Late Chindhuji Laxmanrao Purke Shikshan Prasarak Mandal's

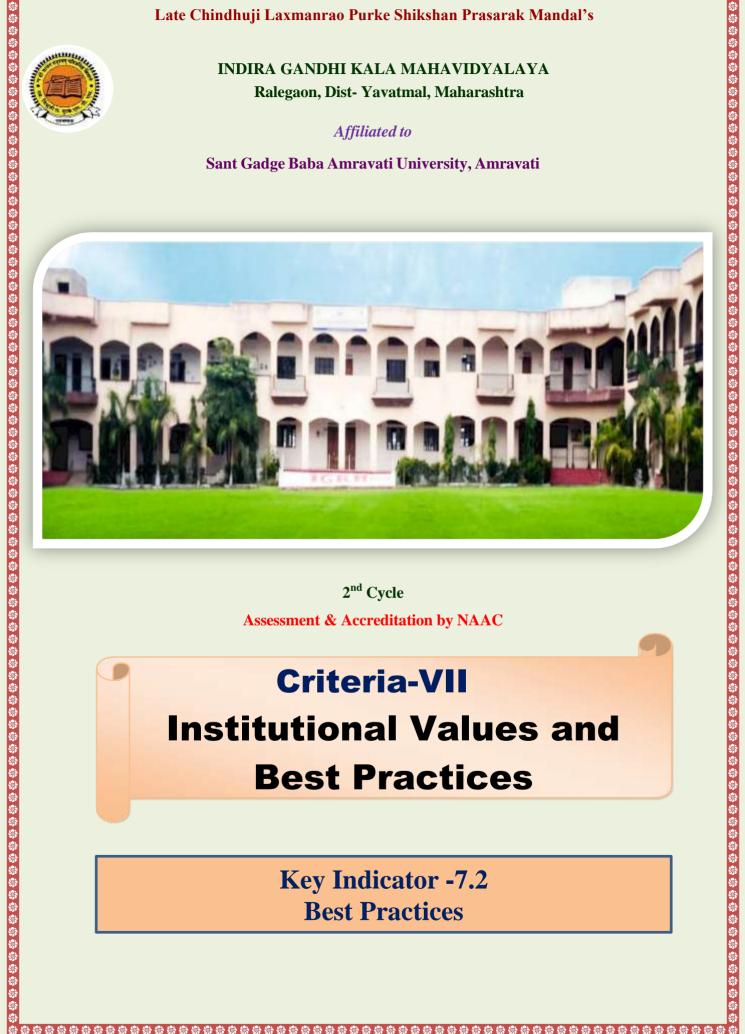


### INDIRA GANDHI KALA MAHAVIDYALAYA

Ralegaon, Dist-Yavatmal, Maharashtra

Affiliated to

Sant Gadge Baba Amravati University, Amravati



2<sup>nd</sup> Cycle

**Assessment & Accreditation by NAAC** 

## **Criteria-VII** Institutional Values and **Best Practices**

**Key Indicator -7.2 Best Practices** 



### Late Chindhuji Laxmanrao Purke Shikshan Prasarak Mandal's Yavatmal

### A GANDHI KALA MAHAYIDYALAYA, RALEGAON

DIST. YAVATMAL (445402)

(Affiliated to Sant Gadge Baba Amravati University College Code-490) (DD Code - 06610100121)

President

Principal www.igkmralegaon.org Mob No. - 9920997275 Mob. No-9373778210 Hon' Prof. Shri Vasantrao C. Purke

Dr. Santosh V. Agarkar

E-mail - igkm490@gmail.com

Website -

Date: 12/07/2024

### **Declaration**

The information, reports, true copies of the supporting documents, numerical data, etc. related to the NAAC process furnished in this file is verified by IQAC and found correct. Hence this certificate.

Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon College Code A 490 A A

## 7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

#### **Best Practice 1**

#### **Eco-Friendly Awareness among tribal and rural students**

### 1. Objectives of the practice

- To integrate eco-friendly concepts into the academic curriculum so that students receive formal education in sustainable practices.
- To facilitate hands-on learning experiences, such as practical workshops and field visit to provide students with tangible experiences in environmental conservation.
- Foster community engagement by involving students in local eco-friendly initiatives, such as tree planting, waste management, and conservation projects.
- To educate students about the importance of eco-friendly practices and their impact on the environment by conducting awareness campaigns within schools and local communities
- To encourage resource conservation habits among students, emphasizing the responsible use of water, energy, and other natural resources in their daily lives.
- To integrate traditional tribal and rural knowledge about sustainable living practices into the curriculum, emphasizing the importance of preserving cultural ties with the environment.
- To provide students with practical skills in areas such as organic farming, renewable energy, and waste management, empowering them to contribute actively to sustainable development.
- To organize and participate in events that celebrates eco-friendly festivals, such as earth day, eco-friendly rakhi and eco-friendly holi to reinforce the importance of sustainability in students' minds.

