. Data is collected and analyzed by using the MS-Exel software. The study focused on various aspects: such as document types, of publications and citations, yearwise, authorship pattern, institutions involved, most prolific authors of the journal. The study revealed that most of the papers (85.29%) of papers were contributed by multiple authors. United States is the top producing country with 1 Rank publications of the total output. All the articles were published in English language. The study demonstrates and elaborates on the various aspects of the Journal, such as its distribution of article by year, authorship patterns, distribution of contributions by institution, and geographical distributions of authors. **Keywords:** Nanotechnology, Bibliometric Study,

### APPLICATION OF WEB 3.0 TECHNOLOGY FOR LIBRARY

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### **ABSTRACT**

The WWW is more and more useful application for application communication. Most people today cannot conceive of life without the internet. Web 3.0 known as a third generation of the web. It refers to a third generation of internet- based services that collectively comprise what might be called the intelligent web such as those using semantic web, micro formats, natural language search, data- mining, machine learning, recommendation agents and artificial intelligence technologies. Purpose of the study is to understand web 3.0 technologies, and how it applicable for to increase to library services.

**Keywords:** Web 3.0, Web 3.0 features, semantic web, Resource Description Framework (RFD), Artificial Intelligence, Technologies.

### PUBLICLIBRARY IN APPLICATIONTECHNOLOGY

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### **ABSTRACT:**

Discuss the importance of computerization of public libraries. Explains in detail the essential factors involved in the scope of computerization of different library functions using advanced information technology. Suggests also the networking of all public libraries. Examines different types computer networks along with network topology and security measures to be followed with examples of computer networks in India.

**Keywords: Public Library, Importance of Computerization, Information Technology** 

### ARTIFICIAL INTELLIGENCE

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### Subhash Kisan Jogdande Research Scholar

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#### **ABSTRACT:**

In this paper an attempt has been made to trace the different applications of ArtificialIntelligence to the libraries. The various concepts such as expert system, natural languageprocessing, pattern recognition and robotics and their application to the libraries haveenumerated. The advantages and disadvantages of Artificial Intelligence have also been discussed.

**Keywords:** Artificial Intelligence, Expert System, Natural Language Processing, Pattern Recognition and Robotics

### BIBLIOMETRIC ANALYSIS OF COLLEGE AND RESEARCH LIBRARIES

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### **ABSTRACT**

The Present Study is based on the Bibliometric analysis of 262 research article publication in 5 volume appeared in College and Research Libraries Journal during the periods of 2014 to2018. The analysis covers mainly the number of article, authorship pattern, degree of collaboration, author productivity, geographical distribution of author, length of papers, distribution of citation etc. The results show that out of total 262, single author contributed 97(37.02%) article, while the 165 (62.98%) articles are contributed by joint authors. It has been revealed that most of the contributors are from Australia that is United States that is 486 (86.94%). The study also shows the majority Article 166 (63.36%) is published in the 5 year during 2014 to 2018 in this journal.

**Keywords:** Bibliometric, College and Research Libraries, Authorship Pattern

### USE OF INTERNET AND ELECTRONIC RESOURCES IN SCIENCE FACULTY STUDENTS, ART COMMERCE AND SCIENCE COLLEGE NAVAPUR: A STUDY

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#### **ABSTRACT:**

The present paper deals with the use of internet by the student their purposes of using internet and time they spent on internet for collecting information concerned with their topics the along with this the paper will also focus the methods followed by the students for using E-journal, which search engine most of the time preferred by the students and which form of book j Journal electronic or printed form is preferred by the students further it will also fours the methods full-text E-Journal preferred storage and File format for saving-journal Preferred by the students. Lastly the paper will fours the percentage of students who are satisfied with internet facility provided by the college.

**Keywords:** -Internet, ICT, E-Journal, E-resources, Navapur College.

## TECHNOLOGY ADVANCEMENT AND ITS ADOPTION: A BOSTER FOR SERICULTURE DEVELOPMENT AND EXPANSION (SPECIAL REFERENCE TO BURHANPUR DISTRICT OF MADHYA PRADESH)

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#### **ABSTRACT:**

Sericulture a agro cottage industry has proof itself in the traditional and non-traditional states of India for providing a sustainable income and employment to the rural farmers, labours and artsians. As its long process from agriculture sector to industry has responsible for such a huge economic growth for small villages and its peoples and has restricted the migration of rural people and a remedy for improving their livelihood. The study is based on primary data on on a sample size of 50 sericulturists in Burhanpur district of Madhya Pradesh. The present paper analyse the knowledge level of improve technology and their adoption level of this advanced technology in sericulture business. As technology has always witness in improving the productivity and production in terms agriculture as well as its allied activities like sericulture. So the study enlight on variable like (Full, Partial and No) knowledge level and adoption level of sericulturists in surveyed region.

Keywords: Sericulture, knowledge level, adoption level of improved upgraded technology.

### IMPACT OF TECHNOLOGY ON AN INDIAN AGRICULTURE SCENARIO

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### **ABSTRACT:**

This paper examines about India's technology participating in Indian agriculture sector. Under the technology schemes being implemented by the Indian Agricultural Department, the facilities given to the farmers can be changed from time to time, as per the requirement, so that the departments of the departments should keep in touch with it. This strategy for increasing agricultural production with the help of technology successfully in many of the more favourable wheat' and rice, producing areas of India, Technological based agricultural is better as compare to Traditional Agriculture. This paper has been told about new technologies for farming.

Keywords: Fertility & Sowing, traditional farming, Technological based agricultural

### A STUDY ON DIGITAL MARKETING PROCESSES AT DIGITALLY INSPIRED MEDIA

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#### **ABSTRACT:**

The article talk about digital marketing and internet marketing. Majority of the population thinks that digital marketing and internet marketing are the same but they are not. As digital marketing is gaining a lot of importance as a marketing technique, it is important to understand the difference between the two of them. It is necessary to understand that they might be related to each other but there is a subtle difference between the two of them and this is what the article explains. The article concludes by stating that internet marketing is only a subset of digital marketing and the scope of digital marketing is far beyond internet marketing. The article gives certain examples of different channels under digital marketing, and also elaborates about some of the channels under internet marketing. Overall it explains the concept of digital marketing and internet marketing in detail, which would help in understating the difference between digital marketing and internet marketing.

**Keywords:** Channels, Digital marketing, Internet marketing, Online marketing, Offline marketing.

### पावरलूम उद्योग में सूचना एवं संचार प्रौद्योगिकी का महत्वः बुरहानपुर जिले के परिदृश्य में डॉ. राजेश काले

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संक्षेप

प्रस्तुत शोध पत्र में **पावरलूम उद्योग में सूचना एवं संचार प्रौद्योगिकी का महत्व : बुरहानपुर** जिले के परिदृश्य में विषय पर शोध किया गया है। अध्ययन से स्पष्ट होता है 21वीं सदी सूचना व संचार प्रौद्योगिकी के विकास की सदी है। आज विज्ञान की प्रगति अपने चरम पर है, आज का युग सूचना एवं संचार प्रौद्योगिकी का युग है। मनुष्य का मस्तिष्क कितना सोच सकता है, यह उसकी पराकाष्टा है। कम्प्यूटर इंटरनेट, ई—मेल, ई—कॉमर्स, मोबाईल, समाचार पत्र—पत्रिकाओं, रेडियों, दूरदर्शन, टेलिफोन, पुस्तकों और न जाने कितनी ऐसी प्रणालियाँ है, जिन्होंने मनुष्य के जीवन को न केवल सुगम बनाया है अपितु श्रम शक्ति के समूचित अधिकतम उपयोग का मार्ग प्रशस्त किया है।

भारत वर्ष की हृदयस्थली के मध्यप्रदेश में एक सुन्दर छोटा—सा शहर बुरहानपुर के नाम से विख्यात है। कृषि क्षेत्र में भी शहर का प्रदेश के व्यवसाय में महत्वपूर्ण योगदान है, यहां कि प्रमुख फसलें कपास, गन्ना एवं केला है। व्यवसायिक दृष्टि से इस क्षेत्र को कपास का गुलदस्ता भी कहा जा सकता है। कपास पर आधारित पावरलूम उद्योग, बुरहानपुर ताप्ती मिल्स, जिनिंग, साइजिंग, प्रोसेस एवं ब्लिचिंग फैक्ट्री कार्यरत है। विगत वर्षो में तीव्र गति से न केवल भारत ही अपितु देश की समस्त प्रादेशिक सीमाओं पर सूचना एवं संचार प्रौद्योगिकी का महत्व दृष्टिगोचर हो रहा है। अध्ययन से प्राप्त सूचना के आधार पर बुरहानपुर के पावरलूम उद्योग के साथ ही विभिन्न उद्योगों पर सूचना एवं संचार प्रौद्योगिकी का महत्व स्पष्ट दिखाई दे रहा है।

### भारत में एम—कॉमर्स का भविष्य एवं चुनौतियाँ डॉ.विनोद काले

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संक्षेपः प्रस्तुत शोधपत्र के अन्तर्गत भारत में एम-कॉमर्स का भविष्य एवं चुनौतियाँ विषय पर शोध किया गया है। अध्ययन से स्पष्ट होता है कि पिछले कुछ वर्षों में भारत में वायरलेस तकनीक का अपार विकास हुआ है, खासकर मोबाईल फोन आधारित तकनीक इतनी बढ़ गई है कि यह केवल अपने दोस्तों एवं रिश्तेदारों को कॉल करने के लिए ही नहीं बल्कि सभी वित्तीय आवश्यकताओं को पूरा करने के लिए एक सशक्त माध्यम साबित हुआ है। अब मोबाईल फोन तकनीक ने एम-कॉमर्स नामक एक नये चलन का मार्ग प्रशस्त करने के लिए अवसर प्रदान किया है। इसमें अन्य उपकरणों के साथ वित्तीय लेनदेन किये जाते है, जहाँ बाजार में तुरंत एवं सुरक्षित लेनदेन द्वारा ग्राहक एवं व्यापारी दोनों को ही सुविधा होती है। वास्तव में मोबाईल कॉमर्स (एम-कॉमर्स) भावी व्यवसाय का प्लेटफार्म है। यह इलेक्ट्रॉनिक माध्यम से व्यवसाय करने की मोबाईल आधारित तकनीक है, यद्यपि कुछ लोग यह मानते है कि एम-कॉमर्स एप्लीकेशन के निर्माण से अधिक कुछ भी नहीं है, जबकी सच्चाई यह है कि एम-कॉमर्स वस्तुतः एक वैश्विक सूचनात्मक एवं प्रत्यक्ष वितरण प्रणाली है जिससे हर उस क्रेता को माल का विक्रय किया जा सके, जो इस प्रकार की मोबाईल आधारित तकनीक से माल का क्रय करना चाहते है। इस प्रकार एम-कॉमर्स एक प्रकार का वितरण तंत्र है जिसमें विपणनकर्ता सूचना तकनीक तथा मोबाईल नेटवर्क के माध्यम से व्यावसायिक संबंधों अर्थात विक्रय का सुरक्षित संचालन करता है।

शब्द संकेत- एम-कामर्स, एम-भूगतान, वायरलेस, नेटवर्क, बैंकिंग, वित्तीय, सेवाएँ।

### भारत में डिजिटल मार्कें टिंग की दशा और दिशा सुशील माहेश्वरी सहायक प्राध्यापक सेवा सदन महाविद्यालय, बुरहानपुर (म.प्र.)

### संक्षेप

प्रस्तुत शोध पत्र के अंतर्गत भारत में डिजिटल मार्केटिंग की दशा और दिशा पर शोध किया गया है। अध्ययन से स्पष्ट होता है कि वर्तमान युग डिजिटल युग है। डिजिटल मार्केटिंग दो शब्दों से मिलकर बना है डिजिटल + मार्केटिंग। डिजिटल का अर्थ मार्केटिंग से है जबकी मार्केटिंग का अर्थ विज्ञापन से है अर्थात ऐस माध्यम जिसमें कम्पनियाँ अपने उत्पाद की मार्केटिंग इलेक्ट्रॉनिक मीडिया (माध्यम) के द्वारा करती है, जो की पारम्पिक तरीके से काफी अलग है। यहां डिजिटल मार्केटिंग को अलग—अलग मार्केटिंग कम्पनियाँ तैयार कर उसे किसी कम्पनी के उत्पाद को विक्रय करने में सहायता करती है। वास्तव में मार्केटिंग कम्पनियों को यह देखना होता है कि किसी विशेष उत्पाद को संभावित ग्राहक तक कैसे पहुंचाया जाये तािक उन्हें सुविधापूर्वक उन वस्तुओं के बारे में सम्पूर्ण जानकारी मिल सकें। तािक ग्राहकों को दो भागों में विभाजित किया जा सके, प्रथम जो वस्तु को पसंद करते है और द्वितीय जो वस्तु को पसंद नहीं करते। उन्हें भी यह देखना होता है कि किस प्रकार के उत्पाद को लोग ज्यादा ऑनलाईन सर्च करते है और किस प्रकार के वस्तुओं को खरीदते है। इन डिजिटल कम्पनियों द्वारा मोबाईल मैसेज, मोबाईल ऐप, ईमेल आई. डी., फेसबुक, इलेक्ट्रॉनिक बिल भुगतान और टेलिविजन चैनल के माध्यम से ग्राहकों को उत्पाद के बारे में सम्पूर्ण जानकारी प्रदान की जाती है तािक वे उसे देखकर खरीदने का निर्णय ले सकें। उस प्रकार डिजिटल मार्केटिंग क्रेता एवं विक्रेता के मध्य एक प्लेटफार्म का निर्णय करता है।

शब्द संकेत – डिजिटल, मार्केटिंग, उत्पाद, इलेक्ट्रॉनिक, ग्राहक, कम्पनियाँ।

### INDIA'S CHALLENGES IN WASTE MANAGEMENT

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### **ABSTRACT:**

The key to efficient waste management is to ensure segregation source and resource recovery. Most recyclable waste ends up in a dump yard due to the lack of efficient waste management. Waste management rules in India are based on the principles of "sustainable development", "precaution" and "polluter pays". These principles mandate municipalities and commercial establishments to act in an environmentally accountable and responsible manner—restoring balance, if their actions disrupt it. The increase in waste generation as a by-product of economic development has led to various subordinate legislations for regulating the manner of disposal and dealing with generated waste are made under the umbrella law of Environment Protection Act, 1986 (EPA). Specific forms of waste are the subject matter of separate rules and require separate compliances, mostly in the nature of authorizations, maintenance of records and adequate disposal mechanisms.

### NON-CONVENTIONAL WATER RESOURCE: AN INDIGENOUS CUE FOR THE PREVAILING WATER CRISIS

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#### **ABSTRACT:**

India is currently facing suicidal water crisis due to overexploitation of groundwater, a conventional resource which needs to be conserved. Sustainable practices for the use of nonconventional water resource have to be identified. One such approach has been elaborately established in the Taittiriya Aranyaka of Rgveda (Rig-Veda) wherein the term, 'Vaaivashvaah', describes that 'vaayu', the wind serves as the 'ashva', the horse; in other words, 'The air is the carrier of water' (Vaaivashvaa Rashmipatayah, T.A.1.1.2). Another statement 'yaa antarikshe bahudhaa bhavanti' as in verse T.A.1.1.2 means 'that which is available in plenty in the ether'gives us the clue that the water vapours absorbed remains in the ether, the water cycle. A leaping step from the brink of an inescapable crisis to a breakthrough involves the trapping of water from moisture content in the atmosphere. This could be accomplished with an Air-Conditioner Machine or Air Handling Unit (AC / AHUs) with minimum energy expenditure and is also inexpensive. Collection and reuse of AC Condensate Water (ACW) starting from commercial to domestic building could be the large scale solution to trim down the increasing demand for portable water which would also save substantial amount of energy. The quantum of water condensate acquired from 6 study sites, installed with an AC of 105.5 tonnage capacity in total was monitored, treated and analyzed with the objective of reusing it as potable water. On the whole, a total amount of 3,32,465 litres of condensate water was collected in 21 months of study period from all the study sites with an average AC operation of 9 hours per day. The challenge relies on its treatment which includes parameters such as physico-chemical and biological as per IS: 10500 2012 drinking water specifications. Analysis revealed, raw ACW showed very high microbial load of >300 CFU/ml and also unpleasant odour, taste and the presence of four volatile organic compounds (1,3 dichlorobenzene, 1.4 dichlorobenzene, Benzene and Ethyl benzene) exceeding permissible limits (>5 µg/L). Based on various treatment methods explored, the combinations of UV and carbon filter showed efficient results that reduced the microbial load to <1 CFU/ml and the volatile organic compounds to < 5 µg/L. The quantity of treated condensate water (3,32,465 litres) recovered during the study period would serve as the daily drinking water requirement for 152 adults, as per WHO standards (3L/day) for a period of two years. On the other side, it not only saves water, rather 22.164 kw/h of energy could be saved and also 19.283 kg CO<sub>2</sub> kwh of Carbon-dioxide emission could be reduced by minimizing the ground water extraction. Moreover, in terms of direct cost cutting, a sum of Rs. 4,98,700 could be saved as per the cost of commercial purified packaged drinking water. Further, the collection and reuse of ACW enhances the green building systems at both scorching summers and shortened winters even though India posses an escalating population as the water recovery is not less than the drinking water requirement at its peak. Therefore, collection and reuse of ACW after appropriate treatment could be a sustainable way of conserving conventional water resource, thereby which the concept of rich wasting water and the poor unable to afford it can be revolutionized.

**Key words:** Non-conventional water resources, water crisis, air-Conditioner, AC condensate water, ACW and green building.

### VERMISTABILIZATION: A FUTURISTIC KEY FOR THE BIORESTORATION OF TEXTILE EFFLUENT POLLUTED SOIL

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#### **ABSTRACT:**

Deterioration in the soil characteristics owing to the discharge of textile effluent on to the environment poses a serious threat to the farming community and ecosystem due its influence on soil fertility and plant growth. Reinstatement of soil properties could be accomplished by vermistabilization, a biorestoration technique. In the present study, textile effluent polluted soil (PS) was admixed with cow dung (CD) at different ratios and a favorable amendment treatment was finally identified according to the results. An epigeic earthworm species, Eudrilus eugeniae, was selected for vermistabilization due to its rapid growth and reproduction characteristics. Phytotoxicity studies were conducted to evaluate the utility of biorestored soil for agronomic applications and *Phaseolus radiates* (green gram) was chosen for the same. Physico-chemical analysis revealed the potential of vermistabilized soil for further applications. Among the treatment groups, PS and CD in the ratio of 1:1 yielded satisfactory results for sustainable use. Increasing trend was observed with TKN (77%), TP (87%), TCa (57.3%) and Mg (27.2%) whilst TOC (59.67%), C:N ratio (76.23%) and EC (38.66%) values were found to be decreasing upon vermistabilization. Above results substantiated the mineralization and stabilization of inorganic nutrients essential for plant growth. Decline in heavy metal concentration (Fe – 28.55% and Cr – 90.47%) ensured the safety of the vermistabilized product. Germination parameters such as shoot and root length (16.88% and 12.39%), wet and dry biomass of shoot and root validated the efficiency of vermistabilization for biorestoration. Thus, the current study highlighted the competency of vermistabilization as a biorestoration method for textile effluent polluted soil.

**Keywords:** Textile effluent, soil pollution, biorestoration and vermicomposting.

### DISPARITY IN THE LEVEL OF LITERACY A SPATIO-TEMPORAL CASE STUDY OF JALGAON DISTRICT MAHARASHTRA STATE (2001-2011)

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#### **ABSTRACT**:

The quantity and quality is a significant element of population. Quality of population is depends on social status and Literacy is one of key socio-economic progress meter of modern society and important aspect of Indian society. In world scenario, spread of literacy is generally associated with importance of modern civilization such as modernization, urbanization, industrialization, communication and commerce. "A person who can both read and write with understanding in any language has been taken as literate by the Indian census". An attempt has been made to study the spatio-temporal pattern of literacy in Jalgaon districts of the Maharashtra State. According to the 2011, Census of India, average literacy rate of India is 74.04 % and average literacy rate of Maharashtra State is 82.91 %. In Maharashtra, especially in Jalgaon District, there is significant variation in rural - urban literacy rate and male - female literacy rate due to cities attract large number of male for education as well as job opportunities. The male-female literacy disparity as well as rural-urban literacy variation is witness to be highly variable throughout the district. This study is to investigate the tahsil-wise disparity of rural - urban literacy in Jalgaon District during 2001 to 2011. The data source for this paper is from district statistical handbook and census. The methodology adopted is mainly statistical analysis where the rural- urban distribution of literacy has been measured with the help Disparity Index. There is a significant difference in literacy rates between males and females in the both rural and urban area of the tahsils in Jalgaon district.

**Keywords**: Spatio-Temporal, Literacy, Disparity, Rural-Urban, Male-Female

### MINERALOGICAL STATUS OF SOIL COLLECTED FROM KAUTHAL VILLAGE USING XRDMETHOD

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#### **ABSTRACT:**

Soil samples were collected from soil fieldKauthal village of Shahada Tehsil of Nandurbar District of Maharashtra, India. The mineralogical identification of soil samples were carried out by using X-Ray Diffraction (XRD) technique. The XRD results revealed the presence of various minerals. XRD Method is non-destructive and can be used in the detection of mineralogical composition.

