

To,
The Principal,
Karnatak Arts, Science and Commerce College,
Bidar.

30 Dec. 2021.

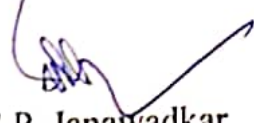
Sub: Permission to run two certificate courses.

Respected sir,

The department of physics is going to conduct two short term certificate courses during the year 2021-22, Titled "Basics of solar cell & Panels", and "Harnessing Wind Energy". Certificate courses are of 2 month duration, with intake of 40 students for each course. And the registration fee for each course will be of Rs.100/- for each student. Kindly permit us to collect 100/- from enrolled students as registration fee & to run the certificate courses successfully.

Thanking you

Yours Faithfully


S.P. Janawadkar
Head, Dept. of Physics

Permitted

PRINCIPAL
Karnatak Arts Sci. & Com. College
B I D A R - 585 401

6/1/22 -



ಕರ್ನಾಟಕ ಕಲಾ, ವಿಜ್ಞಾನ ಹಾಗೂ ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ, ಬೀದರ
KARNATAK ARTS, SCIENCE & COMMERCE COLLEGE, BIDAR



Estd 1970
(Affiliated to Gulbarga University, Kalaburagi)

College with Potential for Excellence Status Awarded by UGC New Delhi
ISO 9001 : 2015




Golden Jubilee Celebration - 1970-2020

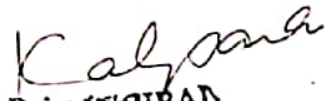
DEPARTMENT OF PHYSICS
CERTIFICATE COURSE - I
BASICS SOLAR CELL & PANELS
BOARD OF STUDIES



- Chairman : Dr.Kalpana.V. Deshpande
Principal
Karnatak College Bidar
- Co-Ordinator : S.P Janwadkar
Associate Professor (Dept.of Physics)
- Subject Tutor : 1. Shweta Patil
2. DevikaRani
- External Members : 1. Dr.Eknath Halse
Gurunanak 1st Grade College,Bidar
2. Dr.Rajendra.Biradar
HOD Dept. of Electronics
Karnatak College Bidar


HOD
Physics

Dept. of Physics
Karnatak Arts Sci. & Com. College Bidar


Principal
Karnatak Arts Sci. & Com. Collge.

E-mail : principalkascc@gmail.com

Hyderabad Road, Karnataka State - 585401.
Ph : 08482-276503

Cell : 9343834635
Visit us @ www.kascc.in.net



ಕರ್ನಾಟಕ ಕಲಾ, ವಿಜ್ಞಾನ ಹಾಗೂ ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ, ಬೀದರ
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DEPARTMENT OF PHYSICS
CERTIFICATE COURSE - I
BASICS OF SOLAR CELL AND PANELS



Duration	:	1 Semester
Batch-I	:	Jan 2021 to March 2021
No. of Hours	:	30
Theory	:	18hrs
Skill Component	:	12hrs
Maximum Intake	:	40 Students
Eligibility	:	UG Students (Regular) with Physics as Elective (Karnatak College Bidar)
Registration Fees	:	Rs. 100/-

HOD, Physics

- 1) Dr. Eknath. Halse
- 2) Dr. Rajendra Binodasi
- 3) Shweta Patel
- 4) Devikasani.

Principal
PRINCIPAL
Karnatak Arts Sci. & Com. College
B I D A R - 585 401

E-mail : principalkascc@gmail.com
Phone : 08482-226503

Hyderabad Road, Karnataka State - 585401.
Fax : 08482-226503

Cell : 9343834635
Visit us @ www.kascc.in.net

KARNATAK ARTS, SCIENCE & COMMERCE COLLEGE, BIDAR
DEPARTMENT OF PHYSICS



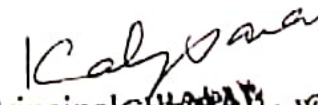
Date: 10/10/2019

A local BOS meeting is called in the department of physics to discuss about the start of two certificate courses 1. Basics of solar cell & panels & 2. Harnessing wind energy today at 5pm.




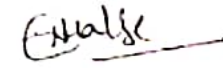

HOD Physics proposed to start two certificate courses as add on courses & the draft syllabus for them.

After the discussion the draft syllabus was approved with minor corrections the entire structure of the course and the examination pattern was finalized in the meeting.