#### 2. The Context

In recent years, there has been a commendable surge in eco-friendly awareness among tribal and rural students, marking a significant stride toward sustainable practices. Our College has actively embraced best practices to instill environmental consciousness, fostering a generation of students attuned to the importance of ecological preservation. Initiatives such as incorporating eco-friendly curriculum modules, organizing tree plantation drives, and promoting waste reduction campaigns have become integral components of these educational programs. This concerted effort not only nurtures environmental stewardship but also empowers tribal and rural communities to play a vital role in shaping a greener and more sustainable future.

#### 3. The Practices

### Sustainable eco-friendly integrations

Conducted eco-friendly festivals such Eco-friendly holi ,eco-friendly rakhi and also conducted Certificate course in organic farming through which students received formal education on environment sustainability.

### Celebration of Ecofriendly Holi on 23/03/2024





# देशोन्तती

## इंदिरा गांधी महाविद्यालयात पर्यावरण पूरक होळी



देशोन्नती वृत्तसंकलन...

राळेगाव = इंदिरा गांधी महाविद्यालय, राळेगाव येथे वनस्पतीशास्त्र व के यांच्या संयुक्त विद्यमानाने पर्यावरणपूरक होळी चे आयोजन करण्यात आले. यामध्ये विद्यार्थ्यांनी नैसर्गिक साधनांचा वापर



करून विविध रंग बनविले ते रंग हळद, पळस, पालक, गुलाब, बीट, विविध झाडाची पाने, फुले इत्यादी पासून नैसर्गिक पद्धतीने बनवण्यात आले. तसेच त्या रंगांचे विद्यार्थ्यांमध्ये वाटप सुद्धा करण्यात आले. प्रस्तावना निलेश देशमुख यांनी मांडला. कार्यक्रमाचे अध्यक्ष महाविद्यालयाचे प्राचार्य डॉ. एस. की. आगरकर यांनी धुलिवंदनाच्या दिवशी नैसर्गिक रंगांचा वापर पर्यावरण पूरक कसा आहे यावर प्रकाश टाकला व पर्यावरण पूरक होळी साजरी करण्याचे आवाहन केले. डॉ. अल्फ्रेड शेख, प्रा. सतीश जाधव, यांनीसुद्धा पर्यावरण पूरक होळी साजरी करण्याचे महत्त्व पटवून दिले यामध्ये महाविद्यालयाच्या विद्यार्थ्यांनी तसेच शिक्षकांनी सहभाग नोंदवला. यशस्वीते करीता एम.की. वानखडे, यांनी प्ररिश्रम घेतले.(ता.प्र.)

Seihornati Edition Mar IN. 1024 Page No. 4

Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon



### Celebration of Ecofriendly Holi on 06/03/2023



Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon College A90 A

### Celebration of Ecofriendly Holi on 21/03/2022



### इंदिरा गांधी कला महाविद्यालय राळेगाव येथे पर्यावरण पूरक होळी



Co-ordinator
Internal Quality Assurance Cell
Indira Gandhi Kala Mahavidyalaya
Ralegaon



Celebration of Ecofriendly rakhi on 29/08/2024





Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon



### **Certificate Course in Organic Farming 2021-22**

### Late Chindhuji Laxmanrao Purke Shikshan Prasarak Mandal, YavatmaPs INDIRA GANDHI KALA MAHAVIDYALAYA,RALEGAON,445402 Department of Botany e-Certificate Course in Organic Farming 2020-2021

### About Course

### Course Detail:

- The course contain five units.
- The course contain the annual formula of 22/07/2021 to 31/07/2021.
   Course will be conduct through online mode during the period of 22/07/2021 to 31/07/2021.
- The course will be of 20 Hours
- There will 10 online lectures of 2 hours each

Eligibility Criteria: Students enrolled to B.A. and B.Sc. are eligible.

Duration:10 Days (20 Hours)

Intake Capacity:30

Fee Structure: Nil

#### Exam Scheme:

- \*Exam will be set on first three units from the syllabus having of 60 marks.
- \*Exam will consist one theory paper of having MCQ type of 50 marks and Internal Assessment of having
- \* There will be 25 questions in MCQ type of having two mark each.
- \* The internal assessment marks shall be provided on the basis of assignment (Practice/Activity) submitted by candidates

The Whole Examination scheme shall be as-

Sr.No.		Examination So	cheme		Grading
	Maximum marks for theory exam	Maximum marks for internal Assessment	Total Marks	Maximum marks for passing	40%-55% C Grade 56%-75% B Grade >75 A Grade

Schedule for Online Certificate Course:

Online Theory Classes	PROPERTY AND ADDRESS OF THE PARTY AND ADDRESS	Time
	22/07/2021 To 31/07/2021	3PM To 5PM
Assignment Submission	31/07/2021	Up to 11.59 PM
Instruction (%) or	31/07/2021	3 PM To 4 PM

### Instruction To Candidates:

- Candidate should join the Teachmint classroom ID 452298329
- 2. Attendance is must to receive e-certificate.
- 3. Separate Google form link will be provided for online exam
- e-Certificate will be given after completion of certificate course with minimum passing of 40%.
- After filling your feedback form, you wi'll receive your e-Certificate within next 3 days.