Keywords: XRD, Mineral, Renewable, Diffraction, Soil.

### RECENT EMERGENCE IN ENVIRONMENTAL AND GLOBAL CLIMATE CHANGE

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#### **ABSTRACT:**

The effects of global warming include its effect on human health, the observed and projected increased frequency and severity of climate related impacts will further effects on human health. Global Human Environmental Threats , Experiment Challenge , Direct Human Effects, Heat deaths, Adverse weather events, Costs of extreme weather events Climate Change and Other Environmental Issues, Associated Climate Changes and Surprises, Flooding, Spread of Waterborne Diseases, Climate Change and Food Production, Effects on Plant and Animal Communities, Emission of co2 gas etc these are the environmental health issues.

Keywords: Recent Emergence, Environmental, Climate Chang

### LANDUSE LANDCOVER CHANGE DETECTION OF DEHRADUN TEHSIL USING LANDSAT DATA

#### **Chatur Pandurang Gadhe**

Assist. Prof. of Geography Shri.V.S.Naik Arts, Commerce And Science College Raver <u>Email.cpgadhe@gmail.com</u> Mob.No.9021962262

#### **ABSTRACT:**

Since the development of Remote Sensing (RS) techniques and invention of powerful software like Geographical Information System (GIS), data from Earth sensing satellites has become vital in mapping the Earth's feature. In situations of rapid and often unrecorded LULC change, observations of the earth from space provide objective information of human utilization of the landscape. Over the past years, RS andGIS are now providing new tools for advanced ecosystem management. Viewing the Earth from space is now crucial to the understanding of the influence of man's activities on his natural resource base over time. The collection of remotely sensed data facilitates the synoptic analyses of Earth system function, patterning, and change at local, regional and global scales over time; such data also provide an important link between intensive, localized ecological research and regional, national and international conservation and management of biological diversity.

**Keywords:** Remote Sensing, Geographical Information System, Earth sensing

### MODERN TRENDS AND PERSPECTIVE IN MATHEMATICS

### **Sujit Patel**

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Assitt. Professor Physics in Seva sadan college, Burhanpur Contact no. 7581944494, E-mail – bharatrraval93@gmail.com

#### **ABSTRACT:**

The main aim of this paper is to study the recent trends in present scenario of mathematics and role of mathematics in science and society. Mathematics always play an important role in developing science and society and it has been seen in the recent past also. I think no subject can escape from influence of mathematics. Now a day's mathematics is playing vital role in Bio-science.

**Keywords:-** Trends in mathematics, New tools, New forms of mathematical activity.

### FLOW IN TUBES OF LINEARLY VARYING CROSS SECTION WITH PERMEABLE WALL

### S.R. Gaikwad

Department of Mathematics, Arts, Comm& Science college, Yawal, India

### **ABSTRACT:**

In this paper, we study the low Reynolds number steady flow in a Linear tube of varying cross section with permeable wall. The fluid is assumed to be incompressible and Newtonian. The wall assumed to be rigid and permeable. The wall permeability is assumed to be a function of axial distance and obeys Starling's Law. A numerical solution for two point initial value problem for pressure is obtained by using perturbation method. The expressions for wall shear stress, pressure drop and volumetric flow rate are evaluated numerically.

#### PROPERTIES OF SEPARATION AXIOMS IN INTUITIONISTIC FUZZY TOPOLOGICAL SPACES

### S. G. Dapke

H. J. Thim College of Arts and Science, Mehrun, Jalgaon.

**ABSTRACT:** The aim of this paper is to study separation axioms  $T_0, T_1, T_2$  in an intuitionistic fuzzy topological space. We have defined  $\varphi$  and  $\varphi$  \*functions. Using these functions, we have introduced separation axioms generalized form of separation axioms in an intuitionistic fuzzy topological space. We have studied some interesting characterizations and basic properties of these separation axioms. We provided examples to give the relation between these separation axioms

### AN ECOLOGICAL AND ENVIRONMENTAL STUDY OF THE ENGLISH ROMANTIC VERSES Vinod Pralhad Chaudhari,

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#### **ABSTRACT**

The Ecological and Environmental literacy is a primary need of the 21<sup>st</sup> century moment and milieu. The continuous overhearing of the term Global Warming has caught the attention of wordly Ecologists and Environmentalists. It has caused due to exploitation of the Biosphere resources since the industrial revolution. The global Ecosystem has stood on the verge of danger to human habitat. The Biodiversity loss has caused the effect on Glacier breaking, Drought, Flood, Cyclone, Tsunami etc. all over the universe. The concept of Environment includes both the 'inter and intra' relations among various Ecosystems and is, at the conclusion, a total amalgamation of social, economical, biological, physical and chemical components and factors. The Natural and Cultural Environments are the two primary branches of the Environment. Since the 20<sup>th</sup> century study of animals and plants has been done under Ecology which earlier was a part of Biology. The concept of Ecology fundamentally refers to the study of organisms in relation with Environment. The interaction between living and non-living comes under the head of Eco-system which is classified as the Natural and Artificial Eco-systems.

The Romantic Revival was a literary movement in the English literature since 1798 to 1832 which had been flourished by the contribution of the poets like William Wordsworth, Percy Shelley, Samuel Coleridge and John Keats with a message 'Back to Nature' through composition of poems on both the biotic and abiotic components of the Ecology. Wordsworth's poem *Tintern Abbey* describes summer and winter seasons, water streams, mountain ranges, fruits and pastoram farms,the shining Sun and Moon. John Keats's *Ode To Autumn* depicts grapes, apples, gourds, hazel fruits of the Autumn season and the activies of farmers like winnowing seeds,reaping crops, gleaning, binging sheaves and singing of grants, lambs, robins in addition to the twittering of swallows. Shelley's *Ode To West Wind* narrates the functioning of Wind on the land, ocean and atmosphere. The Wind is referred by him as"destroyer and preserver" of life. The verses of these poets explain a conceptual touch to Ecology and Environment.

Methodology:- Descriptive and Analytical

**Keywords**:- Environment, Ecology, Biosphere, Global Warming, Biotic.Abiotic Components and Literature.

### APPLICATION OF ICT IN HIGHER EDUCATION

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### **ABSTRACT:**

Higher education in India has made considerable progress in last few decades. Similarly, development in technology brings the terms like e-learning or use of information and communication technology (ICT) in higher education which makes a tremendous change in the education system. It allows learners to study anywhere and at anytime, with effective learning to unlimited number of students. The use of ICT in education itself tends to more student centered learning settings and often this creates a little tension for some teachers and students. However, world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this importance will continue to grow. This review article highlights impacts of ICT on contemporary higher education.

Keywords: ICT, Higher education, teaching and learning

### A STUDY OF BEHAVIORAL CHANGES AND DISORDERS AMONG YOUTH DUE TO ADDICTION OF MOBILE GAMES

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### **ABSTRACT:**

With the rapid development in mobile technology and related areas we can see roaring growth of market size and public reach. One of such area is mobile games, which are in focus due to its addiction and popularity. Video game addiction has severe consequences like compulsive disorder. This addiction is spreading from children to old age people. Although it is not yet recognized by any medical association as diagnosable disorder but many cases came in scene as addiction of mobile game. This research is based on survey among youth to study their behavioral changes, their emotional and physical disorders due to addiction of Mobile Games.

**Keywords** – Mobile technology, Mobile games, Addiction, disorder.

# "भारतीय राजकारणात विज्ञान आणि तंत्रज्ञानाचा वापर" संदीप दासराव धापसे

सहाय्यक प्राध्यापक श्री व्ही. एस. नाईक कला, वाणिज्य, व विज्ञान महाविद्यालय, रावेर जिल्हा जळगाव <u>sandeepdhapse@gmail.com</u>

# सारांश :

स्वतंत्र भारताची लोकशाही 73 व्या वर्षात पदार्पण करत आहे याचा विचार जर केला तर 1952 पासून ते आजतागायत देशांमध्ये लोकसभेच्या व राज्याच्या विधानसभेच्या सार्वित्रिक निवडणुका या मोठ्या प्रमाणात झाल्या. या सार्वित्रिक निवडणुका होत गेल्या तसतशा या निवडणुकीमध्ये सिक्रयपणे भाग घेऊन मतदान करण्याचा लोकांचा टक्का सुद्धा वाढत गेला. याचे सर्वस्वी कारण म्हणजे अलीकडच्या काळात विज्ञान आणि तंत्रज्ञानाचा भारतातील प्रमुख राजकीय पक्षांनी आपली भूमिका सर्वसामान्य मतदारांपर्यंत मांडून जाहीरनामा लोकांपर्यंत पोहोचण्याचे काम केले. त्याचबरोबर लोकांनी निवडणूक प्रक्रियेत सहभागी व्हावे व आपला मतदानाचा अधिकार यासाठी व्हाट्सअप, फेसबुक ,आदीच्या माध्यमातून सर्वसामान्य लोकांना आकर्षित करण्याचा प्रयत्न केला खऱ्या अर्थाने या विज्ञान आणि तंत्रज्ञानाची सुरुवात या देशात माजी पंतप्रधान स्वर्गीय: राजीव गांधी यांनी सुरु केली. आणि त्याचाच परिणाम म्हणून आज देशामध्ये निवडणुकीचे प्रचार तंत्र हायटेक झाले आहे. त्याचबरोबर मतपेटीचे जागा आता मशीनन घेतले आहे ज्याला ईव्हीएम इलेक्ट्रिक वोटिंग मशीन असे म्हटले जाते. ज्याद्वारे मतदान करणेही सोपे झाले व त्याच बरोबर मतमोजणी करणेही सोपे झाले.या पद्धतीमुळे निकाल वेळेस लागण्यास मदत झाली. म्हणजेच जशी लोकशाही प्रगत्भ होत गेली तसतसे लोकशाहीला प्रगत्भ करण्यामध्ये विज्ञान आणि तंत्रज्ञानाने हातभार लावला असे आपल्याला म्हणता येईल .

# विज्ञान पटकथा स्वरूप आणि महत्व

डॉ जी आर ढेंबरे.

# सहायक प्राध्यापक

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# प्रास्ताविक

मराठी चित्रपटाला जवळपास शतकाची परंपरा आहे.िकंबहुना भारतामध्ये चित्रपटांची प्रथम निर्मिती मराठी माणसाने केली . मराठी चित्रपटांसाठी मालिकांसाठी वेगवेगळ्या विषयावरील पटकथांचे लेखन केले जाते . आध्यात्मिक, धार्मिक, सांस्कृतिक, ऐतिहासिक, व्यक्तिगत, कौटुंबिक, समस्याप्रधान पटकथा मराठी चित्रपट, मालिकांमध्ये सादर केल्या जातात.भावनाप्रधान अशा विषयांची प्राधान्याने निवड केली जाते.चित्रपट आणि मालिका यांच्या निर्मितीमागे एक व्यावसायिक गणित असते.या व्यवसायाच्या गणिताबरोबरच ही एक कला सुद्धा आहे.मुळात आज प्रसार माध्यमांचा विस्फोट झाला आहेशेकडो विविध चॅनलची निर्मिती व वाटचाल सुरूआहेमोबाईल ., संगणक यांची हाताळणी व उपलब्धता सहज सोपी झाली आहे.नेटच्या वापरा संदर्भातील कमाल मर्यादा संपल्या आहेतमनोरंजन करमणूक ही आज . .माणसाच्या मूलभूत गरजांपैकी एक गरज बनली आहेचित्रपट मालिकांचा साधन म्हणून काही लोक उपयोग करत आहेतविशिष्ट विचारधारा .. कर्मकांड. संस्कृती. संस्कार यांचा प्रचार आणि प्रसार करण्यासाठी ही साधने उपयोगात आणली जात आहेतकुठेतरी प्रेक्षकांच्या मनावर ., बुद्धीवर ताबा मिळवण्यासाठी चित्रपट, मालिकांचा वापर केला जात आहे.या आजच्या महत्त्वाच्या सादरीकरणाच्या कलेचा आत्मा म्हणजे पटकथा होय.उत्तम विषयावरील पटकथाचा अभाव दिसून येतो.लोकांच्या भावनांना, मनाला जपणारी पटकथा लिहिली जाते.चित्रपट व मालिकांमधून विशिष्ट वर्गाची, विशिष्ट जातीची संस्कृती बहुजन समाजावर लादली जातेया माध्यमाच्या प्रभावी वापरातून इतर वर्गातील बहुजन समाज या विशिष्ट . संस्कृतीला आत्मसात करत आहे.एकूण मराठी चित्रपट व मालिकांमध्ये विज्ञानविषयक व विवेकवादी पटकथाचा अभाव दिसून येतोविज्ञान पटकथेवर आधारित असणारे मराठी चित्रपट व मालिका निर्मितीची . .आज मोठ्या प्रमाणात गरज आहे

# शहरीकरण जागतिकीकरण व आधुनिक तंत्रज्ञान यांचा एक मानसशास्त्रीय अभ्यास संतोषभाऊराव गव्हाड सहायक प्राध्यापक श्री.व्ही. एस. नाईक कला वाणिज्य व विज्ञान महाविद्यालय रावेर

# संक्षेप:

बदलती शहरे, काळ व वातावरण त्यामुळे आपले जीवनमान बदलत आहे. काही दशकांपूर्वी बदलत्या जीवनशैलीचा वृद्धावर परिणाम होत असे सध्याच्या जागतिकीकरण व आधुनिकीकरणामुळे लहान बाळापासूनते वयोवृद्धापर्यंत त्याचे पडसाद उमटतात. लाकडी खेळणी प्लास्टिकची खेळणी ते आता थेट इलेक्ट्रॉनिक्स खेळणी बालपण बदलत आहे.िकशोरवयीन मुलांचे खेळ नातेसंबंध व आचरण फारच बदलेले आहे हे बदल नक्कीच चांगले आहेत व प्रगत मानवाची निशाणी आहे. पण त्याचबरोबर त्यात काही मानिसक समस्यांची गुंतागुंत आहे याचे प्रत्यक्ष अनुभव प्रत्येक मानसोपचार तज्ञांना येत आहेत.

प्रसार माध्यमांचा प्रभाव, न्यायवैधक मानसशास्त्रातील तंत्रज्ञानाचा वापर, बुद्धिमापनतंत्रज्ञानाचा वापर

# कृत्रिम बुद्धिमत्ता तंत्रज्ञान व भारतीय अर्थव्यवस्था धनले एस. बी.

सहाय्यक प्राध्यापक श्री. व्ही. एस. नाईक महाविद्यालय, रावेर

# गोषवारा :

तंत्रज्ञान व अर्थव्यवस्था यांचा सहसंबंध धनात्मक स्वरूपाचा आहे.तंत्रज्ञानाचा विकास आर्थिक विकासाला सहाय्यभूत ठरतो. 1991 च्या आर्थिक सुधारणा नंतर भारतीय अर्थव्यवस्था वेगाने बदलत आहे . जागतिकीकरणाचा प्रभाव क्षेत्रात भारतीय अर्थव्यवस्थेने आधुनिक तंत्रज्ञान स्वीकारण्यात अनुकूलता . दर्शवली आहे सद्यपरिस्थितीत बहुचर्चित असलेल्या कृत्रिम बुद्धिमत्ता तंत्रज्ञान भारतीय अर्थव्यवस्थेच्या कृषी, आरोग्य सेवा ,शिक्षण, रोजगार इत्यादी घटकांना प्रभावित करत आहे प्रस्तुत शोध निंबधात भारतीय . अर्थव्यवस्थेवरील कृत्रिम बुद्धिमत्ता तंत्रज्ञानाचा कृषी, आरोग्यसेवा, शिक्षण व रोजगार या घटकांवरील परिणाम या अनुषंगाने आढावा घेण्यात आला आहे.

संक्षिप्त शब्द : भारतीय अर्थव्यवस्था, कृत्रिम बुद्धिमत्ता, तंत्रज्ञान, कृषी क्षेत्र, आरोग्यसेवा, शिक्षण, रोजगार संधी

# IMPLEMENTATION OF QUESTION AND ANSWERING RETRIEVAL SYSTEM OVER WATCH WORD & HEAD WORD

# Vivek Uprit

Associate Professor & HOD, MCA Sanghvi Institute of Management & Sc. Indore

ABSTRCT: In Computer Science, Question Answering System always helps to user in easier way to find the answers of given question. Information area is new area for human. With help of web crawlers, we can get any data readily available. We are only a tick far from getting to a page at remote corner of the world. We have constantly needed PCs to act savvy [1]. To achieve this undertaking the field of Artificial Intelligence appeared. One of the key obstructions in making PCs clever is comprehension of Natural Language. Normal dialect handling which manages comprehension of dialects is sub division of Artificial Intelligence. Square outline of Question Answering System is appears in beneath figure1.1. Question Answering is a great NLP application. Assignment that an inquiry noting framework acknowledges is given an inquiry and gathering of archives, finds the correct response for the question. It incorporates two integral objectives: first comprehend the different issues in normal dialect comprehension and portrayal and the second to plan regular dialect interface to PCs [2]

**Keywords:-**Natural Language processing ,information retrieval , semantic similarity , restricted domain , answer extraction, answer ranking

# SNO<sub>2</sub> THICK FILMS: PREPARATION AND CHARACTERIZATION

# R. S. Khadayate<sup>1</sup> and V. R. Khadase<sup>2</sup>

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# **ABSTRACT:**

AR grade tin oxide (SnO<sub>2</sub>) powder was taken and crushed for 24 hours to obtain fine powder. Few drops of water were added to pre-weighted grinded powder to form a paste. Then the paste was applied in the form of thick film on electrode patterned PCB. The prepared film was heated overnight at 100°C. The electrical conductivity of so prepared SnO<sub>2</sub> thick film was

investigated with the help of a simple lab prepared two probe I-V characteristics set up. The gas sensing properties of the prepared  $SnO_2$  thick films for the exposure of Ethanol and Acetone fumes was also investigated at room temperature. Humidity sensing properties of prepared  $SnO_2$  thick film was also investigated.

**Keywords:** SnO<sub>2</sub>, thick film, electrical conductivity, gas sensing, humidity etc.

# RESOURCEFUL USE OF ICT FOR THE TEACHING AND LEARNING OF ENGLISH

**Dinesh Prakash Patil** 

Assistant Professor Department of English

Name of the Institute: Appasaheb R.B.Garud Arts Commerce and Science College,Shendurni,Tal.Jamner, Dist.Jalgaon

**ABSTRACT:** Present the rapid growth in all sectors indicates the change in methods and mode of communication. Before two decades people were strongly depended on tele-communication. The era of globalization has totally changed the traditional perspective and approach of communication e.g. chalk and talk method in the class room. Modernization, particularly revolution in the information and technology has changed the scenario in the teaching and learning of foreign language into the class room. This technological advancement has improved the methods of teaching and help to create more awareness among the students about innovation and technological advancement. As compare to modern ICT based teaching methods are effective than the traditional methods. The term ICT impartstools for effective communication like i-pad, mobile, computer, television, web-cam and so on. Teachers can use this ICT tools for the effective teaching of English. Various modes of ICT like mobile apps, e-resources, weblinks, blogs, what's app, facebook are useful for the development of the linguistic competency of rural students. ICT is opening the new vistas for the students. Effective use of ICT upgrades the skills of students. It improves word power, reading, speaking and writing skill. ICT provides the huge or number of e-resources to the students at one click. Many online courses, material may upgrade their knowledge of English language.

**Keywords:** communication, ICT, English and Technology

# EFFECT OF COPPER SULPHATE ON GLYCOGEN CONTENT OF FRESH WATER BIVALVE L. MARGINALIS.

Sandhya M. Sonawane, Mayur M. Sonawane.

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# **ABSTRACT:**

Presence of heavy metals in stream & rivers is largely due to the runoff from agricultural fields and outfall from manufacturing factories. Heavy metals are not highly selective but are generally toxic to many non-target organisms. The aquatic environment is also polluted by heavy metals & leads to many changes in organism physiology. In the present investigation an attempt

has been made to observe the effect of Copper sulphate on Glycogen content of Lamellidens marginalis. After acute & chronic treatment with Copper sulphate the total Glycogen content of digestive gland of bivalve was altered significantly than foot, whole body and mantle (P<0.001), indicating altered carbohydrate metabolism.