HOD, Physics
Karnatak Arts, Science & Commerce College, Bidar


Principal
Karnatak Arts, Science & Commerce College, Bidar
BIDAR-585 401

Members Present

1. Course Co-Ordinator : S.P. Janwadkar 
2. Subject Tutors : 1. Shweta Patil 
2. Devikarani 
3. External Members : 1. Dr. Eknath Halse 
Gurunanak First Grade College Bidar
2. Dr. Rajendra Biradar
HOD Electronics
Karnatak College Bidar 

KARNATAK ARTS, SCIENCE & COMMERCE COLLEGE
DEPARTMENT OF PHYSICS
CERTIFICATE COURSE I & II
PREAMBLE



Energy plays a vital role in the human life. We cannot even imagine our life without energy. But the sources of conventional energies are limited ones, and are going to get exhausted shortly. Hence there is an immense need to shift towards non-conventional evergreen energy resources. In order to introduce our students about harnessing such energies, need was felt to start a certificate course.

The available non - conventional energy resources at our local area were recognized as solar energy and wind energy.

Hence it is decided to continue the two certificate courses as add-on courses

- (1) Basics Solar cell & Panels
- (2) Harnessing Wind Energy

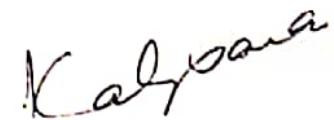
A local BOS is constituted to monitor the running of these courses at the institutional level comprising of following members:

- Chairman : Dr.Kalpana.V. Deshpande
Principal
Karnatak College Bidar
- Co-Ordinator : S.P Janwadkar
Associate Professor (Dept.of Physics)
- Subject Tutor : 1. Shweta Patil
2. DevikaRani
- External Members : 1. Dr.Eknath Halse
Gurumanak 1st Grade College,Bidar
2. Dr.Rajendra.Biradar
HOD Dept. of Electronics
Karnatak College Bidar

The course content is decided to be completed during a span of two months and after its completion the students are expected to acquire knowledge about harnessing these non-conventional energies. Also should acquire the practical knowledge of assembling solar panels / erecting wind turbine to generate the electrical energy.


HOD

Physics


Principal
PRINCIPAL
Karnatak Arts Sci. & Com. Collr.
B I D A R - 585 101



ಕರ್ನಾಟಕ ಕಲಾ, ವಿಜ್ಞಾನ ಹಾಗೂ ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ, ಬೀದರ
KARNATAK ARTS, SCIENCE & COMMERCE COLLEGE, BIDAR



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Golden Jubilee Celebration - 1970-2020

DEPARTMENT OF PHYSICS

CERTIFICATE COURSE – I
BASICS OF SOLAR CELLS AND PANELS
SYLLABUS
THEORY



Unit 1 : Renewable Energy: Need for Renewable Energy, Generation & Consumption a World Scenario, India's Energy Consumption Brief Survey, Different Types of Renewable Energy. Merits & Demerits of Solar Energy. 4hrs

Unit 2 : Solar Cell Fundamentals: PN Junction Device, IV Characteristic, PV Characteristics, Open Circuit Voltage, Short Circuit Current, Fill Factor, Efficiency. 3hrs

Unit 3 : Classification of Solar Cell: Thickness of Active Material, Multi crystalline Silicon Solar Cell, Ga-As Solar Cell, Polymer Solar Cell, Recent Advancements. 5hrs

Unit 4 : Solar Photo Voltaic Module: PV Module Series & Parallel Connections, Number of Cells in Module, Module Power, Role of blocking Diode, Bypass Diode, Shading Effect, Tilting Effect. 6hrs

PRACTICALS

12hrs

1. To study the I-V characteristics of PV module with varying radiation.
2. To study the P-V characteristics of PV module with varying radiation.
3. To study the I-V characteristics of series combination of PV modules.
4. To study the P-V characteristics of parallel combination of PV modules.
5. Study of effect of variation in tilt angle of PV module.
6. Study of effect of shading on module output power.

[Signature]
 HOD Physics
 Coordinator BOS

1) Dr. Eknath N. Holte
 2) Dr. Rajendra Binadan

[Signature]
 Principal &
 Chairman BOS
 PRINCIPAL

Shweta Patil - *[Signature]*
 Devikanani - *[Signature]*

E-mail : principalkascc@gmail.com
 Fax : 08482-226503

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KRE SOCIETY'S
Karnatak Arts Science and Commerce College, Bidar
Department of Physics
Certificate course – Basics of Solar Cell and Panels

Outcomes

By the completion of this course students will:

1. Understand the basics of Renewable energy sources
2. Understand the need for Renewable energy sources
3. Understand the principles of extraction of energy from Solar PV System.
4. Understand the properties of solar energy resource, PV system operation and Component s pecifications.