MUDAULIDAE Assistant Professor Department of Botany Indira Gandhi Kala Mahavidyalaya Ralegaon

Department of Bolany, Indira Gandhi Kala Mahadalaya Ralegaon

Page 2

# Late Chindhuji Laxmanrao Purke Shikshan Prasarak Mandal, Yavatmal's INDIRA GANDHI KALA MAHAVIDYALAYA, RALEGAON, 445402

### Department of Botany

### e-Certificate Course in Organic Farming 2020-2021

### Student List

Sr.No.	Name of the Student	Class	Contact No.
1	Achal A Sonwane	B.Sc III	8390306320
2	Arti Ashok Ladhe	B.Sc II	9529530528
3	Bhagyshri Santoshrao botare	B.Sc I	8766847925
4	Bhumika Dhanraj Neet	B.Sc III	9022439327
5	Diksha Namdevrao Hajare	B.Sc III	9284498723
6	Ganesh Golkar	B.Sc III	8975309573
7	Neha pravinrao Gonde	B.Sc I	9322639762
8	Nikita DhanrajUmate	B.Sc III	9067584596
9	Payal Ambadasji Sonwane	B.Sc II	9373286514
10	Pranjali Nanaji Ghode	B.Sc III	9309730941
11	Prashik Sanjay Fulmali	B.Sc III	9881930201
12	Pratiksha mahadev kasare	B.Sc II	7499225361
13	Rahul Ramkrushan khangare	B.Sc 1	8459230831
14	Roshan Wasudeo deotale	B.Sc III	7620626584
15	Samiksha Rajeshwarrao Nishane	B.Sc I	The second second second second second
16	Sonu Rupesh More	B.Sc III	8698417312
17	Suraj rameshrao kannake	B.Sc II	9284622114
18	Suwarna Pandurng Uge	B.Sc II	8459948049
19	Tanaya maroti kadu	B.Sc II	9673138023
20	Tanzeela Tabassum Sayyed Nasir		9607596685
21	Yogini Bhoyar	B.Sc III	8421856890
	1	B.Sc III	8766852459

Course Coordinator
Assistant Professor

Indira Gandhi Kala e shavidyalaya

Ralegaon

Department of Botany Indira Gandhi Kala Mahavidyalaya Ralegaon

### Late Chindhuji Laxmanrao Purke Shikshan Prasarak Mandal, Yavatmal's INDIRA GANDHI KALA MAHAVIDYALAYA,RALEGAON,445402

### Department of Botany

### e-Certificate Course in Organic Farming 2020-2021

### Attendance

Sr. No	Name of the student	D	ate	2									No.of lectures Conducted	No.of lectures Attended	% of Attendance
		12/1/22	12/1/21	12/1/21	15/4/57	15/5/12	12/1/62	414/20	41/11pt	30/7/14	31/11/1	1/1/2	0		
1	Achal A Sonwane	P	P	P	6	P	40		8	8	6	P		10	90-90
2	Arti Ashok Ladhe	1.	1	8		9	P	P	10	P	P	P		09	81.81
3	Bhagyshri santoshrao botare	P	P	P	P	P	6	P	P	P	P	P		1.4	100
4	Bhumika Dhanrai Neet	1	P	P	P	P	P	9	6	P	4	P		t1	100
5	Diksha Namdevrao Hajare		P	P	1	C	9	9	P	P	P	P		1)	100
6	Ganesh Golkar	0	P	P	P		P	P	P	P		9		10	90 40
7	Neha pravinrao Gonde	9	6	9	9	P		0	9	*	P	9		10	90.90
8	Nikita Dhanraj Umate	0	6	C	e	P	-P		P	P	e	P		10	90 90
9	Paval Ambadasii Sonwane	0	-	P	8	P		C	C	P	P	P		09	84.81
10	Pranjali Nanaji Ghode	0	6	P	P	6	P	P		P	P	P		10	90.30
11	Prashik Sanjay Fulmali		P				P	P		P	P	P		06	54.54
12	Pratiksha mahadey kasare	D		P	C	P	P	*	_	P	+	8		lo	90.90
13	Rahul Ramkrushan khangare	1		1	6	9		P	9	P	f	8		10	90.90
14	Roshan Wasudeo deotale		10	P	-	P	0	9		P	r	P		08	72:72
15	Samiksha Rajeshwarrao Nishane	p	P	9	P	P	ρ	P	•	9	P	P		- 11	100
16	Sonu Rupesh More	6		P	P		P	0	p	P	P	P		09	31.81
17	Suraj rameshrao kannake	T	9	-		P	P	8	9	-	P	9		53	72.72
18	Suwarna Pandurng Uge		0	P	P	P		12	0	P	-	P		80	72.72
19	Tanaya maroti kadu	P	4	P	P		P	P		P	P	P		08	72.72
20	Tanzeela Tabassum Sayyed Nasir	1	P	P		12	P	P	P	-	P	2		13	100
21	Yogini Bhoyar	P	P	P	P	P	P	P	0	P	P	9	-	11	100

Classes conducted and attendance collected through Teachmint app having classroom ID 452298329

Signature of Teacher's 1. Moonthado

Moonkwide Assistant Profesigator

Department of Botany
Indira Gandhi Kala Mahavidyalaya
Ralegaon
Ralegaon
Ralegaon

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Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon

College Code 490

### **Waste Management Programs**

College has implemented waste management system that educates students about proper disposal methods recycling and the reduction of single use plastics.