# ETHNOMEDICINAL IMPORTANCE OF THE PLANTS OF DIST. BURHANPUR, M.P. INDIA

Suchi Modi, Ravindranath Tagore University I. A. Siddiqui

Princiapl And Head, Botany, Deptt, S.G.J.Quaderia College, Burhanpur

# **ABSTRACT:**

The present study was carried out in Dist. Burhanpur of Madhya Pradesh, India to document the ethno medicinal uses of plants. The traditional knowledge of medicinal plants used by tribal communities, Tribals like Gond, Korku, Bhil, Tadvi, Banjara and Baiga are residing in the area. These people have valuable information about medicinal property and medicinal use of many plants, A large member of traditional herbal healers exit belonging to the tribal community and are utilizing local plants in ethno medicinal practices prevalent in the area. A total of 135 species belonging to 128 genera and 59 families have been reported plant species commonly used by local people for food, fodder, medicine and in other fields of their lives are environmental. A list of plant species along with their local names, English names, Botanical names, plant parts used and mode of application has been given. Ethno medicinally most important families are zingiberaceae (5 species), Asteraceace (9 species), Solanaceae (6 species), Fabaceae (15 species), Euphorbiaceceae (6 species) and liliaceceae with (8 species). These plant species are utilized by local people, against various ailments such as constipation, diarrhoea, skin ailments, cough and cold, antidote for poisonous insects, stomach disorders, urinary trouble, liver complaints, digestive problems, Jaundice, asthma, bronchitis. etc. Indigenous knowledge of rural or cultural groups has great significances formulatingapplicable strategy for the development of any region, This statured, secretive, fast eroding highly valuable knowledge needs proper documentation. The present study signifies ethno medicinal values of the plants species occur in Dist, Burhanpur M.P. India.

Keywords: Ethno medicinal survey, Burhanpurindigenous knowledge, Herbs and medicine.

# EFFECT OF MERCURIC CHLORIDE ON GLYCOGEN CONTENT OF FRESH WATER BIVALVE L. marginalis.

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# **ABSTRACT**

Presence of heavy metals in stream & rivers is largely due to the runoff from agricultural fields and outfall from manufacturing factories. Heavy metals are not highly selective but are generally toxic to many non-target organisms. The aquatic environment is also polluted by heavy metals & leads to many changes in organism physiology. In the present investigation an attempt has been made to observe the effect of Mercuric chloride on Glycogen content of Lamellidens marginalis. After acute & chronic treatment with Mercuric chloride the total Glycogen content of digestive gland of bivalve was altered significantly than foot, whole body and mantle (P<0.001) ,indicating altered carbohydrate metabolism.

Keywords: Mercuric Chloride, Glycogen, Fresh Water.

# A study of Data Mining Techniques and its Applications

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Seva Sadan Mahavidyalaya, Burhanpur .

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**Anil Choudhary** 

**Assistant Professor** 

Seva Sadan Mahavidyalaya, Burhanpur

Abstract-

With the help of data mining an important and valuable knowledge is extracted from the large massive collection of data. Data mining is very interesting and recent field having various techniques and applications. It is used in finding the patterns to decide future trends in medical field. The paper discusses some of the data mining techniques, applications, algorithms and various areas where data mining technology is widely used to improve their businesses and found best results.

**Keywords**- Data mining, Information, Data mining techniques, Data mining application, Prediction.

# Fixed Point Theorem in Complete Metric Space Harshad Dixit

Department of Mathematics Seva Sadan Mahavidyalaya, Burhanpur (M.P.) <u>harshadpdixit@gmail.com</u>

**ABSTRACT-** Fixed point theory has wide and useful applications in applied sciences. The object of this paper is to obtain a new fixed point theorem for continuous self mappings in complete metric space.

**Keywords** - Complete metric space, fixed point, continuous self mapping.

**AMS Classification** - 47H10.

# आधुनिक तकनीक का भारतीय पावरलूम उद्योग पर प्रभाव

# डॉ. रश्मि गोविदजीवाला

सहा. प्राध्यापक,

सेवासदन महाविद्यालय, बुरहानपुर म.प्र.

तीउपहवअपदकरपूंसं / हउंपसण्बवउ ए उवइ. 8989501290

प्रस्तुत शोधपत्र में आधुनिक तकनीक का पावरलूम उद्योग पर प्रभाव विषय पर शोध किया गया है। वैश्विक आर्थिक परिदृश्य में भारत को महत्वपूर्ण स्थान दिलाने में देश के उद्योगों का उल्लेखनीय स्थान है। बढ़ता हुआ उद्योग एक ऐसा दर्पण है जिसमें देश, प्रदेश या किसी भी क्षेत्र के विकास को स्पष्ट रूप से देखा जा सकता है वर्तमान युग टेक्नोलॉजी का युग है। सभी क्षेत्रों में तेजी से परिवर्तन हो रहे है। हमारे देश में पावरलूम उद्योग टेक्सटाईल्स उद्योग का एक उल्लेखनीय हिस्सा है।,पावरलूम बिजली से चलने वाला एक उपकरण है या कपड़ा बनाने की विधि में जो यंत्र उपयोग में लाए जाते है, करघा कहा जाता है। पावरलूम उद्योग में मशीन को बिजली की सहायता से चलाकर कपड़े का निर्माण किया जाता है।

पुराने समय में शटल वाले करघे करघे होते थे। इसमें निगेटिव लेट ऑफ मोशन, वार्पस्टाप मोशन नहीं रहता, इन पावरलूमों की स्पीड कम होती थी जिसके कारण कम उत्पादन होता था और कांडी हाथों से लगाई जाती थी। परंतु आधुनिक तकनीक के आ जाने से बिना शटल वाले करघे बनाये जा रहे है। इन करघों में बिना शटल से आधुनिक तकनीकी अपनाकर कपड़ा बनाया जाता है। इस मशीन की स्पीड साधारण मशीन से पांच गुना ज्यादा होती है। महंगे कपड़े का उत्पादन इस मशीन पर किया जाता है, ये पावरलूम शटल रहित होते है जिसमें की वेफ्ट धागा ले जाने की क्रिया, रेपियर, प्रोजक्टाईल, एयरजेट या वाटरजेट के द्वारा की जाती है। इन पावरलूमों को क्रमशः रेपियर, प्रोजेक्टाईल, एयरजेट या वाटरजेट लूम कहा जाता है। बुनाई के लिए लूमों का चयन बुने जाने वाले कपड़े की बुनाई, बनायी जाने वाली आकृति के आधार पर किया जाता है। आधुनिक समय में बिना शटल के पावरलूम द्वारा कपड़ा उत्पादन होने लगा। जिससे कपड़ा उत्पादन की गित में काफी बढ़ोत्तरी हुई है और इलेक्ट्रॉनिक्स के भारी उपयोग से इनकी कार्यप्रणाली काफी सरल और उच्च हो गई है। शटल लूमों की अपेक्षा शटल लैस लूम बहुत अधिक गित से चलते है। शटल लैस लूम की टेक्नालॉजी काफी स्वचलन वाली और उच्च दर्जे की होती है। कई इलेक्ट्रॉनिक साधन लगे रहते है। सिग्नल लैम्पों के द्वारा पावरलूम को काफी सरलता से चलाया जा सकता है, शटल रहित करघे निम्न है—

- (५) प्रोजेक्टाईल लूम —इसमें एक छोटे से ग्रिपर के द्वारा कोन का धागा कपड़े में डाला जाता है। इस ग्रिपर का वजन तकनीकी रूप से 40ह के लगभग होता है यह 90उउ लम्बा और 14उउ चौड़ा व 6उउ पतला होता है।
- (फ) एयरजेट लूम —इसमें कोन का धागा हवा के दबाव वाली नोजल से छोड़कर कपडे मे धागा डाला जाता है। एयरजेट लूम द्वारा उच्च कीमत के कपड़े का निर्माण होता है। इसकी क्षमता एक मिनट में 2000 मीटर कपड़ा उत्पादन की है।
- (प्प्प) वाटरजेट लूम —हवा के नोजल के बजाय पानी की धारा से पिकींग करने वाला वाटरजेट लूम। इसमें कपड़ा उत्पादन के समय यदि वेफ्ट का तार टूट जाता तो मशीन ऑटोमेटीक बंद हो जाती है।

भारत में पावरलूम उद्योग कृषि के बाद आने वाला दूसरा प्रमुख उद्योग है। वर्तमान में पावरलूम क्षेत्र में नवीनीकरण व उन्नत टेक्नोलॉजी का उपयोग किया जा रहा है। वर्ष प्रतिवर्ष भारत में पावरलूम इकाईयों की संख्या बढ़ती जा रही है। वैश्वीकरण एवं वर्तमान आर्थिक नीतियों के परिणामस्वरूप देश व प्रदेश में उद्योग बढ़ा है। अनेक लोगों को प्रत्यक्ष व अप्रत्यक्ष रूप से रोजगार के अवसर प्रदान हुये है और विदेशों में निर्यात की संभावना बढ़ी है। अतः उन्नत तकनीक से पावरलूम उद्योग पर सकारात्मक प्रभाव पड़ा है।

# Diversity of Butterflies From Dara Dam (Unapdevi) of Shahada Taluka of Nandurbar District (M.S).

# Chaudhari Rajeshwar M. and Ishi Sahebrao S.

Department of Zoology,

P.S.G.V.P.Mandal'sS.I.PatilArts,G.B.Patel Science and S.T.K.V.S. Commerce College Shahada- 425409

## **ABSTRACT**

An appraisal of butterfly species diversity was made using in Dara dam of Shahada tahsil. Butterflies are good biological indicators of habitat quality. Lepidoptera (Moth and butterfly) is second most abundant order after the order coleoptera (beetle). Generally, the butterflies are known to be the most beautiful and attractive insect in the biosphere. Additionally, the butterflies are the important pollinators to most agricultural crop plants. Survey has been done on the butterflies Dara Dam of Shahada Taluka of Nandurbar District. In this study 48 species of butterflies have been recorded. These 48 species of butterflies are belonging to 7 families and 10 genera.

Key Words: Butterflies, Diversity, Dara dam, Unapdevi, Shahada.









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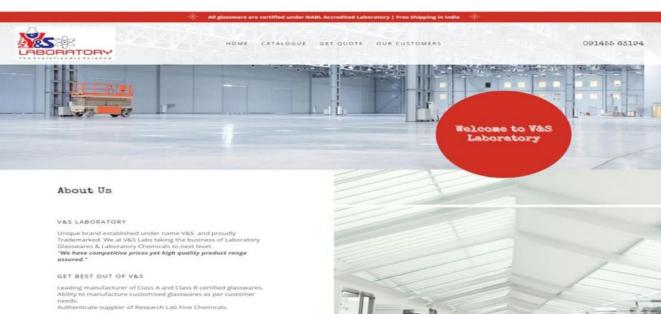




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# सकाळ वृत्तसेवा

रावेर, ता. १० : येथील श्री. व्ही. एस. नाईक महाविद्यालय आणि सेवासदन महाविद्यालय यांच्यातर्फे ११ व १२ फेब्रुवारीला दोनदिवसीय राष्ट्रीय चर्चासत्र आयोजित करण्यात आले आहे. यात मध्य प्रदेश, गुजरात, आंध्र प्रदेश, तमिळनाडू, उत्तर प्रदेश, महाराष्ट्र आदी राज्यांतील संशोधक-अध्यासक या राष्ट्रीय चर्चासत्रात भाग घेणार असल्याची माहिती प्राचार्य डॉ. पी. व्ही. दलाल यांनी दिली.

चर्चासत्राचे उद्घाटन कुलगुरू प्रा. डॉ. पी. पी. पाटील यांच्या हस्ते करण्यात येईल. तर संस्थेचे चेअरमन हेमंत नाईक, सेवासदन संस्थेचे चेअरमन तारिका देवी ठाकूर, प्र. कुलगुरू प्रा. डॉ. पी. पी. माहलीकर हे उपस्थित राहणार

आत्तापर्यंत देशभरात्न सुमारे १५० संशोधकांनी शोधनिबंध चर्चासत्रासाठी पाठवले असल्याची माहिती या चर्चासत्राचे समन्वयक डॉ. अनिल पाटील यांनी दिली. नाईक महाविद्यालय आणि सेवासदन महाविद्यालय यांच्यात सहकार्य करार (एम.ओ.यु.) झालेला आहे. दोन राज्यातील महाविद्यालय एकत्र येऊन राष्ट्रीय चर्चासत्र घेत आहेत. 'रिसेंट इमर्जन्सी इन सायन्स अँड टेक्नॉलॉजी' हा चर्चासत्राचा विषय आहे. यशस्वीतेसाठी प्रा. डॉ. पी. व्ही. दलाल, प्राचार्य ए. के. कापडिया, डॉ. ए. जी. पाटील, प्रा. अनिश पटेल, उपप्राचार्य डॉ. व्ही. बी. सूर्यवंशी, डॉ. जे. एम. पाटील, डॉ. बी. जी. मुख्यदल, प्रा. डॉ. एस. जी. चिंचोरे आर्दीचे सहकार्य लाभत आहे.

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# पुण्य 🎚 नगरी

# व्ही.एस. नाईक महाविद्यालयात राष्ट्रीय चर्चासत्र उत्साहात



रावेर : बन्हाणपूर - मध्यप्रदेश येथे श्री. व्ही. एस. नाईक महाविद्यालय रावेर आणि सेवा सदन महाविद्यालय, बन्हाणपूर, मध्य प्रदेश यांच्या संयुक्त विद्यमाने

'रिसेंट इमर्जन्स इन सायन्स ॲण्ड टेक्नॉलॉजी' या विषयावर दि. ११ व १२ फेब्रुवारी रोजी दोन दिवसीय राष्ट्रीय चर्चासत्र झाले. सदर

चर्चासत्राचे उद्घाटन कवियत्री बिहणाबाई चौधरी उत्तर महाराष्ट्र विद्यापीठ जळगाव, प्र. कुलगुरू प्राध्यापक डॉ.पी. पी. माहुलीकर यांच्याहस्ते करण्यात आले. या समारंभाचे अध्यक्ष प्राचार्य डॉ. पी. व्ही. दलाल होते. प्रमुख पाहुणे म्हणून संस्थेचे चेअरमन हेमंत नाईक, सेवासदन संस्थेच्या चेअरमन श्रीमती तारीका देवी ठाकूर, सचिव प्राध्यापक एम.सी.कानडे ,हसमुख जरीवाला, सेवासदन महाविद्यालयाचे प्राचार्य डॉ. अनिल कापडीया हे उपस्थित होते.





# Shri Vitthalrao Shankarrao Naik Arts, Commerce & Science College

श्री विठ्ठलराव शंकरराव नाईक कला, वाणिज्य आणि विज्ञान महाविद्यालय Burhanpur Road, Raver, Maharashtra

बुरहानपूर रोड,रावेर, महाराष्ट्र 'B+' Grade NAAC Re-Accredited (2nd Cycle)

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# Raver Parisar Shikshan Prasarak Mandal's

# Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College

Dr. P. V. Dalal M.Sc., M. Phil., Ph. D. **Acting Principal** Cell Phone. 7987819272 Email. paresh10dalal@gmail.com



RAVER, Tal. Raver, Dist. Jalgaon - 425 508 (M.S.) Off.: (02584) 250447(O), 252610(D) email: principalvsn\_rvr@yahoo.in website: www.vsnaikraver.org Affiliated to North Maharashtra University, Jalgaor UGC Recognation - S-2(f)-F8-77/2007(CPP-I),31 Jan.2008 S-12(B)-F8-77/2007(CPP-I),17 Sep.2008

## Memorandum of understanding between



And



Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver Dist. Jalgaon

International Journal of Creative Research Thoughts (IJCRT) (Now onwards referred as JETIR)

#### **UGC and ISSN Approved Journal**

The Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver Dist. Jalgaon (M.S.) and International Journal of Creative Research and Thoughts (Now onwards referred as JETIR) hereby agreed for Memorandum of Understanding with following points:

- 1. The selection of research papers for the "Recent Emergence in Science & Technology", "REST-2019" will be done by Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver Dist. Jalgaon (M.S.), whereas review and plagiarism checking of such papers will be done by editor of Journal of Emerging technology and Innovative Research (JETIR), which will be published in the special issue of JETIR. The conference is scheduled during 1-2 February, 2019.
- 2. The sole right of selection for papers will lie with Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver Dist. Jalgaon (M.S.).
- 3. The Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver Dist. Jalgaon (M.S.) will submit paper to http://jetir.org/submitonline.php and soft copy of the paper (word format as per JETIR format) to JETIR.
- 4. The JETIR will charge online maintenance fee as Rs 500/- per paper.
- 5. The JETIR will provide ISSN to the special issue and Publish paper.
- 6. The JETIR will provide DOI for special issue without any extra charges.
- 7. After sending all Paper Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver Dist. Jalgaon (M.S.) will complete all payment due before publication.

FS MoU signed by 78

**Editor in Chief JETIR-Journal of Emerging** Technology and Innovative Research 24, Kiran Park Society Nava Vadaj Ahmadabad

Date: 08/01/2019 Place: Raver

Dr. Paresh Vasantial Dalai ACTING PRINCIPAL Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarrao Naik Arts, Commerce & Science College

Raver. Dist-Jalgaon (M.S.) 425508

# **Memorandum Of Understanding** (MOU)

Signed between Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver and UGC and ISSN approved JETIR Journal to publish all reviewed and plagiarism check research papers received during National Seminar "REST-2019"

Raver Parisar Shikshan Prasarak Mandal's Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College



Creative Research Thoughts (IJCRT)
(Now onwards referred as JETIR)

#### UGC and ISSN Approved Journal

ri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver Dist.

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- 4. The JETIR will charge online maintenance fee as Rs 500/- per paper 5. The JETIR will provide ISSN to the special issue and Publish paper.

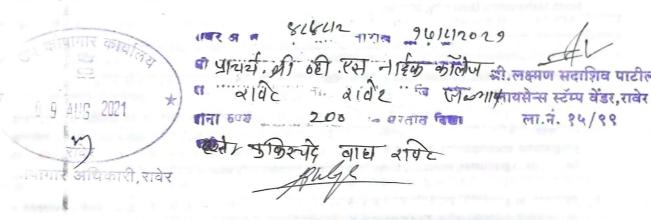
 signed between Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver and UGC and ISSN approved JETIR Journal to publish all reviewed and plagiarism check research papers received during National Seminar "REST-2019"



महाराष्ट्र MAHARASHTRA

**● 2020 ●** 

YR 756379



# MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (hereinafter referred to as the "MOU") is made and executed on this 18<sup>th</sup> day of August, 2021 at Pune.

#### BETWEEN

Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College., a college/Institute recognized under Section 2(f) and 12 (B) of the UGC Act 1956 and having address at:Taluka RaverJalgaon, 425508, Maharashtra, India

Through its Principal

(hereinafter referred to as "PARTNER INSTITUTE")





#### AND

BAJAJ FINSERV LIMITED, a company registered under the provisions of the Companies Act, 1956, having its registered office at: Bajaj Auto Ltd Complex, Mumbai-Pune Road, Pune 411 035

#### AND

BAJAJ FINANCE LIMITED, a company registered under the provisions of the Companies Act, 1956, having its registered office at: Akurdi, Pune 411 035

Through President (Legal and Taxation) – Bajaj Finserv Limited

(Bajaj Finserv Limited and Bajaj Finance Limited hereinafter referred to as "FINSERV")

The expressions "PARTNER INSTITUTE" and "FINSERV" shall, collectively be referred to as "Parties" and individually as

#### WHEREAS:

- A. PARTNER INSTITUTE established in 1978 by Raver Parisar Shikshan Prasarak Mandal, Raver is affiliated to KBC North Maharashtra University, Jalgaon.
- B. Bajaj Finserv Limited is the holding company for financial services businesses of the Bajaj Group;
- C. Bajaj Finance Limited is a Non-Banking Finance Company registered with Reserve Bank of India.
- D. FINSERV, as part of its Corporate Social Responsibility (CSR) activities, desires to create employment opportunities for educated youth in the Banking, Finance and Insurance Sector through a customized training programme encompassing product knowledge, communication and other soft skills, which is expected to benefit fresh graduates, especially those belonging to economically weaker sections of the society;
- E. FINSERV, in partnership with some of the leading educational institutes, has designed and developed a customized programme viz. Certificate Programme in Banking, Finance and Insurance (hereinafter referred to as CPBFI).
- E. The PARTNER INSTITUTE has expressed its willingness to partner with FINSERV to conduct CPBFI for its students and alumni, on terms and conditions set out herein below;
- F. FINSERV has accepted the offer of the PARTNER INSTITUTE and agreed to partner with the PARTNER INSTITUTE

NOW THIS AGREEMENT WITNESSETH AND IT IS AGREED BY AND BETWEEN THE PARTIES AS UNDER:

# Purpose/Objective of CPBFI:

The objective of CPBFI is to impart practical knowledge and essential skills to final year graduation students and fresh graduates, especially those belonging to economically weaker sections of the society, with a view to create employment opportunities for them in the Banking, Finance and Insurance Companies.







# 2. Scope of CPBFI:

- FINSERV has appointed different training institutes as Official Training Partners for conducting CPBFI (hereinafter referred to as CPBFI Official Training Partners).
- ii. FINSERV and the PARTNER INSTITUTE, through one of the CPBFI Official Training Partners, shall conduct, for the eligible students and alumni of the PARTNER INSTITUTE, a Certificate Programme in Banking, Finance and Insurance viz. CPBFI, covering industry overview and product knowledge relevant for roles in banks, NBFCs, life insurance and general insurance companies, communication and other workplace skills. CPBFI shall be conducted through classroom training (hereinafter referred to as CPBFI—CLASSROOM), online training (hereinafter referred to as CPBFI—ONLINE) or a combination of classroom and online training (hereinafter referred to as CPBFI—BLENDED).