HOD, Physics

HOD,
Dept. of Physics
Karnatak Arts Sci. & Com. College Bidar.

Department Of Physics

NOTICE

Date: 3 -1 -22


All the degree students with physics as elective subject are here by informed that, the department of Physics is introducing two short term certificate courses. The details are as follows:

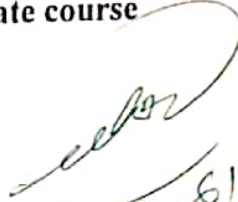
Title	No. of Hrs	Registration fees
1. Basics of Solar Cell & Panels	30hrs	Rs.100/-
2. Harnessing Wind Energy	30hrs	Rs.100/-

Students, who are willing to enroll, need to contact

1. Ms. Shweta Patil
2. Miss. Shruti Swami
3. Miss. Devikarani

Note: the intake is limited to 40 Students per certificate course


HOD Physics
Dept. of Physics
Carnatak Arts Sci. & Com. College Bidar


Principal
PRINCIPAL
Carnatak Arts Sci. & Com. College
B I D A R-585 401

KRE Society's
Karnatak Arts Science and Commerce College, Bidar
Department of Physics
Certificate Course 2021-22

Notice

D: 31-12-2021

All the students of B.Sc I, III and V semester, who have enrolled for certificates courses titled "Basics of Solar Cell and Panels" & "Harnessing Wind Energy", are hereby informed to attend the regular classes as per the time table mentioned.



Course In Charge

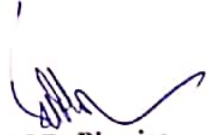


Principal
PRINCIPAL
Karnatak Arts Sci. & Com. Collr.
B I D A R-585 401

Time Table
Certificate Course 2021-22
Basics of Solar Cell and Panels

Effective from 10 Jan 2022

Day/Time	B.Sc I Sem 8.30 to 10.30	B.Sc V Sem 11am to 1pm
Monday	Group-I : 07 - PCs	Group-I: 10 - PCM
Tuesday	Group-II: 07- PCs+PC	Group-II: 10 - PCM
Wednesday	Group-III: 09- PM	--
Thursday	Group-IV-09- PM	--


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MOD,
Dept. of Physics
Karnatak Arts Sci. & Com. College Bidar


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Karnatak Arts Sci. & Com. College
BIDAR-585 401



K.A.S.C. Society's

Karnatak Arts, Science and Commerce College, Bidar



(Affiliated to Gulbarga University, Kalaburagi)
College with Potential for Excellence

ADMISSION FORM

Certificate/Value added/Skill Development/Diploma/Advance Diploma Courses
&
IAS/IPS/NET/SET Coaching Classes

Name of the Department Physics Year 2021-22

Name of the Student Kanchan Sajan

Father's/Guardian's Name Sanyuktakar Sajan

Date of Birth

Date

Month

Year

3 0

0 3

2 0 2 0



Address for Correspondence :

H.No ; 17-4-363/1, Vivekanand Colony, Gumpa,
Bidar . Pin code : 585403

Semester/Class : B.Sc. Vth Semester

Register No : 52063117

Percentage of previous semester : 83.3% (8.3 SGPA)

Contact No : 7255049229

E-Mail ID : 3kanchansajan7@gmail.com

Course to be Joined: Basics Solar Cells and Panels

Kanchan

Signature of the Student

[Signature]

HOD/Coordinator

Dept. of Physics
Karnatak Arts Sci & Com. College Bidar


[Signature]

Principal

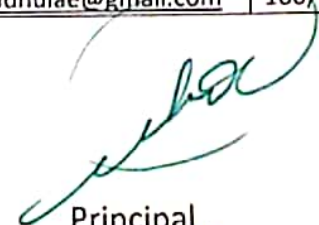
PRINCIPAL
Karnatak Arts Sci. & Com. College
BIDAR-585 401

DEPARTMENT OF PHYSICS
CERTIFICATE COURSE – I
2021 – 22
Basics of Solar Cell & Panels
LIST OF STUDENTS