### **Solid Waste Management**



**Liquid Waste Management** 





### **Tree Plantation Drives**

College organized regular tree plantation drives to instill a sense of responsibility for afforestation and environmental conservation among students.



Adoption of plant by faculty



Plantation Drive in college Campus and adoption by students





### Adoption of plant by students

Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon







Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon



PRINCIPAL Indira Gandhi Kala Mahavidyalaya Ralegaon Dist.Yavatmal

### Green and Energy Audit

Conducted regular Green and Energy audit to access the impact of ecofriendly awareness programs.

### 4. Evidences of Success

- Students, parents and local community members are actively participated in eco-friendly events, workshops and projects demonstrating a growing awareness and commitment to sustainable practices.
- Significant reduction waste generation within college campus through effective waste management programs and recycling efforts.
- Increased in flora of the college campus is the result of successful tree plantation drives and afforestation initiatives.
- Present data indicating reduced energy consumption by the college through the implementation of energy saving practices.





Flora of the campus and outside the campus after plantation

### List of flora in the college campus

Sr.No.	Common Name	<b>Botanical Name</b>	Numbers
1	Mehandi	Lowsonia Inermis	158
2	Ashoka	Saraca Ashoka	25
3	Kadunimb	Azadirakta Indica	32
4	Chakri	Tabernaemontana	2
5	Palm	Roystonea regia	20
6	Angreji Chinch	Pithecellobium dulce	1
7	Ulta Rawan	Lantana camara	4
8	Ghantoli	Tecoma stans	4
9	Kanher	Nerium Indicum	16
10	Bakul	Mimusops Elengi	4
11	Sadafully	Catharanthus roses	27
12	Jabhul	Synzygium cumini	3
13	Saag	Tectona grandis	150
14	Pimpal	Ficus religiosa	2
15	Karanj	Millettia pinnata	9
16	Champa	Plumeria rubra	3
17	Jaswand	Hibiscus rosa sinensis	8
18	Kadamb	Neolamarckia cadamba	3
19	Rose	Rosa	7
20	Vidya	Thuja occidentalis	4
21	Stobush	Breyania disticha	5
22	Mogra	Tasminium sambac	7

23	Dalimb	Punica granatum	1
24	Casurina	Casurina sp.	1
25	Dracena	Draceana sp	1
26	Ova	Trachyspermum ammi	1
27	Shatavari	Asparagous recemosus	1
28	Ashwganda	Withania somnifera	1
29	Adulsa	Adathoda vasica	1
30	Rui	Calatropis procera	1
31	Alovera	Aloe barbadensis	1
32	Prajkta	Nyctanthes arbortrisis	1
33	Raktchandan	Pterocarpus santalinus	2
34	Shevga	Moringa oleifera	1
35	Santra	Citrus sinensis	1
36	Anjir	Ficus carica	1
37	Shendur	Bixa orellana	1
38	Nilgudi	Vitex negundo	1
39	Mosambi	Citrus limon	1
40	Sitafal	Annona squmosa	2
41	Jambh, Peru	Psidumguajava	1
42	Naral	Cocus nucifera	1
43	Akashnim	Milingtonia hortensis	1
44	Java apple	Syzygium samaran	1
45	Karavand	Carissa conjesta	2
46	Limbu	Citrus acida	1
47	Godnimb	Muraya koenigii	1
48	Sonchafa	Maognoolia champaca	7
49	Copper leaf	Acalypha wilkesiana	1
50	Bel	Aegel marmelos	1
51	Bor	Zyzipus sp	2
52	Apta	Bahunia sp	1
53	Sisum	Dalbergia sissoo	10
54	Gulmohar	Delonix regia	2
55	Nilgiri	Eukalyptus	2
56	Saptparni	Alstonia scholaris	5
57	Umber	Ficus racemosa	1
58	Snowbush	Ceanothus veluntis	5
59	Wad	Ficus benghalensis	1
60	Conoarpus	Conocarpus erectus	22
61	Bahava	Cassia fistula	1
		Total	583

Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon



### Certificates issued from external agencies

Energy Audit Report: Indira Gandhi Kala Mahavidyalay, Ralegaon, Yavatmai: 21-22

## **Enrich Consultants**

Yashashree, 26, Nirmal Bag Society, Near Muktangan English School, Parvati, Pune 411 009 Tel: 09890444795 Email: enrichcons@gmail.com

Ref: EC/IGC/21-22/06

Date: 25/05/2022

#### CERTIFICATE

This is to certify that we have conducted Energy Audit at Indira Gandhi Kala Mahavidyalay, Ralegaon, Yavatmal - 445 402 in the Academic year 2021-22.