# 3. Responsibilities of the Parties:

- i. The PARTNER INSTITUTE shall be responsible for mobilizing students for the CPBFI Programme by spreading awareness about CPBFI and its potential benefits for the prospective students. FINSERV shall, if requested by PARTNER INSTITUTE, at its discretion, support the awareness campaigns by participating in the student meetings, parent meetings and design of publicity material such as posters, leaflets etc.
- ii. The PARTNER INSTITUTE shall be responsible for providing necessary infrastructure facilities for conducting classroom sessions of CPBFI-CLASSROOM and CPBFI-BLENDED, specifically (a) one class room, equipped with a projector, a sound system and a white-board with a seating capacity of at least 45 students, (b) one computer room, equipped with computers having MS Office software and high-speed internet connection, with a seating capacity of at least 25 students, for conducting the online assessment tests (c) one assembly hall with a capacity of around 60 persons and 3 interview rooms, for one day per batch, for conducting CPBFI HR Workshop. PARTNER INSTITUTE shall also provide basic stationery required for training purposes such as marker pens, chart sheets, chalks etc.
- iii. The PARTNER INSTITUTE shall appoint a Coordinator for every CPBFI batch, with following responsibilities;
  - To motivate and encourage students to extract maximum benefit from CPBFI.
  - To provide necessary support to the CPBFI Official Training Partner for planning and conducting the program.
  - c. To conduct online pre-assessment and post-assessment tests for every batch.
  - d. To ensure that the classes are conducted as per pre-defined schedule.
  - e. To ensure that all students are regularly attending the classes.
  - To maintain daily attendance of students.
  - g. To attend few classes as an observer and provide feedback to FINSERV about the training quality.
  - To ensure discipline and good conduct from the students.
  - i. To support FINSERV team to conduct CPBFI HR Workshop for every batch.
  - j. To submit required college information as per Annexure 3 to FINSERV coordinator.
- iv. The PARTNER INSTITUTE shall issue an appointment letter to the Coordinator as per format prescribed in Annexure 4 of this MOU. The PARTNER INSTITUTE shall submit the appointment letter, duly authorized by the Principal of the PARTNER INSTITUTE and accepted by the Coordinator, to FINSERV before commencement of every CPBFI Batch.

FINSERV shall be responsible to design and continuously improve the CPBFI programme structure, including adding or deleting courses, changing pedagogy or modifications to the programme duration.



- vi. FINSERV shall be responsible to arrange faculty, with requisite expertise and experience, through any of its CPBFI Official Training Partners. FINSERV shall provide necessary details of the concerned CPBFI Official Training Partner to the PARNTER INSTITUTE at least 2 weeks before start of every batch. FINSERV shall be responsible to arrange the online training platform for conducting CPBFI-ONLINE and CPBFI-BLENDED.
- vii. FINSERV and the PARTNER INSTITUTE, shall be responsible for award of "Certificate of Completion" at the completion of CPBFI to all successful candidates who meet eligibility criteria viz. requisite attendance and credits in the examinations conducted during CPBFI.
- viii. FINSERV, as part of its CSR, shall bear the full cost of faculty deployed by its CPBFI Official Training Partner, to ensure that CPBFI is affordable to students belonging to economically weaker sections of the society.
- ix. FINSERV along with its chosen academic partner/s, shall conduct an online examination at the end of CPBFI. Only students who pass this examination and have requisite attendance shall be eligible to receive the "Certificate of Completion". This examination shall be in addition to all other examinations conducted by the CPBFI Official Training Partner during CPBFI.
- x. The PARTNER INSTITUTE shall display the FINSERV name and logo prominently in all marketing and publicity material, notices for students and all other internal and external communications, in paper form or otherwise, relating to CPBFI.
- xi. Any other use of FINSERV brand names by the PARTNER INSTITUTE shall require prior written consent from FINSERV.
- xii. The PARTNER INSTITUTE shall provide to FINSERV, necessary information about all the students of CPBFI, in the format specified by FINSERV in Annexure 1. FINSERV shall be free to contact the students directly for the purpose of monitoring the impact of CPBFI and the career progression of students.
- xiii. The PARTNER INSTITUTE shall not conduct CPBFI or a programme with identical course structure except in partnership with FINSERV.
- The PARTNER INSTITUTE shall be solely responsible to comply with regulations of University Grants Commission or any other authority regulating educational activities in India. The PARTNER INSTITUTE agrees that FINSERV shall not have any liability including monetary or otherwise, in the event of any regulatory action taken against the PARTNER INSTITUTE in respect of conducting this programme. The PARTNER INSTITUTE agrees to fully compensate FINSERV in case an action is taken against FINSERV by any such regulatory authority in respect of conduct of CPBFI by the PARTNER INSTITUTE under this MOU.
- The PARTNER INSTITUTE shall be solely responsible for payment of GST or any other taxes that may be applicable, in respect of fees collected by the PARTNER INSTITUTE for CPBFI and FINSERV shall not have any liability towards the same. The PARTNER INSTITUTE agrees that FINSERV shall not have any liability, monetary or otherwise, in the event of any action is taken against the PARTNER INSTITUTE by any tax authorities. The PARTNER INSTITUTE agrees to fully compensate FINSERV in case any action is taken against FINSERV by any such tax authority in respect of conduct of CPBFI by the PARTNER INSTITUTE under this MOU.
- xvi. The PARTNER INSTITUTE shall submit the information specified in Annexure 3 before commencement of every batch to FINSERV.





# 4. Batch Strength:

The parties agree that, each batch shall consist of minimum 45 and maximum 60 students. FINSERV and the PARTNER INSTITUTE may mutually decide to start a batch with less than 45 students.

## 5. Term of the MOU:

The term of this MOU is for a period commencing from signing of this MoU till end of March 31, 2024, except Clause 3(xiii) and Clause 14, which shall continue to be in force for a further period of 3 years from the date of termination of this MOU. The parties may decide to further extend the term of this MOU by mutual consent on such terms and conditions as may be agreed between them.

### 6. Course fees:

- i. PARTNER INSTITUTE shall charge a non-refundable fee of Rs. 1000(Rupees One Thousand only) plus applicable GST and other taxes, to each of the students of CPBFI towards the course fees. The fee payable by each student shall not be less than Rs. 1,000 (Rupees one thousand only) plus applicable taxes and shall not exceed Rs. 3,000 (Rupees three thousand) plus applicable taxes. The fees specified here shall be valid for two years from signing of this MOU. The fees shall be reviewed on completion of this period and parties may mutually agree to revise the same from time to time.
- ii. On successful completion of every batch (i.e. If the overall attendance of the students is in excess of 75%) of CPBFI-CLASSROOM and CPBFI-BLENDED, FINSERV shall pay an amount of Rs. 500 (Rupees Five Hundred only) per student to the PARTNER INSTITUTE as a fee subsidy. The fee subsidy shall be paid by FINSERV within 2 weeks from completion of every batch and submission of bank account information as per Annexure 3. The method for calculating the overall attendance in respect of CPBFI batches, is included in Annexure 2.
- iii. The PARTNER INSTITUTE has agreed to suitably remunerate the coordinator and other staff members for their effort towards successful conduct of CPBFI Batch.
- iv. The PARTNER INSTITUTE, may at its own discretion, waive the fees of students from economically weaker sections, provided the number of such students does not exceed 15% of total enrolment in the respective batch.
- v. The PARTNER INSTITUTE shall ensure that no student shall be allowed to attend CPBFI without paying the full fees except those permitted under sub-clause iv above.
- vi. The PARTNER INSTITUTE shall submit to FINSERV, before commencement of any batch, extracts of bank statement or copies of cash receipts or a letter from the Principal or Vice-Principal confirming collection of fees from every participant.

# 7. Duration and contents of CPBFI:

- i. CPBFI shall commence from August 2021. The said Programme will involve training of about 100 hours.
- ii. The PARTNER INSTITUTE has agreed to mobilize, on best effort basis, at least 40 students in first academic year and at least 80 students from second academic year onwards. The PARTNER INSTITUTE shall decide the batch schedule and timings and inform the schedule to FINSERV at least 45 days before commencement of the batch.





- iii. FINSERV shall arrange to make the faculty available as per the schedule informed by the PARTNER INSTITUTE.
- Detailed schedule of the lectures and practical shall be given in advance to students before commencement of CPBFI.

#### 8. Place of teaching:

i. The CPBFI classroom teaching and practical shall be conducted at Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College., Jalgaon by the CPBFI Official Training Partner, for up to four hours a day on such days, dates and at such timings as may be mutually decided between the parties.

# 9. Eligibility for CPBFI:

- Any student who is studying in the final year of Graduation Programme or pursuing any post-graduation programme shall be eligible to apply for admission to CPBFI.
- Additionally, any fresh graduate i.e. a graduate with less than 2 years of work experience or no work experience, shall also be eligible to apply for admission to CPBFI.
- Only candidates who are less than 27 years old, on the date of application, are eligible to apply for admission to CPBFI.
- iv. The PARTNER INSTITUTE shall select the final list of candidates for admission based on the criteria mutually agreed upon by the PARTNER INSTITUTE and FINSERV from time to time.

### 10. Discipline and right to expel:

- i. The students of CPBFI-CLASSROOM and CPBFI-BLENDED shall be subject to rules of discipline/code of conduct of the PARTNER INSTITUTE during course period. In case of CPBFI – ONLINE, the students shall be subject to rules of discipline/code of conduct of the CPBFI Official Training Partner.
- ii. If the concerned CPBFI Official Training Partner observes a breach of code of conduct by any student, it shall immediately report the same to the CPBFI Coordinator for necessary action.
- iii. If any participant commits breach of code of conduct of the PARTNER INSTITUTE, the faculty shall have full authority to expel such student for the remaining duration of CPBFI.

# 11. Faculty:

- i. FINSERV shall be solely responsible for arranging, through a CPBFI Official Training Partner, faculty, with requisite industry and teaching experience, and conducting CPBFI efficiently and effectively. The PARTNER INSTITUTE shall not be responsible for making any payments to the faculty of the CPBFI Official Training Partner.
- ii. Some of the lectures of CPBFI may be conducted by the experts from FINSERV as per the understanding between the parties. However, the PARTNER INSTITUTE shall not be liable to pay any amounts to FINSERV towards the said lectures and no amounts shall be deducted from the amounts payable to the PARTNER INSTITUTE.





# 12. Certification:

FINSERV and the PARTNER INSTITUTE shall issue a "Certificate of Completion" in "Certificate Programme in Banking, Finance and Insurance" to the eligible students of CPBFI-CLASSROOM and CPBFI-BLENDED. The certificates shall be printed by FINSERV and shall carry the logos of FINSERV, the PARTNER INSTITUTE and the concerned CPBFI Official Training Partner.

FINSERV shall issue a "Certificate of Completion" in "Certificate Programme in Banking, Finance and Insurance" to the eligible students of CPBFI-ONLINE. The certificates shall be in digital format and shall carry the logos of FINSERV, the PARTNER INSTITUTE and the concerned CPBFI Training Partner.

## 13. Further Agreements:

The parties agree that, they may mutually discuss and enter into further agreements, if needed.

## 14. Confidentiality:

- The Parties agree to maintain strict secrecy and confidentiality regarding any and all Confidential Information exchanged or to be exchanged between them in relation to this MOU.
- The PARTNER INSTITUTE agrees that all the course material provided by FINSERV or the CPBFI Official Training Partner, including but not limited to CPBFI structure, curriculum, lesson plans and evaluation methods, shall be deemed to be Confidential Information.
- The PARTNER INSTITUTE agrees that any of FINSERV's technical or business or other information including information given for development of any case studies / development of any program modules / contents, made available by FINSERV or its personnel to the PARTNER INSTITUTE shall be deemed to be Confidential Information.
- iv. The PARTNER INSTITUTE agrees to restrict access and disclosure of Confidential Information to such of their employees, agents, vendors, and contractors strictly on a "need to know" basis, to maintain confidentiality of the Information disclosed to it in accordance with this clause.
- v. Information and material disclosed and provided by each party to the other party in pursuance of or in connection with performance of its obligation under this MOU shall, at all times, remain the sole and exclusive property of the disclosing Party.

# 15. Intimation about cancellation/postponement of CPBFI:

- i. If due to any cogent reasons, it appears to the PARTNER INSTITUTE that it is unable to arrange any batch as per schedule, the PARTNER INSTITUTE shall intimate about its inability to FINSERV at least 30 days in advance and the parties shall decide further schedule of CPBFI by mutual consent. FINSERV may decide to complete such batches through online classes.
- However, if such postponement or cancellation is necessitated due to any last minute, unforeseen and unavoidable circumstances like Act of God, civil commotion, strike, bandh, disruption of traffic, epidemic, war, aggression, change in Government Policy or any other similar circumstances, the PARTNER INSTITUTE shall intimate the change in schedule as early as possible after such circumstances as stated above have arisen. In such circumstances, the PARTNER INSTITUTE shall not be held liable for payment towards any loss or damages caused to FINSERV due to delay in its schedule.

If for any reason, FINSERV, decides to discontinue support for CPBFI, it shall give a written notice to the PARTNER iii. INSTITUTE, 30 days in advance. Such notice shall not impact any batch which is already in progress on the date of notice and the terms of this MOU shall continue to apply to the running batches.

# 16. Amendment/Termination:

- Any amendment to the terms of this MOU can only be made by mutual consent of the parties. i.
- This MOU may be terminated by either party, for breach of terms and conditions of the present MOU or ii. otherwise, by a written notice of at least one (1) month in advance. Such notice of termination shall not interfere with the batches underway at the relevant time. Such batches shall be allowed to continue until their conclusion.
- Both the parties agree that Finserv shall have the right of terminating this MOU without any notice to the iii. PARTNER INSTITUTE, if the PARTNER INSTITUTE charges a fee exceeding the amount prescribed under Clause 6(i) of this MOU. In such event, the batches underway at the relevant time, may also be terminated by FINSERV, unless the PARTNER INSTITUTE refunds the excess fee charged to every student of the batch.

# 17. Applicable Law and Dispute Settlement:

- i. This MOU shall be governed by the Laws of India.
- ii. Any dispute arising between the parties in connection with or arising out of the performance of mutual obligations under this MOU shall be resolved by mutual discussion and consultation. If the dispute remained unresolved even after 30 days, then the dispute shall be referred to the Principal of Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College. and Mr. V. Rajagopalan, President (Legal and Taxation), Bajaj Finserv Limited. The decision of the principal of Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College. and Mr. Rajagopalan shall be final and binding on both parties.

#### 18. Originals:

This MOU is executed in counterparts, each of which shall be deemed to be original and retained by each of the Parties but together they shall constitute one and the same MOU.

IN WITNESS WHEREOF, the Parties hereto have put their hands the day, month and the year first hereinabove mentioned.

For Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College.

Name: Prof. Paresh Vasantlal Dalal

Designation: Principal

Witness Eull Name: Yuvraj R Birpan Bernaation: Head Clerk For Bajaj Finance Limited

Name: V. Rajagopalan

Designation: President (Legal and Taxation)

Witness Full Name: Ajay Sathe Designation: Group Head -

Customer Experience and CSR

For Bajaj Finsery Limited

Name: V. Rajagopalan

Designation: President (Legal and

Taxation)

Witness Full Name: Ajay Sathe

Designation: Group Head -Customer Experience and CSR

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# Annexure 1: Format for submission of student information

The PARTNER INSTITUTE shall provide the following information in respect of every student of CPSFs Full Name:

Full Name:

Gender:
Academic qualification: If already graduate mention the degree. If pursuing graduation, mention the degree

for which studying. for which studying.

Status: Mention "Complete" if the candidate is already a graduate. Mention "Pursuing" in case of final year pate of Birth: in DD/MM/YYYY format

Mobile Number:

Email Address:

# Annexure 2: Methodology for Calculating Overall Attendance of the Batch

The steps and formula for calculating overall attendance are as under.

1. Enrollment: Number of students who have registered and paid fees for CPBFI

2. Drop-outs: Number of students who stopped attending CPBFI during the batch

3. Regular students: Enrollment minus Drop Out

4. Total available student days: Number of regular students multiplied by total duration of CPBFI (number of days. E.g. 40 days)

5. Actual student days: Sum of days attended by each regular student.

6. Overall attendance (%) = Actual Student Days / Available Student Days X 100

Example: In a CPBFI batch 43 students registered and paid fees. By end of first week 3 students stopped attending the batch. The batch was conducted for 40 days. Out of the 40 regular students – 10 attended every class, 15 attended for 35 days, 10 attended for 33 days and 5 attended by 30 days. Overall attendance will be calculated as under.

Enrollment: 43

Drop-out: 3

Regular students: 40

Available days: 40 X 40 i.e. 1600

Actual days: (10 X 40) + (15 X 35) + (10 X 33) + (5 X 30) = 400 + 525 + 330 + 150 = 1405

Overall attendance: (1405 / 1600) X 100 = 87.81%





# Annexure 3: Information required by FINSERV before commencement of every batch

	Information Required
_	anation about the PARTNER INSTITUTE viz.
_	Basic information about the PARTNER INSTITUTE Viz.
	Name Year of establishment Year of establishment society
	Year of establishment Name of the educational society
	Name of the Education
	Contact details
	Website URL
	NAAC rating Total number of students (by stream)
	Total number of students (by stream) Total final year students (by stream)
	Total final year students (x)
-	Coordinator Details viz.
	Name
	Designation Department (Commerce/Science etc.) Department (Address
	Department (Commerce, See See See See See See See See See S
	Bank Details for payment of subsidy viz.
	Bank Details for payment of substance
	Beneficiary Name:
	Reply Account number:
	Bank Account Type: (Saving/current)
	Bank Name:
	Branch:
	IFSC Code:
	Permanent Account Number of the college (PAN):
	Permanent Account Names
	Please provide scanned copy of a cancelled cheque and PAN Card along with the above
	information
	High resolution logo of the college for printing on the Certificate/CPBFI brochures etc.
	THEIR TESTIMENT TO STATE OF THE
	Ai, JPEG, PNG, PDF Format. The image should be high resolution.
	Brief write up about the institute – for inclusion on CPBFI website, CV book etc.
-	far inclusion on CPBFI website, CV Boom





(to be printed on PARTNER INSTITUTE letterhead)		
Date:	*************************	****************
То		
(Name of the coordinator)		
(Designation of the coordinator)		
Subject: Your appointment as the official coordinate	ator for the Bajaj Finsery (	CPBFI Programme
Dear		
I am pleased to inform you that you have been appointed as the	e official coordinator for o	conducting Bajaj Finserv's CPBFI
Programme in our college. Congratulations!		
As official coordinator of the CPBFI programme, you will be responded in our college, in accordance with the terms and consistitute and Bajaj Finserv Limited and Bajaj Finance Limited. You of the said MOU. You will also abide by the other terms of the National information.	ditions prescribed in the our specific responsibilities	MOU signed between our s are mentioned in Clause 3(iii)
The college will be pay you a consolidated amount of Rs	(Rupees	) for every successful
batch of CPBFI, coordinated by you. This amount shall be subject	ct to applicable taxes.	
This appointment is valid for the academic year  Kindly confirm your acceptance to this appointment by signing		performance.
For: (College name)		
Authorized signatory		
(Name and designation)		
I agree to the terms of this appointment letter.		
Coordinator		
(name and signature)		
		CINSEDX

Annexure 4: Appointment Letter for appointing Coordinator for CPBFI









# Certificate of Completion

This is to certify that

### Bhavsar Vaishnavi Vijay

has participated and successfully completed

Certificate Programme in Banking, Finance and Insurance (September 2021)

conducted by Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver, Jalgaon in collaboration with Bajaj Finserv Limited

Beech

For

Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science

College, Raver, Jalgaon

CPBF

For and

Bajaj Finserv Limited



WALCHAND PLUS





# Certificate of Completion

This is to certify that

### Gayatri Dhondu Patil

has participated and successfully completed

Certificate Programme in Banking, Finance and Insurance (September 2021)

conducted by Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver, Jalgaon in collaboration with Bajaj Finserv Limited

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Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver, Jalgaon

PBF

For Samuel Control of the Control of



WALCHAND PLUS





# Certificate of Completion

This is to certify that

### Vaishali Traymbak Wagh

has participated and successfully completed

Certificate Programme in Banking, Finance and Insurance (September 2021)

conducted by Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver, Jalgaon in collaboration with Bajaj Finserv Limited

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For

Shri Vitthalrao Shankarrao Naik Arts, Commerce and Science College, Raver, Jalgaon

PBF

For Bajaj Finsery Limited



WALCHAND PLUS

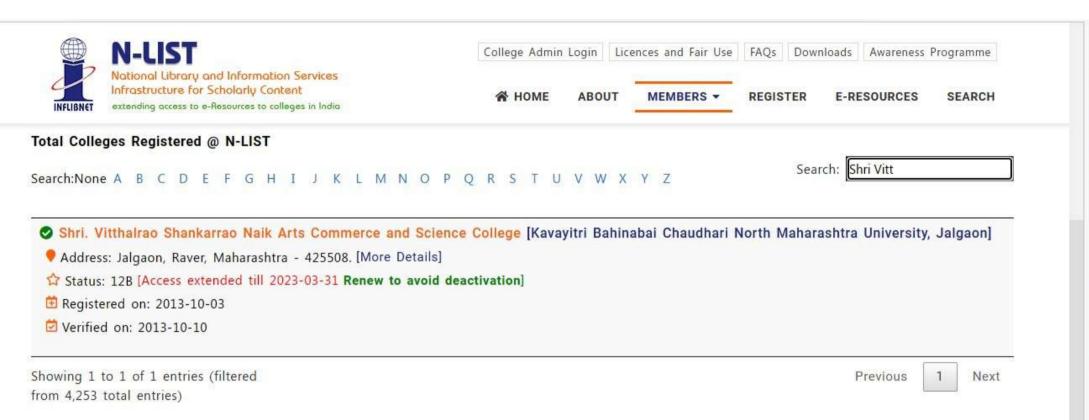


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**→** 

E-Journals (Fulltext) ✓ American Institute of Physics [18 titles] Annual Reviews [33 titles] Economic and Political Weekly (EPW) [1 title] Alternate Link Indian Journals [180+ titles] ✓ Institute of Physics [46 titles] JSTOR [2500+ titles] Oxford University Press [262 titles] Royal Society of Chemistry [29 titles] ☑ H. W. Wilson [3000+ titles]

E-Books Cambridge Books Online [1800 titles] **E-brary** [185000+ titles] EBSCoHost-Net Library [936 titles] ☑ Hindustan Book Agency [65+ titles] ✓ Institute of South East Asian Studies(ISEAS) Books [382+ titles] Oxford Scholarship [1402+ titles] Springer eBooks [2300 titles] Sage Publication eBooks [1000 titles] **⊘** Taylor Francis eBooks [1800 titles]

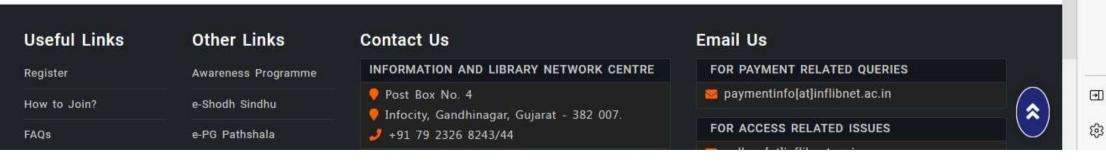


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- 1. Organizing Department: IQAC, Library Department and National Intellectual Property Awareness Mission (NIPAM), GOVT. of India
- 2. Name of the Event: One Day National Workshop on "Awareness on Intellectual Property Rights, Patents for the Aspiring Minds"
- 3. Date of the Event: 19 July 2022
- 4. Total number of Participants: 419
- 5. Name of the Coordinator: Dr. S. R. Chaudhari and Dr. B. G. Mukhyadal

### **Report of the Event**

One Day Online National Workshop on "Awareness on Intellectual Property Rights, Patents for the Aspiring Minds" with the collaboration of NIPAM, IQAC and Library Dept. of Shri V. S. Naik College Raver was organized on 19 July 2022. At the outset, Dr. S. R. Chaudhari, IQAC Coordinator delivered the introductory speech. Mr. Amol Ravindra Patil, Examiner of Patent and Design, Patent Office Mumbai was invited as a resource person. In his address, he guided all the participants about the importance of registration of Patent, several types of Patents, Copyrights and the detailed procedure of patent registration.