The College has adopted following Energy Efficient practices:

- Usage of Energy Efficient LED Fittings
- Maximum usage of Day Lighting

We appreciate the support of Management, involvement of faculty members and students in the process of making the Campus Energy Efficient.

For Enrich Consultants,

A Y Mehendale,

Certified Energy Auditor

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EA-8192

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CONSULTZ Q Page 3

Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon



Environmental Auds Report: Indira Gandhi Kala Mahavidyalay, Ralegaon, Yavatmsi: 20-21

### Enrich Consultants

Yashashree, 26, Nirmal Bag Society, Near Muktangan English School, Parvati, Pune 411 009 Tel: 09890444795 Email: enrichcons@gmail.com

Ref. EC/IGC/20-21/22

Date: 26/04/2021

#### CERTIFICATE

This is to certify that we have conducted Environmental Audit at Indira Gandhi Kala Mahavidyalay, Ralegaon in the Academic year 2020-21.

The College has adopted following Environment Friendly Practices:

- Usage of Energy Efficient LED Light Fitting
- Maximum Usage of Day Lighting
- Provision of Separate bins for Dry & Wet Waste
- The College has installed septic tanks and cleans periodically.
- Implementation of Rain Water Management Project
- Tree Plantation in the campus
- Creation of awareness by Display of Posters on Resource Conservation

We appreciate the support of Management, involvement of faculty members and students in the process of Energy Conservation & making the campus Green.

For Enrich Consultants,

Muchalan A Y Mehendale,

Certified Energy Auditor

EA-8192

Enrich Consultants, Purce

Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon

Kala Maha College Code 490 Gen Dest 42

Energy Audit Report. Indira Gandhi Kala Mahavidyalay, Ralegaon, Yavatmal. 2022-23

### **ENGRESS SERVICES**

Yashashree, 26, Nirmal Bag Society, Near Muktangan English School, Parvati, Pune 411 009 Tel: 09890444795 Email: engress123@gmail.com

MEDA Registration No: ECN/2022-23/CR-43/1709 ISO: 9001-2015 Certified (Cert No: 23EQKC13), ISO: 14001-2015 Certified (Cert No: 23EEKW20)

### **ENERGY AUDIT CERTIFICATE**

Certificate No: ES/IGC/22-23/01

This is to certify that we have conducted an Energy Audit at Indira Gandhi Kala Mahavidyalaya, Ralegaon, Yavatmal, in the Year 2022-23.

.The Institute has adopted following Energy Efficient practices:

- Usage of Energy Efficient LED Fittings
- Maximum usage of Day Lighting

We appreciate the support of Management, involvement of faculty members and students in the process of making the Campus Energy Efficient.

For Engress Services,

A Y Mehendale,

B E-Mechanical, M Tech- Energy

BEE Certified Energy Auditor, EA-8192

Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon

College Code

Indira Gandhi Kala Mahavidyalaya Ralegeon Dist. Yavatmal

Date: 06/07/2023

### **ENGRESS SERVICES**

Yashashree, 26, Nirmal Bag Society, Near Muktangan English School, Parvati, Pune 411 009

Tel: 09890444795 Email: engress123@qmail.com UDYAM Regn. No. UDYAM-MH-26-0135636,

MEDA Regn. No. ECN/2023-24/CR-43/1709 ISO: 9001-2015 Certified (Cert No. 23EQKC13), ISO: 14001-2015 Certified (Cert No. 23EEKW20)

### **ENERGY AUDIT CERTIFICATE**

Certificate No: ES/IGC/23-24/01 Date: 30/05/2024

This is to certify that we have conducted Energy Audit at Indira Gandhi Kala Mahavidyalaya, Ralegaon, Yavatmal, in the Academic year 2023-24.

.The College has adopted following Energy Efficient Practices:

- > Usage of Energy Efficient LED Fittings
- Usage of Energy Efficient BEE STAR Rated equipment
- Maximum usage of Day Lighting

We appreciate the support of Management, involvement of faculty members and students in the process of making the Campus Energy Efficient.

For Engress Services,

Amehandel

A Y Mehendale,

B E-Mechanical, M Tech- Energy

BEE Certified Energy Auditor, EA-8192

Indira G

PRINCIPAL Indira Gandhi Kala Mahavidyalaya Ralegeon Dist.Yavatmal

Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon



### 5. Problem encountered and resources required

- Due to unavailability of mobile and internet facility at their residential area, many students could not participated in online programmes.
- Tribal students hesitated for participation in various activities because for their communication problem and mind set.
- Due to unavailability of state transports bus facility after 5.00 PM for most of the villages, tribal students are reluctant to participate in the events organized after 5.00 PM.
- The strength of girl's students is higher than boys in our college and because of local & social obstacles and unbelief, girl students are reluctant in participation.