दूरभाष Tel: 🖺 022-24153651

फॅक्स Fax: 🚊 022-24130387

Email: mumbai-patent@nic.in

Website: www.ipindia.nic.in

### भारत सरकार पेटेंट कार्यालय

बौद्धिक सम्पदा भवन, एस.एम. रोड, अन्टॉप हिल, मुंबई - ४०००३७

### GOVERNMENT OF INDIA PATENT OFFICE

Boudhik Sampada Bhawan, S.M. Road, Antop Hill, Mumbai - 400037

To. Date: 08/03/2022

The Principal/Director,

Raver Parisar Shikshan Prasarak Mandal's Shri V.S. Naik Arts; Com. And Science College; Raver, Dist. Jalgaon

**Subject:** - Invitation to conduct IPR Awareness Program in your esteemed institution / school under **National Intellectual Property Awareness Mission (NIPAM).** 

Dear Sir/Madam,

Our Nation is commemorating the 75th Anniversary of India's Independence under the banner of "Azadi ka Amrit Mahotsav", and Government of India has taken initiative of National Intellectual Property Awareness Mission (NIPAM) under which awareness and training would be imparted to 1 million students on Intellectual Property Rights (IPRs) during the period from 15August 2021 to 15 August 2022.

As part of said Mission, the Office of Controller General of Patents, Designs and Trade Marks hereby invites your esteemed institution/school to conduct Intellectual Property Right awareness program in your institution/school. The said program is of 30-40 minutes duration wherein the students would be exposed to different types of Intellectual Property Rights (IPRs) and they would be enlightened and motivated to convert their ideas into innovation and further transformation into IP assets through protection of their IP rights. After completion of the said program every participant including the organization shall be awarded with e-certificate from the competent authority.

A line of confirmation on the above said proposal is highly appreciated. You are requested to contact **Dr. Ajay Thakur** (Team Leader) on **9768884980** <u>ajaythakur.ipo@nic.in</u> **Or Shri. Amol Ravindra Patil** (NIPAM Officer) on **8446317325** or <u>arpatil.ipo@gov.in</u> or **Mr. Sanjay Khandare** (NIPAM Officer) on **9820622601** <u>khandare.tmr@gov.in</u> for further information at the earliest. Awaiting your kind co-operation in this regard,

With Warm Regards,

Yours sincerely,

(Dr. Ajay Thakur)
Assistant Controller of Patents and Designs
NIPAM Team Leader

Copy to:

1) NIPAM Register



### Government of India Ministry of Commerce and Industry Department for Promotion of Industry and Internal Trade Office of the Controller General of Patents, Designs and Trade Marks





In Collaboration with IQAC and College Library

of

Raver Parisar Shikshan Mandal's Shri V. S. Naik Arts, Commerce and Science College Raver Organizes

One Day National Workshop on

"AWARENESS ON INTELLECTUAL PROPERTY RIGHTS, PATENTS FOR THE ASPIRING MINDS"

TUESDAY, 19 July 2022, Morning 10:00 to 12:00

Our Inspiration



Shri Hemantsheth Naik Chairman Raver Parisar Shikshan Prasarak Mandal

Principal



Prof. Dr. P. V. Dalal Principal Shri V. S. Naik Arts, Commerce and Science College Raver Dist. Jalgaon (MS)

Key Speaker



Shri Amol Ravindra Patil

Examiner of Patents and Designs, Patent Office Mumbai, DPIIT, Ministry of Commerce and Industry, Government of India

### **Organizing Team**

Dr. S. R. Chaudhari IQAC Coordinator Shri V. S. Naik Arts, Commerce and Science College Raver

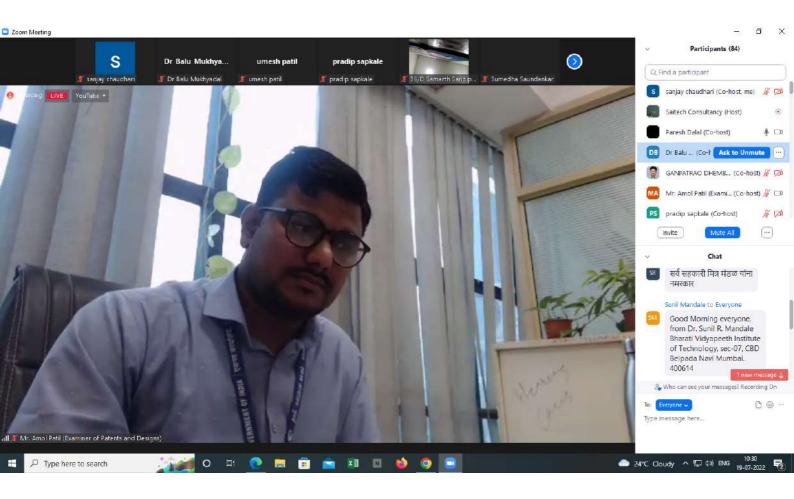
Dr. B. G. Mukhyadal Librarian Shri V. S. Naik Arts, Commerce and Science College Raver

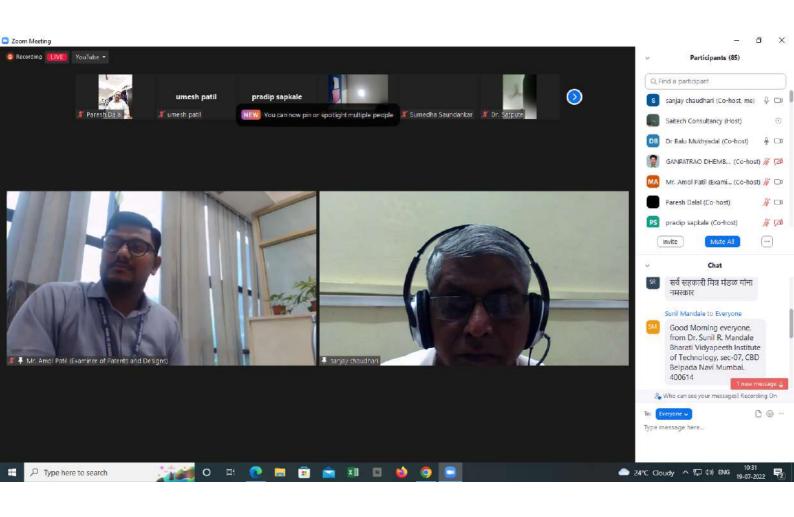
Registration Link: https://forms.gle/kZVziFwgXyRqh7ck9

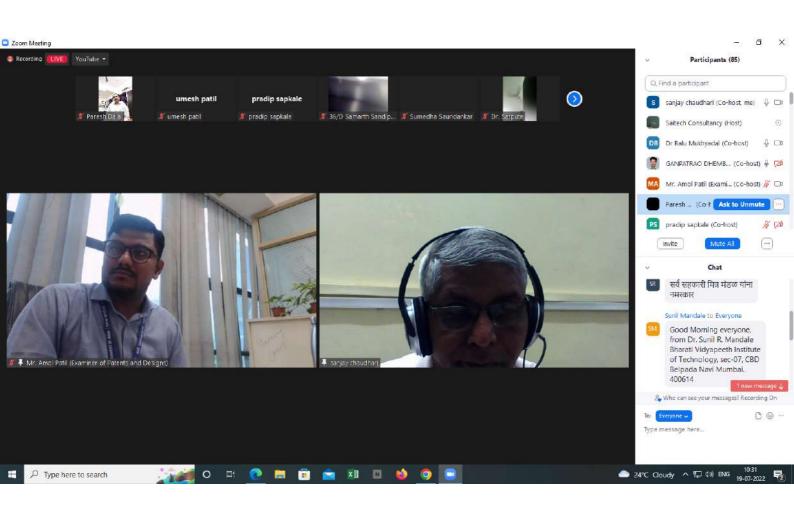
Follow this link to join WhatsApp Group

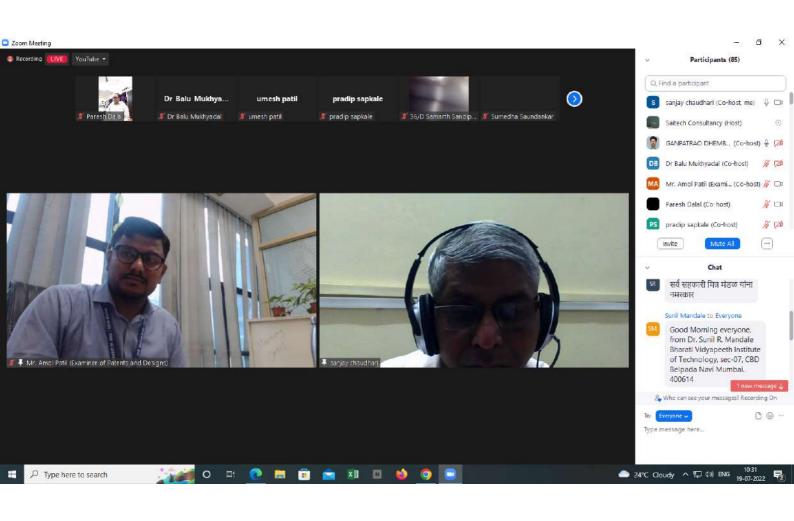
WhatsApp Group: https://chat.whatsapp.com/Jwlj5xh8tCaJbLVbABoF7h

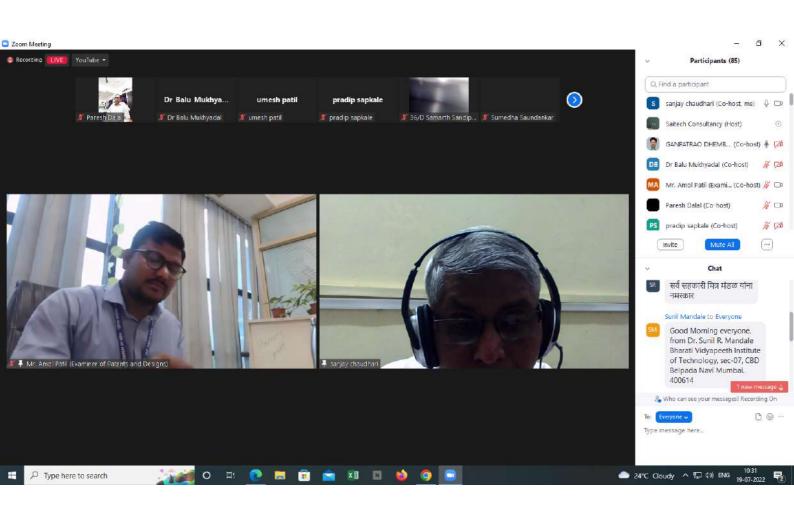
The Programme will be conducted through Zoom App.
E-Certificate will be issued to all the Participants from Government of India, Patent Office Mumbai.

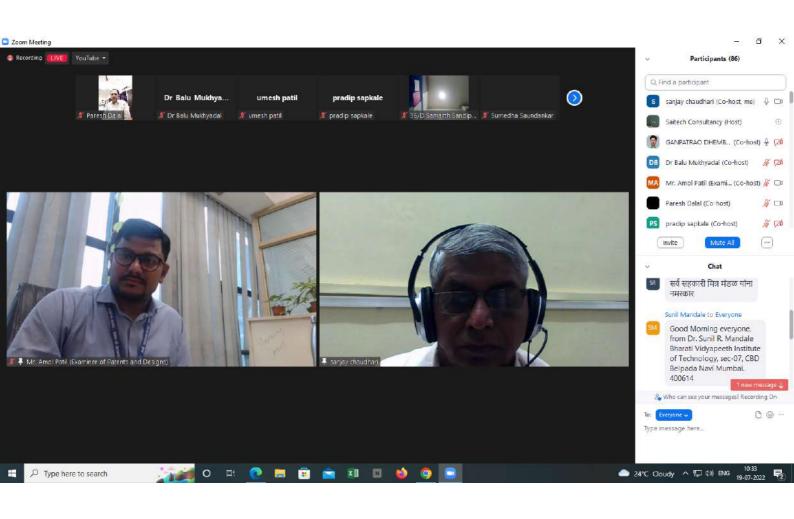


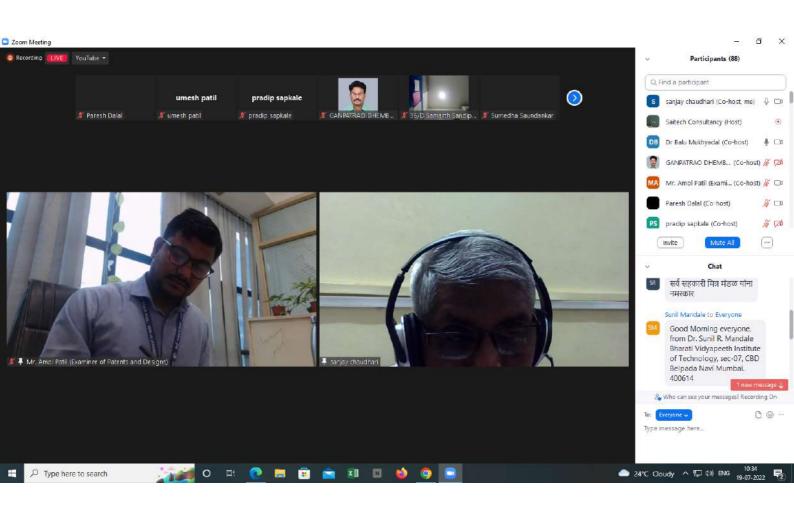


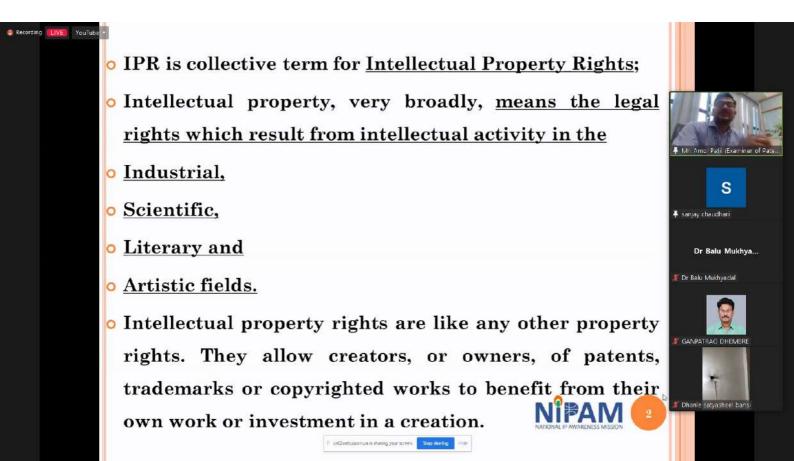


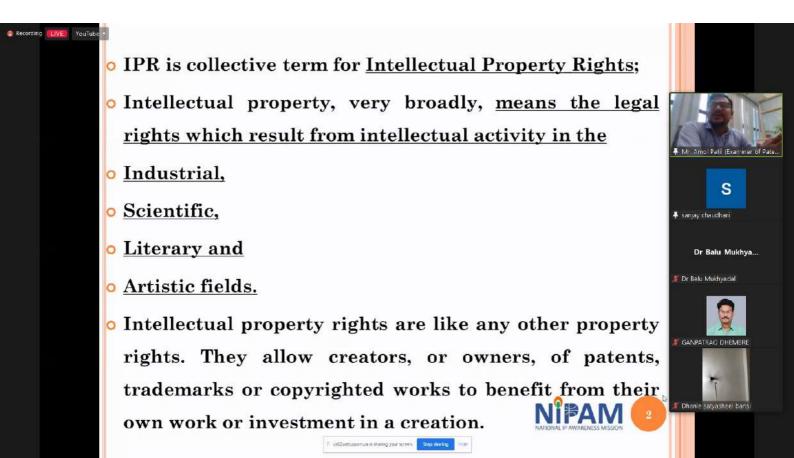


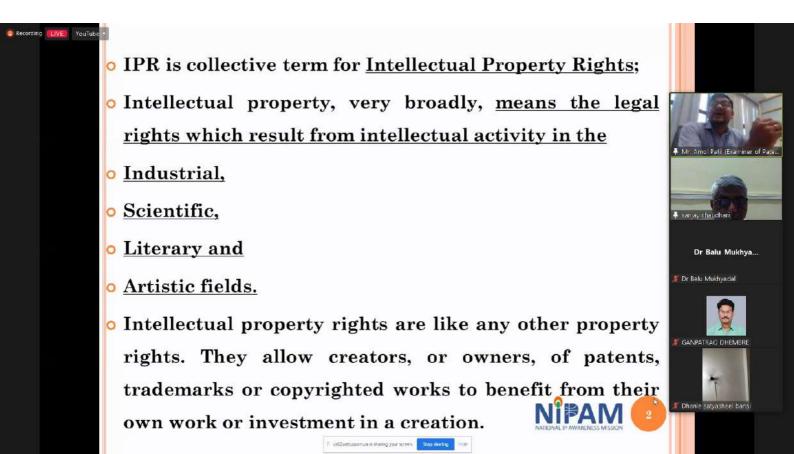


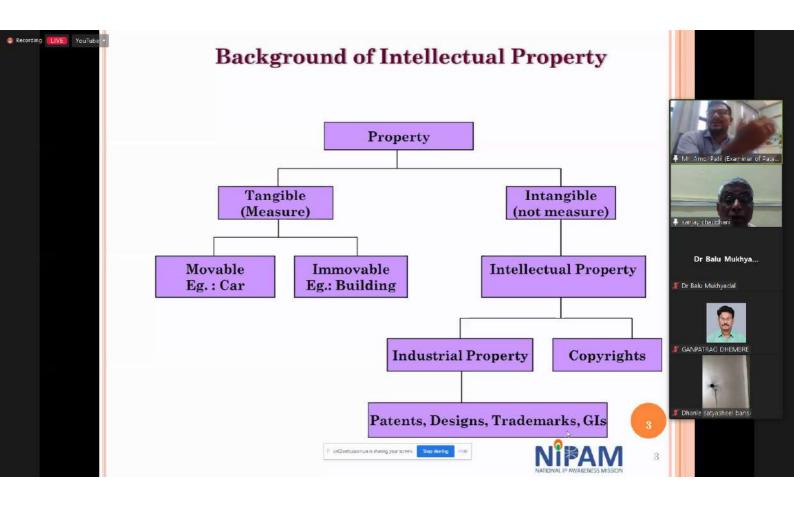


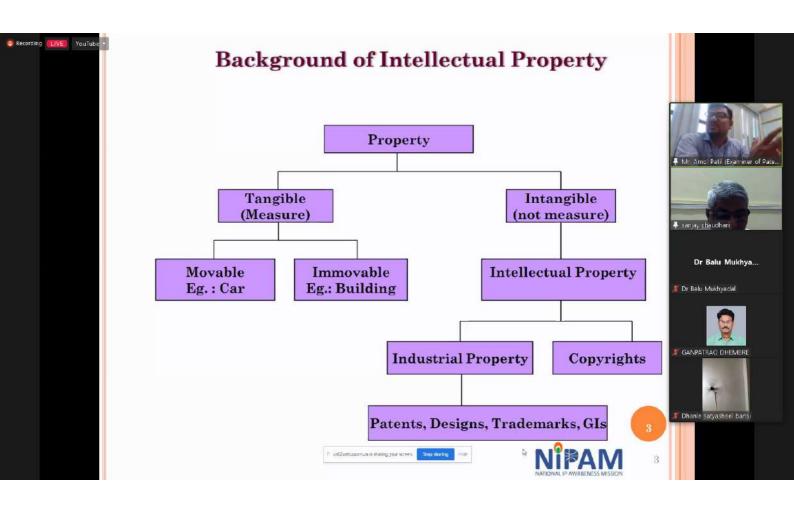




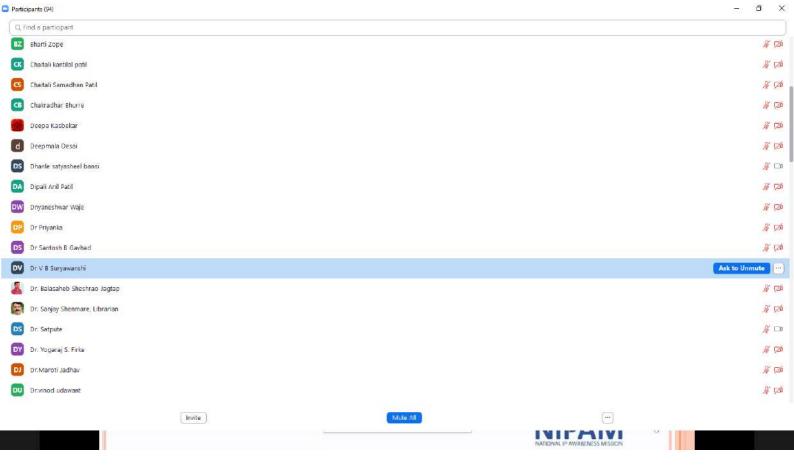


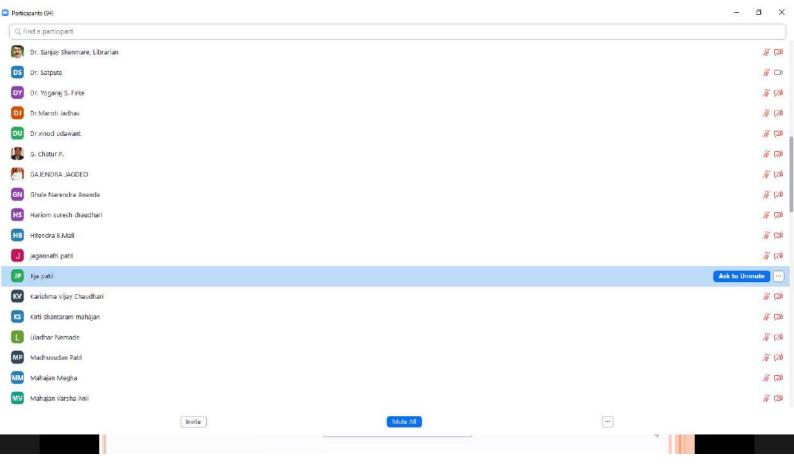


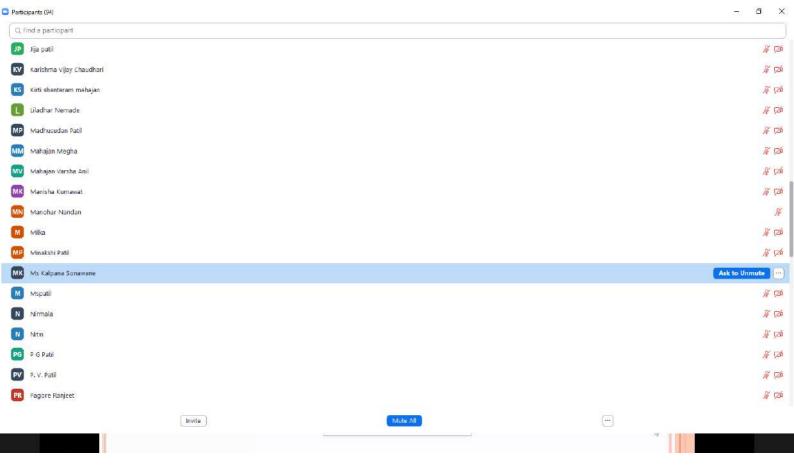


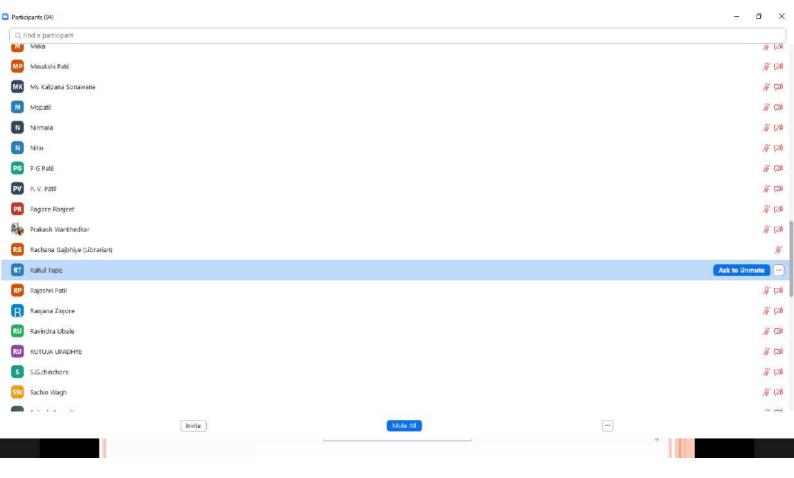


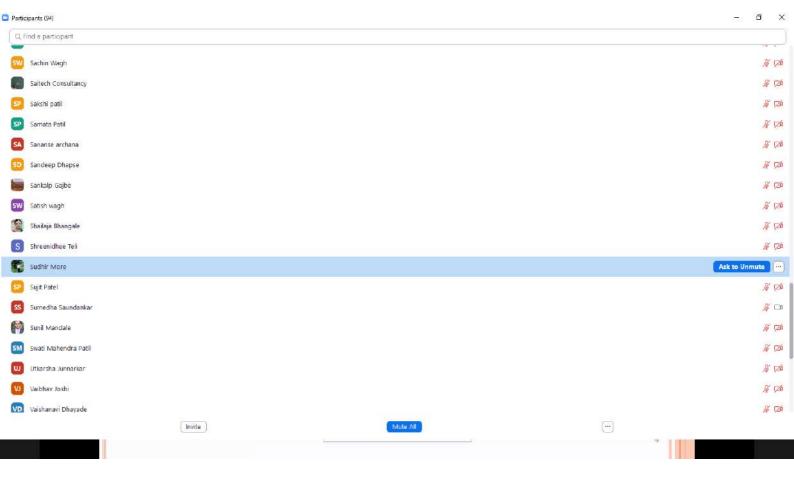


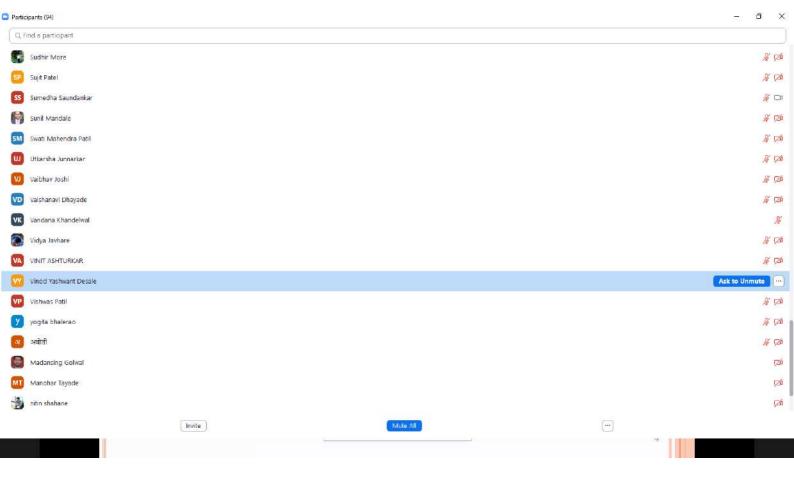


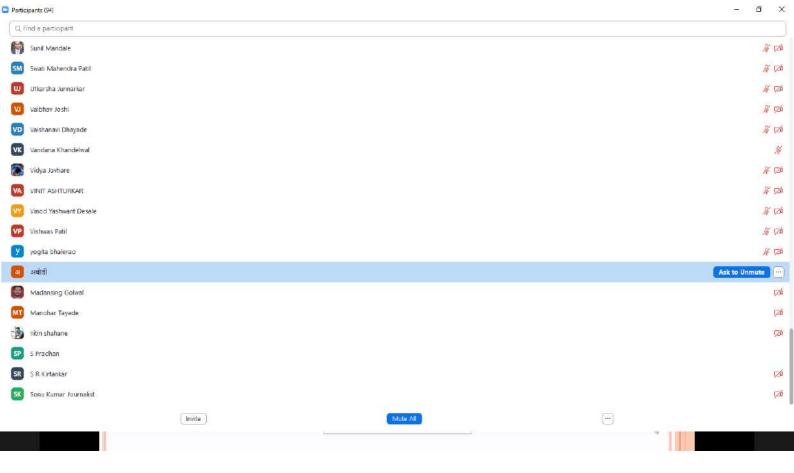


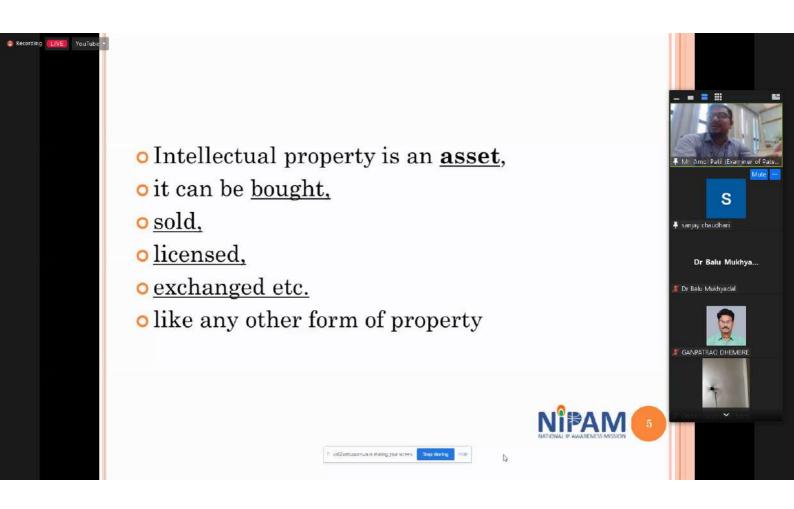














Intellectual property is divided into two categories:

Industrial Property includes patents for Inventions, Trademarks, Industrial Designs and Geographical indications.

Copyright covers literary works (such as novels, poems and plays), films,

music, artistic works (e.g., drawings, paintings, photographs and sculptures) and architectural design.

Rights related to copyright include those of performing artists in their performances, producers of phonograms in their recordings, and broadcasters in their radio and television programs.



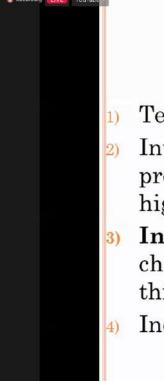
S

Dr Balu Mukhya.

# sanjay chaudhari

F Dr Balu Mukhyadal





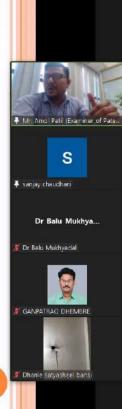
### NEED FOR IPR

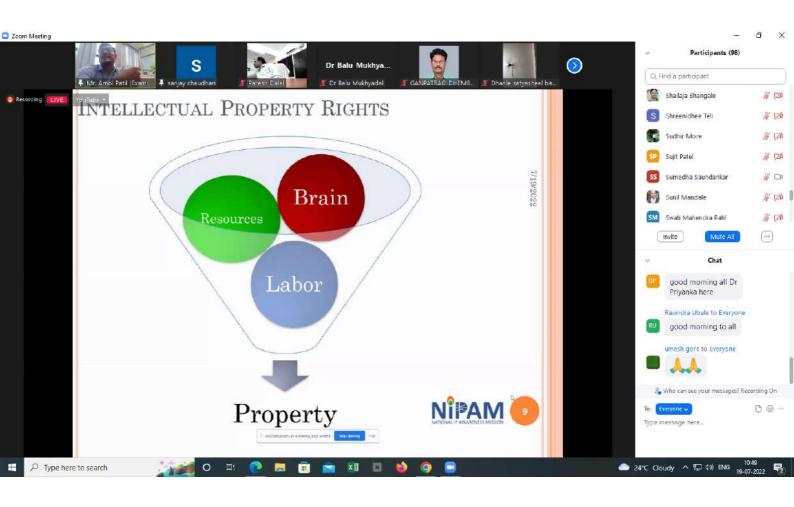
- 1) Technologies are changing rapidly;
- 2) Investments in Research & Development, production, marketing have become very high;
- 3) In the Era of digitalization, there are high chances of creative ideas being stolen by any third party, without any prior permission;

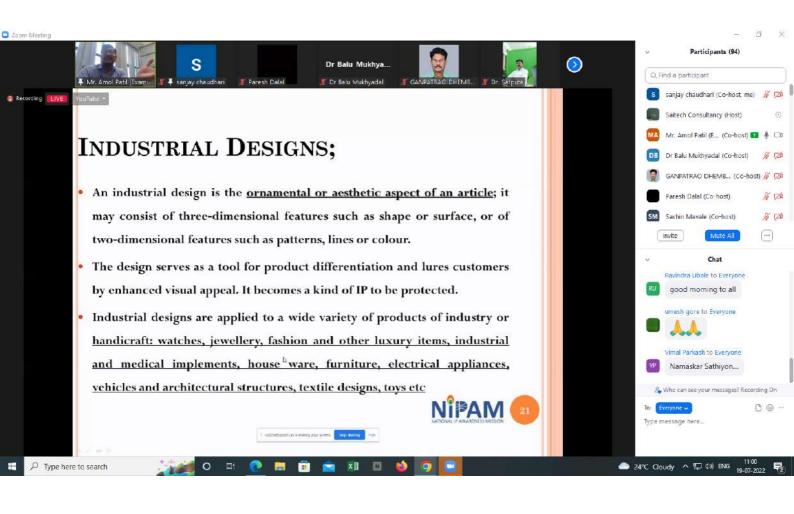
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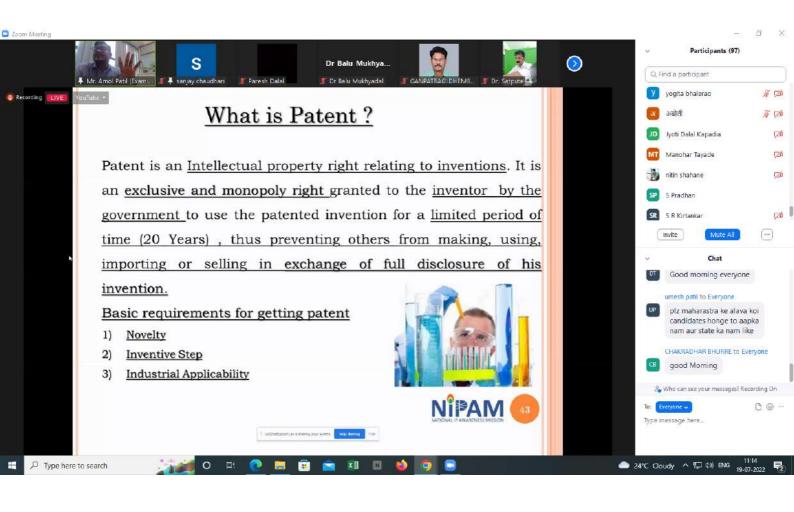
4) Industry has become very competitive, etc.