#### **Best Practice 2**

#### Awareness and Promotion of Use of Non-conventional Energy Sources in Tribal Region.

#### 1. Objectives of the practice

- To increase a scientific temper and awareness in the students from tribal community and develop in them a logical thought process and present the marvels of Science and Technology.
- To promote the use of non-conventional energy sources by facilitating flow of information to the students, teachers and general public.
- To introduce practical application and recent advancements in order to strengthen theoretical knowledge for the benefit of society.
- To introduce certificate courses for improving skills and imparting training.
- To organize various awareness and promotional programmes.

#### 2. The context

In tribal regions, the promotion and awareness of non-conventional energy sources are essential for sustainable development. Recognizing the unique challenges and opportunities in these areas, fostering awareness and encouraging the use of non-conventional energy sources can lead to improved energy access, environmental conservation, and community empowerment.

#### 3. The practices

### • Programs and workshops on energy conservation

Conduct regular workshops and training programs such as for students to enhance their understanding of non-conventional energy sources and their applications.

#### • Demonstration Projects

Implemented small-scale demonstration projects showcasing the practical use and benefits of non-conventional energy sources within the tribal community.

#### • Integration into Local Industries

Promoted the integration of non-conventional energy sources into local industries, such as agroprocessing or handicrafts, to enhance economic sustainability.

#### • Community Outreach Programs

Organized community outreach programs to disseminate information about the advantages of non-conventional energy, addressing many misconceptions and concerns.

## A live telecast of Prime Minister Shri. Narendra Modiji's address at the "India's Techade: Chips for Viksit Bharat" program

Date: - 13/03/2024





Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon



### **Educational Tour at Raman Science Centre, Nagpur**



Photo 1 - Participents in front of Raman Science Centre, Nagpur



Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon College 490

## Workshop on ''Non-Conventional Source of Energy'' Date: - 10/12/2021





Dr. S. V. Agarkar and Mr. K. D. Jagtap guiding students on the non conventional source of energy



Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon



# Certificate course on "Renewable Energy Resources" organized by department of Physics

Late Chindhuji Laxmanrao Purke Shikshan Prasarak Mandal's



### INDIRA GANDHI KALA MAHAVIDYALAYA, RALEGAON DISTRICT- YAVATMAL

Affiliated to S.G.B Amravati University, Amravati NAAC Accredited with "B" Grade

### Department of Physics

Organizes e-Certificate Course On

## "Renewable Energy Resources"

Session: 2022-23

### Preamble of the course

I nergy is a critical component of a country's development and economic success. Energy sees development is critical for socioeconomic development, particularly in rural regions. It is significant problem in the Indian setting to supply inexpensive energy services to the populate, the moment, grid power is available to 80% of total villages and 44% of rural homes. Energy services to the populate, system growth is further hampered by the depletion of fossil fuels, local environment repercussions, and the challenge of global warming and accompanying climate change. I energy todiustry is in transformation, and there is an urgent need to comprehend the differences conversion and utilization processes. An attempt has been made in this course standardize the course material and to emphasize the fund mentals of non-conventional energy conversion, and biomass).

### ♦ Objectives:

- 1. To introduce new courses for the students and to eradicate unemployment,
- 2 To understand appliances available in the market that promote solar usage.
- 3. To join hands for a greener tomorrow.
- 4. I neare the relevance of programs by updating courses regularly.
- 5 Help participating students to become more effective decision-makers in their knowledge and managerial skills.

### Course Structure:

- The Course will be of 30 hours.
- There will be 15 online theory classes each of 2 hours.
- There will be 2 assignments, 2-unit tests & 2 practicals as a part of the internal assessment
- The internal assessment marks shall be awarded on the basis of assignment, unit tes practical submission.
- The final grading exam will contain 25 MCQ questions (each of two marks) based on
  overall syllabus of the course.

### · Course Syllabus:

#### Module-1 (10 hours)

Freegy Scenario: Classification of Energy Sources, Energy resources (Conventional nonconventional). Solar Energy: Solar thermal Systems: Types of collectors, Collection systems; Energy calculations, applications. Wind Energy: Wind speed and power relation. Proceedings of Components, Types of Turbines, Turbine rating.

#### Module-2 (10 hours)

Introduction to the ocean environment. Ocean energy resources, Ocean energy routes. (§ thermal energy conversion, Wave energy conversion, Tidal energy conversion, Geoth Lnergy: Origin of Geothermal Energy, Types of geothermal energy sites, Geothermal Plants.

#### Module-3 (10 hours)

Overview of biomass as energy source; Biomass availability in India Production of biomass as fuel. Fuel Cell: Principle of working, Basic thermodynamic and electroche principles, Classifications, Applications for power generations. Photovoltaic Cell: Introduce operating principal, Working of PV cell, Advantages & Disadvantages.