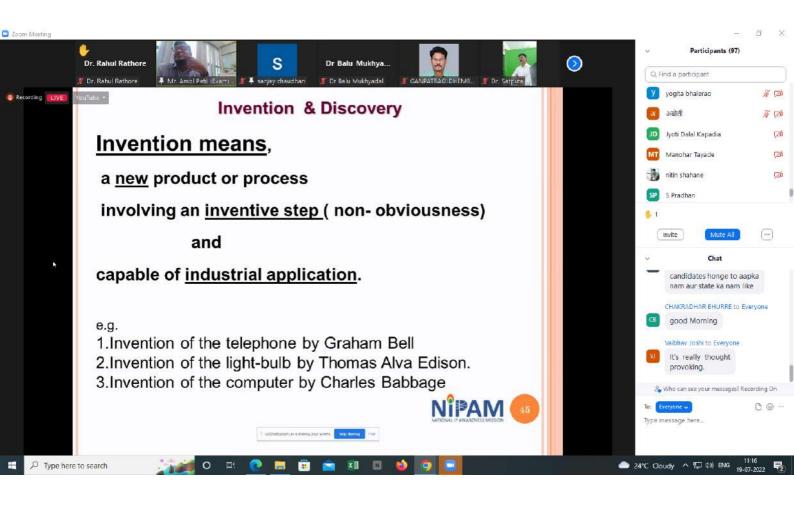


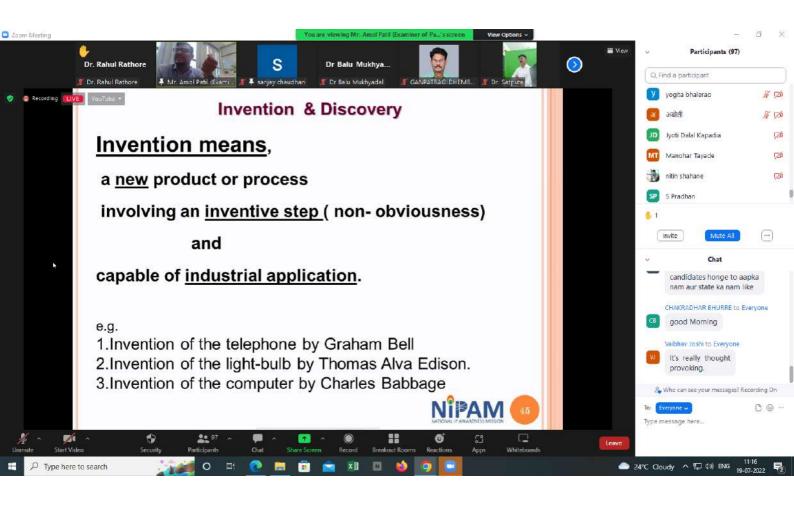


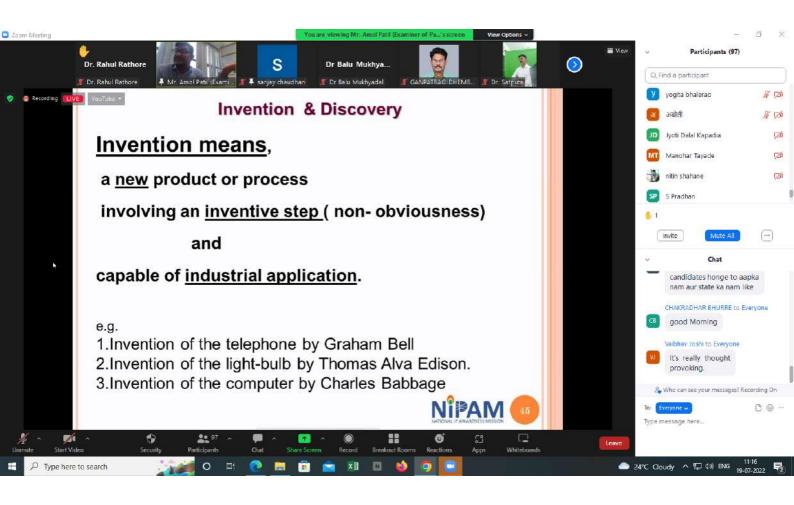


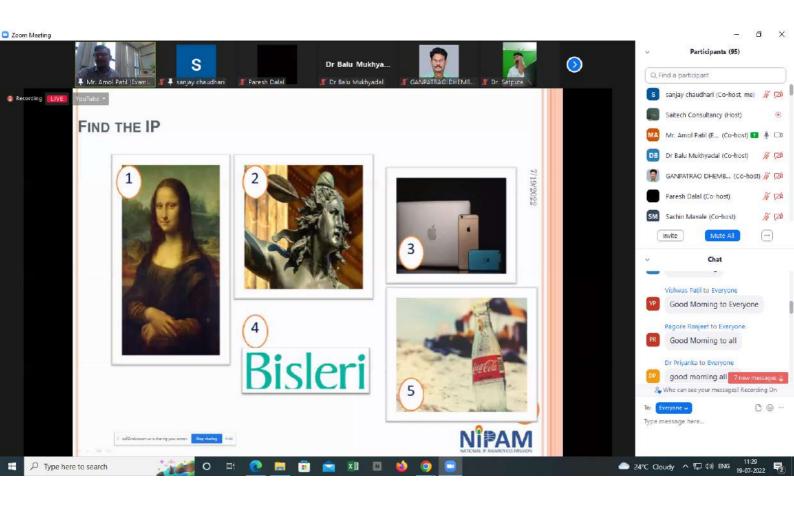


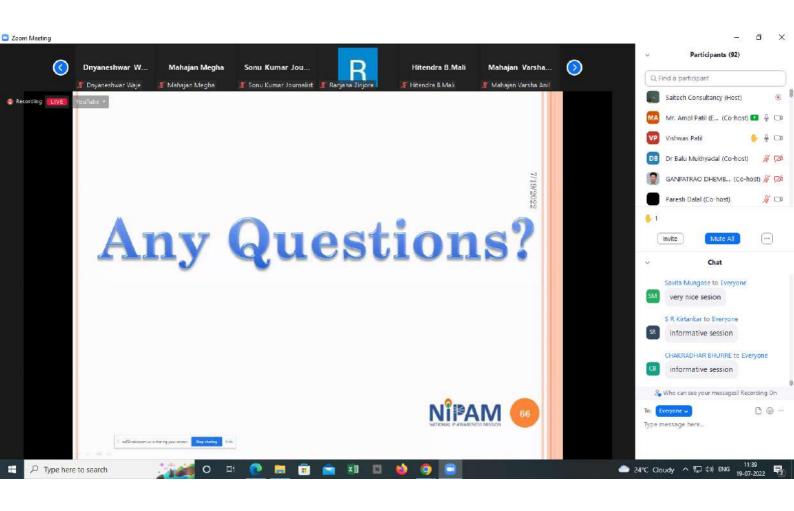


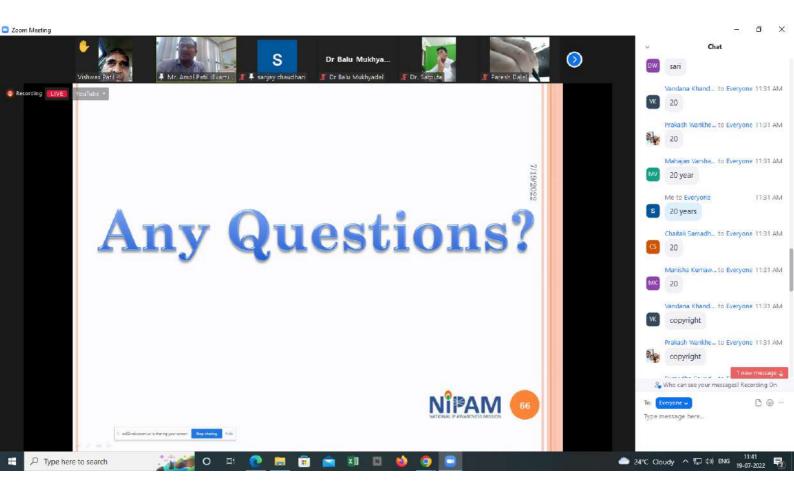


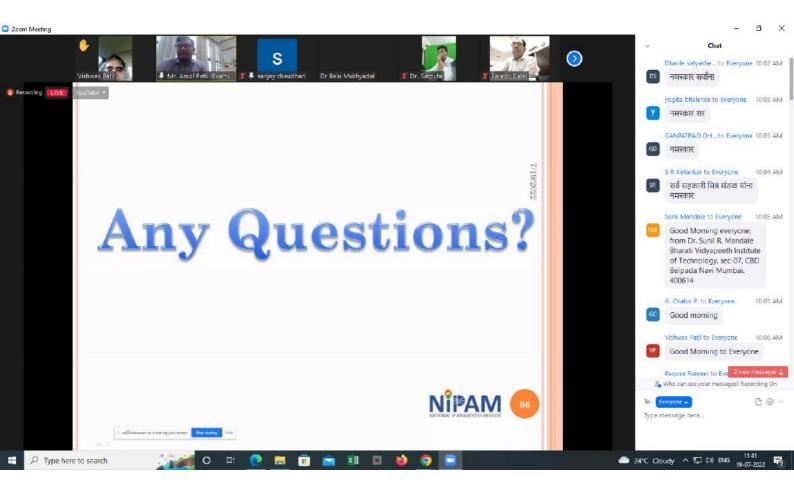












## Chat



piz manarastra ke alava koi candidates honge to aapka nam aur state ka nam like



Dr.Rekha Tarachand Zalke to Everyone



## Good morning everyone

Me to Everyone

plz maharastra ke alava koi candidates honge to aapka nam aur state ka nam like



CHAKRADHAR BHURRE to Everyone



# good Morning

Vaibhav Joshi to Everyone



It's really thought provoking.

Ms Kalpana Sonawane to Everyone



very informative session.... thanks all team

Send to: Everyone >

Tap here to chat or tap a message to reply

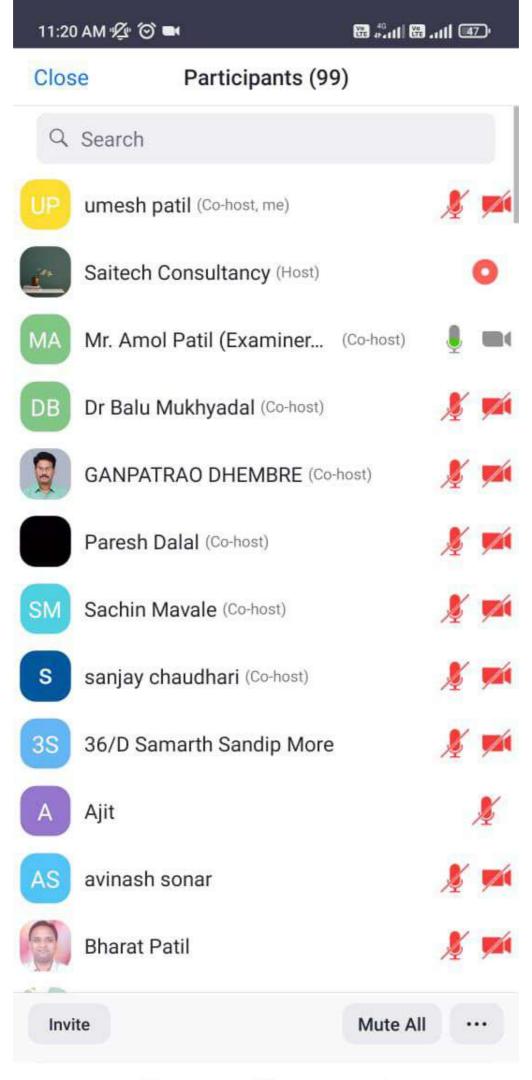




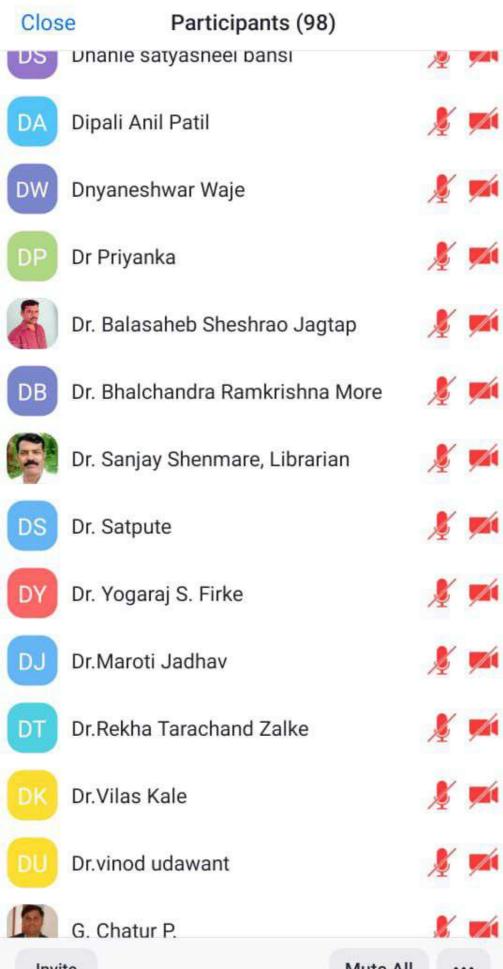


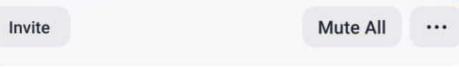














Invite Mute All

SP S R Kirtankar

S Pradhan

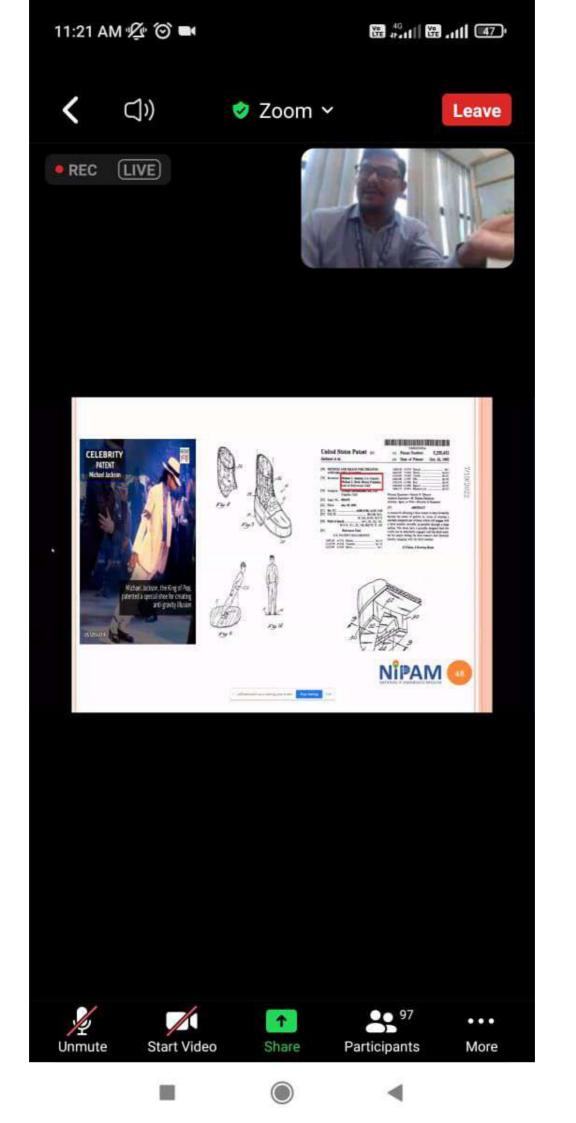
Shweta sonawane

Sonu Kumar Journalist

VM vikas mungase

Mute All Invite















Leave



LIVE



### NIPAM

## PROTECTION FORM OF IPR REGISTRATION TERM OF PROTECTION

IPR	ACT (Legislation)	REGISTRATION / TERM
Patent	The Patents Act, 1970.	Compulsory : 20 years.
Trademarks	The Trademarks Act, 1999.	Optional:10 years & renewable,
Designs	The Designs Act, 2000.	10 years + Renewable by 5 years
Geographical Indications	Geographical Indications of Goods (Registration and Protection) Act, 1999.	Compulsory: 10 years + Renewable forever.
Copyright	The Copyright Act, 1957.	Optional Lifetime of Author + 60 years
Plant Protection	Protection of Plant Varieties and Farmers' Rights Act, 2001.	Compulsory :15/18 years
Integrated Circuits	The Semiconductor	Compulsory: 10 years





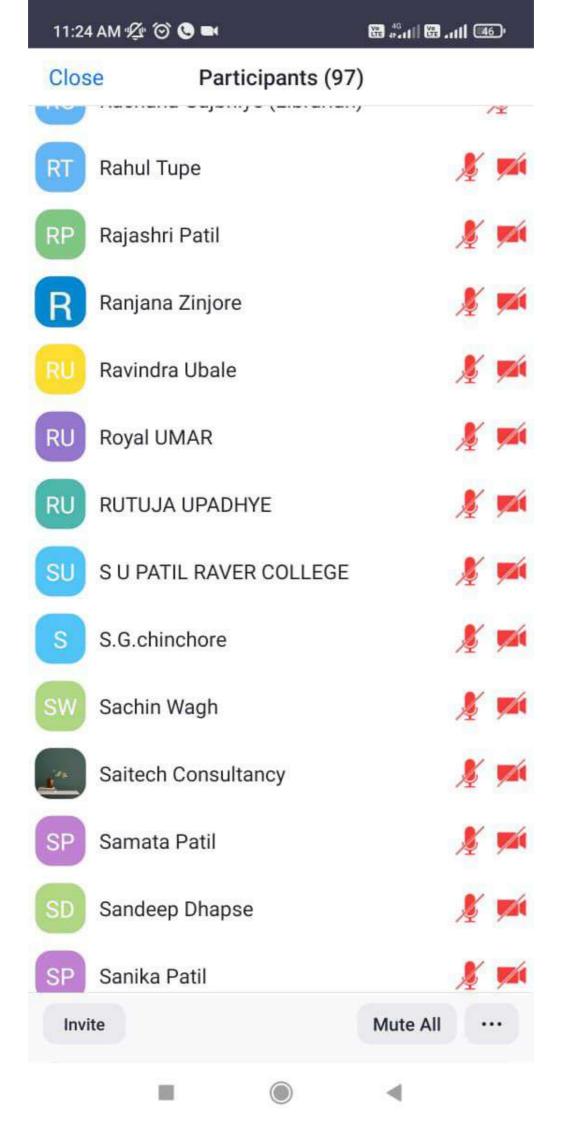


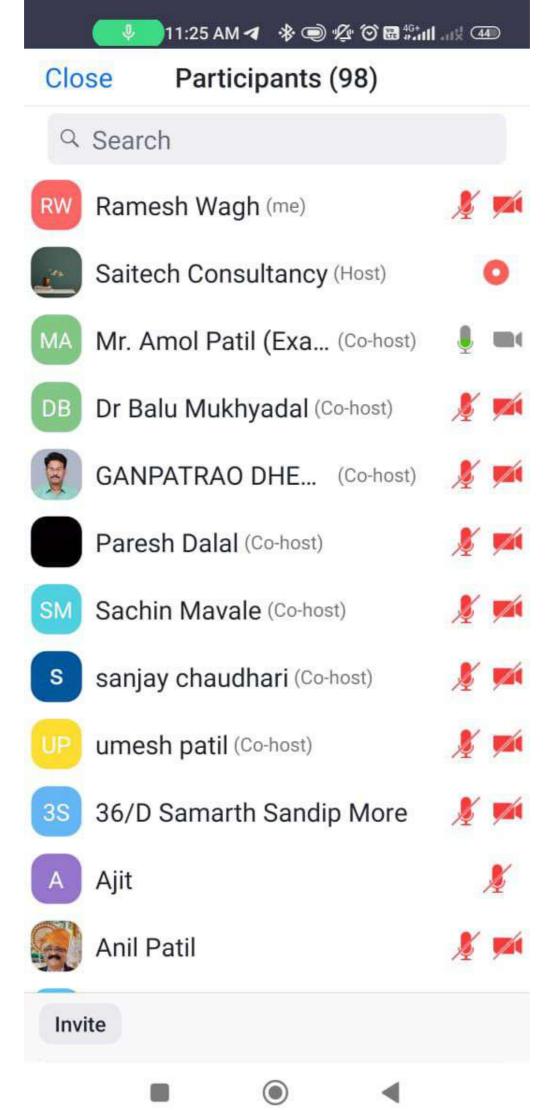


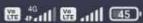












# Chat



Ms Kalpana Sonawane to Everyone



## very informative session.... thanks all team

Vaibhav Joshi to Everyone



# Copyright

Sumedha Saundankar to Everyone



# Copyright

Vandana Khandelwal to Everyone



# copyright

Dnyaneshwar Waje to Everyone



# copy right

Prakash Wankhedkar to Everyone



# copyright

Send to: Everyone >

Tap here to chat or tap a message to reply

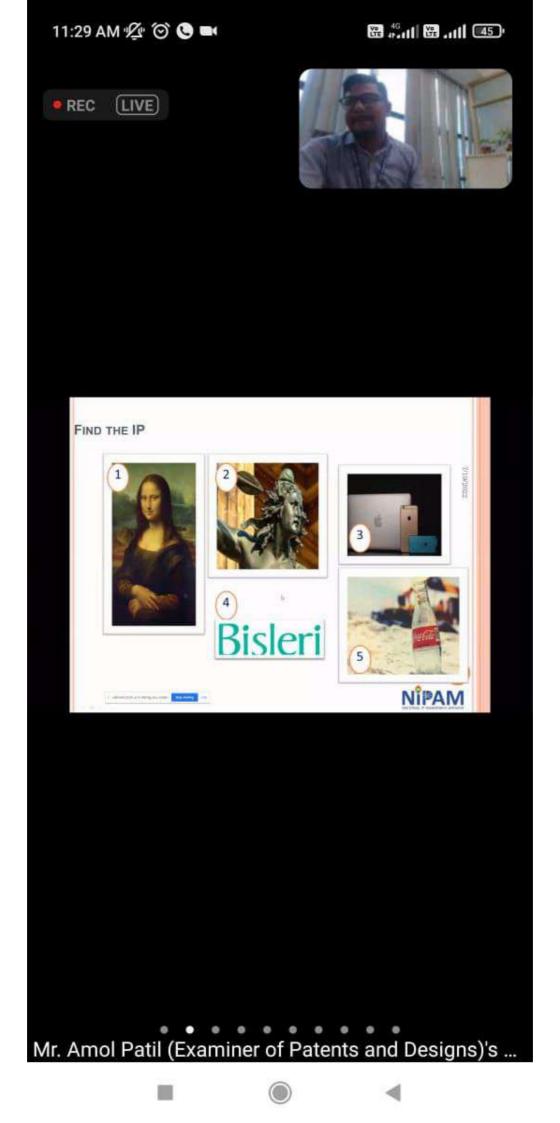














## Chat



pz

Prakash Wankhedkar to Everyone



thank you very much sir

nice information

Sanjay Dahiwadkar to Everyone



very nice information

Vandana Khandelwal to Everyone



Very informative and fruitful session. Thanks to organizer and resource person.

Please share recording of session

Savita Mungase to Everyone



very nice sesion

Send to: Everyone >

Tap here to chat or tap a message to reply

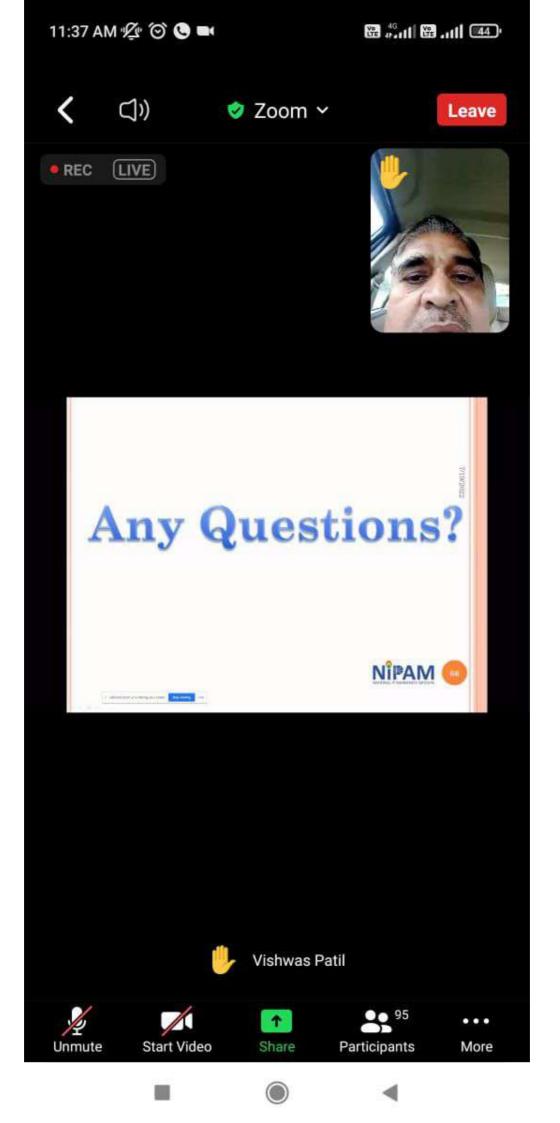


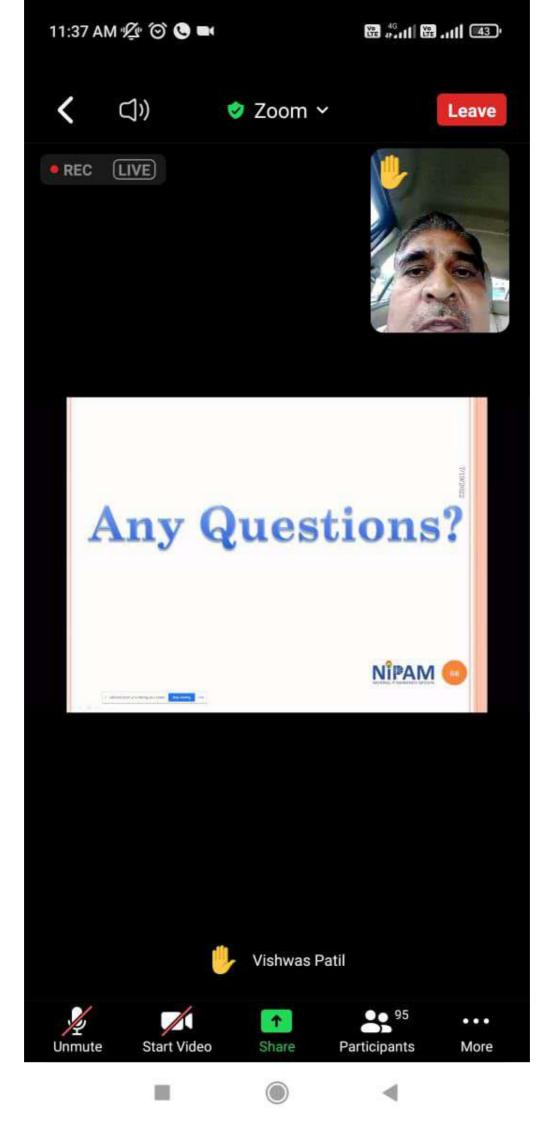














## Chat



Nirmala to Everyone



informative session ..