Department of Physics

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Day	Content of the course	Type of Resources
Day-1	Introduction to various renewable energy sources	Lecture -1 / PDF-1
Day-2	Solar energy	Lecture -2/ PDF-2
Day-3	Solar radiations on earth	
Day-4	Solar Energy Storage/ Solar Cell Experiment-1	Lecture -3/ PDF-3 Lecture -4/ PDF-4
Day-5	Quiz	Grading quiz
Day-6	Solar water heater	Lecture -5/ PDF-5
Day-7	Solar concentrating collectors	Lecture -6/ PDF-6
Day-8	Wind energy	Lecture -7/ PDF-7
Day-9	Ocean energy-Waves & tides	Lecture -8/ PDF-8
Day-10	Quiz	Grading quiz
Day-11	Geothermal energy	Lecture -9/ PDF-9
Day-12	Biomass Energy	Lecture -10/ PDF-10
Day-13	Fuel cells	그렇게 되었다면 되어 보니 얼마를 되는 맛있다면 뭐 없었다.
Day-14	Photovoltaic cell / Photocell Experiment-2	Lecture -11/ PDF-11
Day-15	Final Grading Exam.	Lecture -12/ PDF-12 Grading

### Examination Pattern and Marks distribution

Final grading exam questions are set to be from the entire syllabus. There will be 25 questions of MCQ type of 2 marks each. The internal assessment marks shall be awarded on the basis of assignment, practical, and unit test submission. The marking scheme of each Practice/Activity shall be as follows: -

	Station officer	Wentlen Lightons	Lake Dangeret
1	Assignment	Two test per week (each of 5 marks)	10
2	Unit test	Two test per week (each of 5 marks)	10
3	Practical	Two practicals per week (each of 15 marks)	30

### Final Grading Exam

	The amorting Stage	1200	
Max. Marks for theory paper	Max. marks for internal assessment	Total	Minimum Passing Marks
50	50	100	40

### Grading Scheme

$\Lambda^*$		85 percent and above
Λ		70 percent to less than or equal to 84 percent
В	2	60 percent to less than or equal to 69 percent
C	10	50 percent to less than or equal to 59 percent
D		Below 49 percent

Department of Physics

Asliktkar

Mr.Kapil D. Jagtap Assistant Professor & HOD Physics Indira Gandhi Kala Mahavidyalaya Ralegaon Distravatmal

Mr.Bhushan H. Bhatti Assistant Professor Department of Physics ra Ganchi Kala Mahavidyalaya Relegaco Dist Yavatmal

### Indira Gandhi Kala Mahavidyalaya, Ralegaon Department of Physics Session-2022-23

Timetable of the e-Certificate Course on "Renewable Energy Resources"

Date	Time	Name of the topic	Type of Resources
17/04/2023	3:00 P.M to 5:00 P.M	Introduction to various renewable energy sources	Video Tutorial-1/ PDF-1
18/04/2023	3:00 P.M to 5:00 P.M	Solar energy	Video Tutorial-2/ PDF-2
19/04/2023	3:00 P.M to 5:00 P.M	Solar radiation on earth	Video Tutorial-3/ PDF-3
20/04/2023	3:00 P.M to 5:00 P.M	Solar Energy Storage/ Solar Cell Experiment-1	Video Tutorial-4/ PDF-4
21/04/2023	3:00 P.M to 5:00 P.M	Quiz & Assignment session.	Grading quiz
22/04/2023	3:00 P.M to 5:00 P.M	Solar water heater	Video Tutorial-5/ PDF-5
23/04/2023	3:00 P.M to 5:00 P.M	Solar concentrating collectors	Video Tutorial-6/ PDF-6
24/04/2023	3:00 P.M to 5:00 P.M	Wind energy	Video Tutorial-7/ PDF-7
25/04/2023	3:00 P.M to 5:00 P.M	Ocean energy-Waves & tides	Video Tutorial-8/ PDF-8
26/04/2023		Quiz & Assignment session.	Grading quiz
27/04/2023		Geothermal energy	Video Tutorial-9/ PDF-9
28/04/2023		Biomass Energy	Video Tutorial-10 PDF-10
29/04/2023	And the first three parties and the	Fuel cells	Video Tutorial-11. PDF-11
30/04/2023 3:00 P.M to 5:00 P.M		Photovoltaic cell / Photocell Experiment-2	Video Tutorial-12 PDF-12
02/05/2023		Final Grading Exam.	Grading quiz

Mr.Bhushan H. Bhatti Assistant Professor Department of Physics Indira Gandhi Kala Mahavidyalaya Rategeon Dist.Yavatmal

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andra Canola Hala Mahavidyalaya
Ralagaon

Mr.Kapil D. Jagtap Assistant Professor & HOD Physica Indira Gandhi Kala Mahavidyalaya Ralegaon Dist.Yavatmal

### Indira Gandhi Kala Mahavidyalaya, Ralegaon

Department of Physics

e-Certificate Course on " Renewable Energy Resources"