Sujit Patel to Everyone



knowledgeable

Deepa Kasbekar to Everyone



very informative session sir. thank you so much 🙏

Vandana Khandelwal to Everyone



Can you please share recording of the session

Utkarsha Junnarkar to Everyone



Thank you Sir

Sonu Kumar Journalist to Everyone



feedback link

Send to: Everyone >

Tap here to chat or tap a message to reply













Mr. Amol Ravindra Patil

Email: arpatil.ipo@gov.in

Examiner of Patents and Designs, (Group 'A', Gazetted)
Indian Patent Office, Mumbai,
DPIIT | Ministry of Commerce & Industry
Government of India.

### **Academic Details:**

- **1. Bachelor of Engineering (Mechanical),** Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- 2. **Bachelor of Law (L.L.B),** Dr Ambedkar Law College, Mumbai. (University of Mumbai)

### **Work Experience:**

Worked as a Bosch Production System (BPS) Engineer for 1 year in Bosch Limited, Nashik (NaP): 2013-2014

## **Nature of Work in Patent Office:**

- 1. Examination of each patent application under Section 12 of the Patents Act, 1970 (as amended) according to field of specialization and report to the Controller about its patentability under the Patent Act,
- 2. Conducting search for anticipation under Section 13 of the Patents Act, 1970 (as amended),
- 3. IPC classification of patent applications,
- 4. Preparation of detailed examination reports,
- 5. Consideration of observation/submissions and proposed amendments,
- 6. Can act as chairman/member of Opposition board, assisting Controllers in opposition matters.
- 7. Conducted more than 100 IPR Awareness Programs in various schools, colleges, Academic Institutions, etc.







Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
Office of the Controller General of Patents, Designs and Trade Marks

# **CERTIFICATE**

This is to certify that, DR. BALU GANGADHAR MUKHYADAL of SHRI V. S. NAIK ARTS,

COMMERCE AND SCIENCE COLLEGE RAVER DIST JALGAON co-ordinated in conducting

the Intellectual Property Awareness program under

NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION

Azacji 19,2022 Amrit Mahotsav

Organized by Intellectual Property Office, India

Date:July 30,2022



(Prof. (Dr) Unnat P. Pandit) CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS











Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
Office of the Controller General of Patents, Designs and Trade Marks

# **CERTIFICATE**

This is to certify that, DR. SANJAY R CHAUDHARI of SHRI V. S. NAIK ARTS, COMMERCE

AND SCIENCE COLLEGE RAVER DIST JALGAON has successfully participated in IP

Awareness/Training program under

NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION

Azacji 19,2022 Amrit Mahotsav

Organized by Intellectual Property Office, India

Date: July 30,2022



(Prof. (Dr) Unnat P. Pandit) CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS







### Raver Parisar Shikshan Prasarak Mandal's Shri. Vitthalrao Shankarrao Naik Arts, Commerce and Science College. Raver - 425 508, Tal. - Raver, Dist. - Jalgaon.

[ Affiliated to North Maharashtra University, Jalgaon (M.S.) ]

Prin. Dr. P. V. Dalal M.Sc., M.Phil., Ph.D.

e-mail: paresh10dalal@gmail.com

Cell Phone: 09420074998

Phone: 02584-250447(0)

e-mail: principalvsn\_rvr@yahoo.in

U.G.C. Recognisation -

S-2(f)-F8-77/2007(CPP-I), 31 Jan. 2008. S- 12(B)-F8-77/2007(CPP-I), 17 Sep.2008.

जा.कं १४४४२०१९-२०

दिनांक - ०६ /०२/२०२०

मा. व्यवस्थापक. जैन हिल्स / जैन इरिगेशन्स लि. जळगांव

> विषय: अभ्यास सहलीनिमित्त आपल्या उद्योगसमुहास भेट देण्यास परवानगी मिळणे बाबत

उपरोक्त विषयान्वये विनंती की, आमच्या महाविद्यायातील तृतिय वर्ष रसायनशास्त्र वर्गाच्या अभ्यास सहली निमित्त दि. ०६/०२/२०२० रोजी भेट दयावयाची आहे. तरी सदर अभ्यास सहलीस परवानगी मिळावी व विदयार्थ्यांना मार्गदर्शन करावे ही विनंती

श्री.व्ही.एस.नाईक क**ला, वाणिज्य व** ा महाविद्यालय,रावेर ४२५५०८





प्रति

प्राचार्य. श्री. व्ही. एस. नाईक कला, वाणिज्य व विज्ञान महाविदयालय रावेर, जि. जळगाव

विशय — अभ्यास सहल आयोजित करण्यास परवानगी मिळणे बाबत

उपरोक्त विषयान्वये आम्ही विनंती करतो की, रसायनशास्त्र या विषयाची तृतिय वर्ष वर्गाची अभ्यास सहल जैन हिल्स व जैन इरिगेषन येथे दि. 06/०२/२०२० रोजी न्यावयाची आहे. तरी सदर अभ्यास सहलीस परवानगी मिळावी ही विनंती

Pormissin grantal

रसायनशास्त्र

# Shri. V. S. Naik Arts, Commerce and Science College, Raver

# Department of Chemistry

Organization of Industrial Visit to Jain Hills and Jain Irrigation Systems Ltd. Jalgaon

Date 06 Feb. 2020

# List of Students

Sr. No.	Full Name of Student	Mobile	Signature
		Number	
1	Rohan Devanand Patil	9511727688	700
2	Bhushan Subhash Shinde	9130147460	Brutande
3	Dhiraj Raman Chaudhari	9834277457	Rely
4	Kiran Balu patil	8766575028	K.B. Retil.
5	Puja Vijay Patil	7974766040	Fratil
6	Sakshi Vijay Patil	7974766040	- Aulid
7	Pournima Vasant Mahajan	9673169088	Prinahajan
8	Kalyani Kishor Wani	9657968912	Lewani
9	Ashutosh Yuvraj Mahajan	8459979808	Andria
10	Akshay Ashok Mahajan	8530093705	Mahajar
11	Puja Vijay Patil	9823129005	Redi
12	Kanchan Pramod Mahajan	9763565288	KALLERJON
13	Damini Prakash Belaskar	9923047050	DElaster)
14	Mahendra Ambadas Chaudhari		Beulin'.
15	Digambar Ramesh Mahajan	7057348184	3' gunden
16	Gunjan Mohan Chaudhari	8208510244	Chartei
	Name of Teachers	0000005753	
1	Dr. A. N. Sonar	8999065752	
2	Dr. J. M. Patil	8788297396	lla lla
3		9158701540	Erandle.
4	Mr. N. A. Ghule	6455384498	

Head of Department







### Onion & Vegetable Dehydration



### प्याज़ तथा सब्जी निर्जलीकरण



- Capacity, Process & Features
  Processing Facilities

  Three Processing facilities worldwide.

  Two processing facilities in India, one located at Jalgaon, Maharashtra and the other at Vadodara,
- Gujarat.

   One in United State of America.

#### Raw Material

White Onion, Garlic, Leek, Bell Pepper, Paprika, Tomato & Spinach

- Production Process Dehydration

   Special varieties of Onion & Vegetables are contract grown in vicinity of the dehydration
- plants.

   Cultivation and harvesting is supervised by our agronomists, who also provide agronomical guidance to the contract growers.

  Raw Onions and vegetables are harvested, graded and then transported to the plants.

  All of the raw material on receipt is checked for a contract of the plants.
- All of the raw material on receipt is checked for quality and only good quality raw meterial is feed to the plant or store in the climate control storages for future processing.
  The onions/vegetables are cleaned, inspected, washed and then transported to the main processing plant by a special water flume system.
  The onions/vegetables are washed once again, peeled, washed, inspected and then cut to required sizes.

- The cut onlons/vegetables are then dried gently
- to retain all the natural taste, flavour and nutrients.

  The dried product is then milled to make different fractions like flakes, granules, powder etc. depending on customer application and requirement.
- The finished product is then passed through metal detector, colour and laser sorter, before being packed and store in cool storages

- विश्व में तीन प्रसंस्करण इकाईया।
   गारत में दो जातगाँच (मक्षराष्ट्र) य वडीवराः गुजरातः।
   एक इकाई सयुक्त राष्ट्र अमेरिका।

• सकेद प्याज, लक्षसुन, प्याजनुमा वनस्पति, लाल मिर्व, टमाटर और पालक।

- उत्पादन विक्रया निर्जलीकरण निर्जलीकरण प्रक्रिया प्रकल्प के समीपस्थ क्षेत्र में प्याज व सब्जियों वी विशेष प्रकारियों अनुबन्धित खेती के अन्तर्गत किसानों द्वारा

- वी विशेष प्रजावियों अनुबन्धित वंदि के अन्तर्गत किशानों द्वारा उदायदित।

  के खेती एक लटाई, खुटाई, तुआई कम्पनी के कृषि विशेषकों का मार्गदर्शन अनुबन्धित वोदी के कृषकों को उपलब्ध।

   याज एक सोक्रियों की एजाई, खुटाई के बाद अणीकरण करके उनका परिवाद निर्मालिकरण प्रमान को किया जाता है।

   राजान पर मार्ग आने के बाद अनकी गुजदता का परिवाद किया का का किया जाता के कि किया आती के बाद अनकी गुजदता का परिवाद किया किया जाता के कि विशेष जीवित की का का का को किया जाता के किया जाता के किया जाता के विशेष जीवित की अन्तर्शित की विशेष जाता की अन्तर्शित की अन्तर्शित की जीवित की जीवित की स्थाप स्थाप इंग है प्रमान के अन्तर्शित की अन्तर्शित की जीवित की जीवित की अन्तर्शित की जीवित क
- जाता है।

   यान है व निरिक्षण परवात आवश्यक अन्तर में काटा जाता है।

   जाता है व निरिक्षण परवात आवश्यक अन्तर में काटा जाता है।

   लटे हुए प्याप्त्र सिन्धां को धीरे धीर चुवाते हैं जिससे प्रकृतिक स्वाट, गंध एवं प्रोचक करता को सुनितित रखा जा सके।

   निर्जालीकृत चरचार को जनक प्राप्ता और अनेक, लेन्द्रन, या चारकर में प्राप्तक के उपयोग ऐव अवश्यकता के अनुसार परिवर्धित किया जाता है।

Latitude: 20.94764 Longitude: 75.554182 Elevation: 277.97m

Accuracy: 13.1m

Time: 06-02-2020 13:09





# **Fruit Processing**

### फल प्रसंस्करण







#### Salient Features

- Agronomical support and training is provided to the farmers to ensure good agricultural practices.
- Full traceability up to the farm level/farm cluster level.
   Stringent plant sanitation, hygiene and good
- manufacturing practices followed.
- · All products tested and certified for pesticide and heavy metal residues.
- · Products marketed under the brand name 'FarmFresh'
- . GMP, HACCP, SPC & other Quality Management Systems are implemented.
- Free of any chemical preservatives / adultrants.
   Meet WHO, EU and Japanese Standards for
- pesticides and heavy metals.

#### Products and Packing

Alphonso, Kesar, Totapuri Mango Puree, Totapuri Mango Concentrate, Mango Clarified Juice Concentrate, Banana Puree, Concentrate and Clarified Juice Concentrate, Guava Puree, Concentrate and Clarified Juice Concentrate, Papaya Puree, Concentrate and Clarified Juice Concentrate, Tomato Puree, Concentrate and Paste, Amla Puree, Pomegranate Juice and Clarified Juice Concentrate, IQF Alphonso, Totapuri and Kesar Slices and Dices, Pomegranate Arils, Papaya dices, Guava dices, Sapota dices and Vegetables.

ASEPTIC - 20 Kg. Bag in Box, 50/100 Kg. Bag in Plastic Drums, 200/220 Kg. Bag in Steel Drums and 1000 Kgs. in Plastic or Corrugated Bins.

CANS - 450 ams, 850 gms, 3.1 Kg. and 5.25 Kg. Banana Puree, Concentrate and Clarified Juice

CANS - 450 gms, 850 gms, 3.1 Kg. and 5.25 Kg FROZEN - 1 Kg. in pouch/plastic jars, 5 Kg & 10 Kg. in plastic drums, 20 Kg in Bag in Box and 200 Kg. in Bag in Drums.

IQF - 1 Kg, 5 Kg, 10 Kg. in Bag in Box.

Applications: • 'FarmFresh' fruit pulps and concentrates are used in a variety of applications e.g. fruit juices, nectars and other fruit based beverages. Ice-creams, yogurts, confectionaries and other applications

 'FarmFresh' Frozen Fruit & Vegetable Products are also used in a variety of applications e.g. Fruit salads, Yogurts, Ice-creams & other applications.



- उत्तन कृषि तकनीक अपनाने के लिये कृषकों को कृषि सम्बन्धी परामरों व प्रशिक्षण प्रदान किया जाता है।
- प्रक्षेत्र या प्रक्षेत्र समूहतक की प्रत्यक्ष अनुमार्गिता।
- कठोर ढंग से संयन्त्र की स्वाक्रता, सफाई व उच्च निर्माण क्रियाओं
- सभी उत्पाद की कीटनाशक व रोगनाशक ववाइयों व नारी धातु अवशेषों के लिये जांच की जाती है और उन्हें प्रनाणित किया जाता है।
- उत्तादों को 'फार्मकेश' बांजनाम से बेंचा जाता है।
   जी एम थी., एक ए.सी.सी.थी., एक पी.सी. व अन्य गुणवता व्यवस्थाओं को लागू किया जाता है।
   कोई भी परिरक्षित रसायन या मिलावट रहित।
- जापानी मानकों का परिपालन।

#### उत्पाद एंव पॅकिंग

उत्पाद एवं पैकिंग हापुत, केसर, तोतापुरी आम की प्यूरी, तोतापरी आम का गावा गूरा, आम का गावा रस, केला पूरी, कान्सन्द्रेट व निर्जलीकृत रस कान्सन्द्रेट, अमन्दर पूरी व निर्जलीकृत गावा रस, परीता प्यूरी, कान्सद्रेट व निर्जलीकृत रस कान्सद्रेट, टमाटर प्यूरी, कान्सद्रेट व गेसर, आवल पूरी, अनार रस, एंव निर्जलीकृत रस कान्सद्रेट। आय क्यू,एफ, हायुस, तोतापुरी एंव केसर कंक व दुकडे, अनार के वाने, पपीते के दुकडे, अमन्दर के दुकडे

चीकू के दुकरे एवं सम्मियां। निर्जन्तक - २० किलो बीली का बॉक्स ५०/१०० किलो की बैली प्लास्टिक दूम में २००/२०० किलो की बीली, स्टील दूम में एवं १००० किलो प्लास्टिक

कोरुगेटेड बड़ी कोठी में।

जब - ४५० ग्राम ८५० ग्राम ३.१ किलो च ५.२५ किलो कोजन (उच्चशीनक) - १ किलो पाउच/ खास्टिक जार ५ किलो व १० किलो प्लास्टिक ड्रम, २० किलो बॅग बन्से में, २०० किलो बॅग ड्रम

आय.क्यू.एफ.- १ किलो. ५ किलो, १० किलो थैली बॉक्स में।

- अनुमयोग फार्मिकेश फलों के गूबी व कान्सड्रेट के विभिन्न उपयोग हैं उदाहरणार्थ कलों का रस बनाने व फलों के रस आधारित अन्य पदार्थ आइस्क्रीम, दही, कन्केक्शनरी व अन्य उमेगों मे।
- फार्मफ्रेश उच्चशीतक (फ्रोजेन) फल एव सन्जियों के उत्पाद जैसे फल सलाद, योपर्ट आइसकीम एवं अन्य विभिन्न प्रकार के उपयोगों में प्रयोग किये जाते हैं।



Latitude: 20.94764 Longitude: 75.554186

Elevation: 271.14m Accuracy: 29.8m

Time: 06-02-2020 13:09

Latitude: 20.947582 Longitude: 75.554224 Accuracy: 77.6m Time: 06-02-2020 13:11

Jain Solar Photovoltaic Module (Panels)

जैन सोलर फोटोवोल्टिक मॉड्यूल (पैनल्स्)



#### **Products**

Category	Rating	Application
Photovoltaic modules	10W. 12W, 18W. 37W, 45W. 74W, 130-140W, 220-240W & 270-285 W	All SPV applications

#### Salient Features

- Solar PhotoVoltaic, (SPV) module is made up of a grid of mono/multi crystalline silicon solar cells laminated between tedlar, EVA sheet and toughened glass.
- Performance warranty of 25 years for SPV module as per international norms.
- · Pollution-free and eco-friendly.
- IEC 61215 & IEC 61730 certified.

Facility is Certified for ISO 9001:2008 by TUV NORD CERT GmbH, Germany

#### उत्पाद

प्रकार	क्षमता	उपयोग
फोटोवोल्टिक मॉड्यूल	90,97,9८,३७, ४५,७४,9३०-9४०, २२०-२४० और २७०-२८५ वॉट	त्तमी एसपीव्ही अनुप्रयोग

#### प्रमुख विशेषताएँ

- सोलर फोटोवॉल्टिक, (एसपीवी) मॉडबूल मोनो/मल्टी क्रिस्टलाइन रिस्तीकॉन के एक ग्रिड से निर्मित है. जिससे सोलर संल्स को इबीए शीट तथा कड़क कांच के बीच लेमिनेट किया गया है।
- एसपीवी मॉड्यूल्स के लिए अन्तर्राष्ट्रीय मानक आधार पर १५ वर्ष की निष्पादन वॉर्स्टी।
- यह प्रणाली प्रदूषण मुक्त तथा पर्यावरण हितेषी है।
- आय.इ.सी. ६१२१५ एवं आय.इ.सी. ६१७३० प्रमाणित।
- रखरखाव एव पंप चलाने का खर्च नहीं।

आयएसओ १००९:२००८ टीयुवी नोर्ड जीएमबीएव, जर्मनी द्वारा प्रमाणित कंपनी





Your joint venture with the sun.





सुरज से आपकी साझेदारी।



#### **Products**

Category	Rating	Application
Photovoltaic modules	10W, 12W, 18W, 37W, 45W, 74W, 130–140W, 220–240W & 270–285 W	All SPV applications

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#### उत्पाद

प्रकार	क्षमता	उपयोग
फोटोवोल्टिक मॉड्यूल	१०,१२,१८,३७, ४५,७४,१३०-१४०, २२०-२४० और २७०-२८५ वॉट	सभी एसपीव्ही अनुप्रयोग

#### प्रमुख विशेषताएँ

- सोलर फोटोवॉल्टिक, (एसपीवी) मॉड्यूल मोनो/मल्टी क्रिस्टलाइन सिलीकॉन के एक ग्रिंड से निर्मित है, जिससे सोलर सेल्स को इवीए शीट तथा कड़क कांच के बीच लेमिनेट किया गया है।
- एसपीवी मॉड्यूल्स के लिए अन्तर्राष्ट्रीय मानक आधार पर १५ वर्ष की निष्पादन वॉरंटी।
- यह प्रणाली प्रदूषण मुक्त तथा पर्यावरण हितैषी है।
- आय.इ.सी. ६१२१५ एवं आय.इ.सी. ६१७३० प्रमाणित। रखरखाव एवं पंप चलाने का खर्च नही।

आयएसओ ९००१:२००८ टीयूवी नोर्ड जीएमबीएच, जर्मनी द्वारा प्रमाणित कंपनी