Registration List

Session: 2022-23

Sr. N	o Full Name	Class
1	Mr. CHI TAN ASHOK DAMBHARI	B.ScIst (Sem-II)
2	Ku. KIRTI BILAI CHANDRA RAUT	B.ScIst (Sem-II)
3	Ka. MANSI SOMDEV BHOYAR	B.ScIst (Sem-II)
4	Ku, MINAKSHI S, POHANKAR	B.ScIst (Sem-II)
5	Ku NIKHITA BHOJARAJ GEDAM	B.ScIst (Sem-II)
6	Ka. PRACHI SHRAVAN DONGARE	B.ScIst (Sem-II)
7	Mr. PRATIK RAJENDRA TODASE	B.ScIst (Sem-II)
S	Ku. PRATIKSHA S. SASANE	B.ScIst (Sem-II)
9	Ku. PRERANA P. KULSANGE	B.ScIst (Sem-II)
10	Kn. PUNAM G. RAMPURE	B.ScIst (Sem-II)
1.1	Ku, RADHIKA A, PANNASE	B.ScIst (Sem-II)
22	Ku. RANI HARIBHAU KHAPARDE	B.ScIst (Sem-II)
13	ISB. RUTUJA GOVINDRAO UMATE	B.ScIst (Sem-II)
14	Ku. SHIVANI GAJANAN MADAN	B.ScIst (Sem-II)
15	Ku. TANUJA SHIBAJI INGALE	B.ScIst (Sem-II)
16	Ku. TANUSHRI S. LATKAR	B.ScIst (Sem-II)
37	Ku, SEJAL B. GHINMINE	B.ScIst (Sem-II)
18	Mr. SANDESH GEDAM	B.ScIst (Sem-II)
19	Ku, VAIDEHI SONEKAR	B.ScIst (Sem-II)

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Assistant Professor
Department of Physics
Indira Gandhi Kala Mahavidyalaya

Ashirkar

Assistant Professor

Displanted of Physics

Indica Good in Kala Mahavidyakiya

Ralegnon

Mr. Kapil D. Jagtap

Assistant Professor & HOD Physics
Indira Gandhi Kala Mahavidyalaya
Ralegoon Bist. Yavatmal

Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon



#### 4. Evidences of success

- Adoption of non-conventional energy sources within the tribal community has been increases.
- Students from tribal community have successfully involved and participated in awareness programs and energy projects.
- Arranged field visit to solar plant, expert talk and solar charakha unit demo for students.

### Visit to solar plant



Mr. Shirsagar guiding to B.Sc. II Students about materials used in the Solar Panel and their application & uses

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### Industrial Visit- Kalpvruksh Khadi Udyog, Ralegaon Date: -23/04/2023



Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon



	Indira Gandhi Kala Mahavid	sics	
	e-Certificate Course on " Renewabl	e Energy Resources"	
	Final Grading qu		
Session: 2022-23			
Sr. No.	Name of the Student	Class	Score
1	Mr. CHETAN ASHOK DAMBHARE	B.ScIst (Sem-II)	46 / 50
2	Ku. KIRTI BHALCHANDRA RAUT	B.ScIst (Sem-II)	40 / 50
3	Ku. MANSI SOMDEV BHOYAR	B.ScIst (Sem-II)	44 / 50
4	Ku. MINAKSHI S. POHANKAR	B.ScIst (Sem-II)	46 / 50
5	Ku. NIKHITA BHOJARAJ GEDAM	B.ScIst (Sem-II)	46 / 50
6	Ku. PRACHI SHRAVAN DONGARE	B.ScIst (Sem-II)	48 / 50
7	Mr. PRATIK RAJENDRA TODASE	B.ScIst (Sem-II)	46 / 50
8	Ku. PRATIKSHA S. SASANE	B.ScIst (Sem-II)	48 / 50
9	Ku. PRERANA P. KULSANGE	B.ScIst (Sem-II)	44 / 50
10	Ku. PUNAM G. RAMPURE	B.ScIst (Sem-II)	50 / 50
11	Ku. RADHIKA A. PANNASE	B.ScIst (Sem-II)	48 / 50
12	Ku. RANI HARIBHAU KHAPARDE	B.ScIst (Sem-II)	44 / 50
13	Ku. RUTUJA GOVINDRAO UMATE	B.ScIst (Sem-II)	40 / 50
14	Ku. SHIVANI GAJANAN MADAN	B.ScIst (Sem-II)	44 / 50
15	Ku. TANUJA SHIBAJI INGALE	B.ScIst (Sem-II)	48 / 50
16	Ku. TANUSHRI S. LATKAR	B.ScIst (Sem-II)	46 / 50
17	Ku. SEJAL B. GHINMINE	B.ScIst (Sem-II)	48 / 50
	Mr. SANDESH GEDAM	B.ScIst (Sem-II)	42 / 50
18	Ku. VAIDEHI SONEKAR	B.ScIst (Sem-II)	46 / 50

Alhitkar

Aggistant Professor

Mr.Bhushan H. Bhattidira Gandhi Kala Mahavidyalaya
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Co-ordinator Internal Quality Assurance Cell Indira Gandhi Kala Mahavidyalaya Ralegaon



### 5. Problem encountered and resources required

- Technical difficulties faced during the implementation of nonconventional energy sources and how they were addressed.
- There are certain limitations in existing infrastructure that posed challenges and the steps taken to mitigate them.
- Rural population is reluctant in using non-conventional energy sources.

• The parents from tribal community are not permitting their wards

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