SL. NO	REG.NO.	Name of Student	Phone No.	E-mail.ID	Amount
01	S2062909	Bhagyavati.Sangappa	9113016152	bsmalade@gmail.com	100/-
02	S2063117	Kanchan.Sanjeevkumar	9448426440	3kanchansaijan7@gmail.com	100/-
03	S2062963	Pradeep.Ramchandra	9108433566	Pradeeptupak02001@gmail.com	100/-
04	S2062979	Shivani.MAdayya Swamy	6361397363	Shivanimadapathi08@gmail.com	100/-
05	S2062982	Sindhu.Maharudrappa	7760314201	Sindhupasargi1234@gmail.com	100/-
06	S2062953	Pooja Patil.Shivraj.P	9743271832	Pp5294149@gmail.com	100/-
07	S2062938	Akhila.Dhanraj	9113557857	Akhilaphulari@gmail.com	100/-
08	S2063035	Shweta.Avinash	9731830708	Swamyavinash@gmail.com	100/-
09	S2063020	Shruti.Shivanand	9481098261	Ahrutikollure@gmail.com	100/-
10	S2063072	Ankita.Sambanna	9591339198	Ankitasambanna1@gmail.com	100/-
11	S2063071	Pooja.Sunilkumar	8105556122	Ragapooja6@gmail.com	100/-
12	S2063024	Pratibha.Pralhad	8088541902	Kavitadarga402@gmail.com	100/-
13	S2063028	PremSagar.Shivraj	9071887572	PremSagarkale@gmail.com	100/-
14	S2063039	Basavaraj.Santosh	9986008126	Bshetkar3020@gmail.com	100/-
15	S2063016	Sandeep Reddy	8792435608	Reddysandeep0929@gmail.com	100/-
16	S2063126	Arvind Alurkar	7795316891	Alurkararvind9@gmail.com	100/-
17	S2062893	Shivprasad	8884668682	Patilshiva820@gmail.com	100/-
18	S2062899	Omerfarooq	6360561967	Omerfarooq5544@gmail.com	100/-
19	S2062977	Siddesh.Ashok	8088909790	Siddeshpanchal001@gmail.com	100/-
20	S2062901	Sharanbasappa.Mallikarjun	9901078932	sharanabasappadhulae@gmail.com	100/-


HOD, Physics

D-pt. of Physics
Karnatak Arts & Com. College Bida


Principal

PRINCIPAL
Karnatak Arts Sci. & Com. Collg.
R I D A R-585 401

DEPARTMENT OF PHYSICS
CERTIFICATE COURSE – I
2021 – 22
Basics of Solar Cell & Panels
LIST OF STUDENTS

B.Sc I sem

Sl.No	UUCMS No	Name	Student Sign
1	U04AE21S0003	Pavan	
2	U04AE21S0024	Aishwarya	
3	U04AE21S0029	Ratnamala	
4	U04AE21S0032	Bhagyashree	
5	U04AE21S0037	Shantkumar	
6	U04AE21S0059	Arpita Gachinmath	
7	U04AE21S0075	Bhagyashree	
8	U04AE21S0079	Praveen	
9	U04AE21S0082	Yogesh	
10	U04AE21S0110	Kalpna	
11	U04AE21S0114	Preeti koli	
12	U04AE21S0122	Anuradha gayamukhe	
13	U04AE21S0131	Shweta	
14	U04AE21S0132	Nandini	
15	U04AE21S0143	Ambika	
16	U04AE21S0153	Vaishnavi	
17	U04AE21S0175	Poojarani	
18	U04AE21S0180	Ambikarani reddy	
19	U04AE21S0179	Akash talwade	
20	U04AE21S0188	Aarati	
21	U04AE21S0207	Sadiya sultana	
22	U04AE21S0219	Jayprakash reddy	
23	U04AE21S0227	Sangeeta	
24	U04AE21S0225	Priya thakur	
25	U04AE21S0245	Sarika	
26	U04AE21S0243	Mohammad saif siddiqui	
27	U04AE21S0250	Monika	
28	U04AE21S0254	Snehalata	
29	U04AE21S0280	Shrinivas	
30	U04AE21S0283	Vishnu	
31	U04AE21S0287	Sangamesh	
32	U04AE21S0297	Akash	
33	U04AE21S0299	Akshata	
34	U04AE21S0303	Pradeep	
35	U04AE21S0333	Praveen kumar	
36	U04AE21S0339	Mallikarjun	
37	U04AE21S0340	Rajeshri	

HOD, Physics

HOD,

Dept. of Physics

Waranatek Arts Sci. & Com. College Rida

Principal

PRINCIPAL
Waranatek Arts Sci. & Com. College
BIDA R-585 401

DEPARTMENT OF PHYSICS

CERTIFICATE COURSE - I

2021-22

Basics of Solar Cell & Panels

LIST OF STUDENTS

N. 5110

SL. NO	REG. NO.	NAME OF STUDENT	PHONE NO.	E-MAIL ID @gmail.com	AMOUNT	
01	S2062909	Bhagyavati %o Sangappa	9113016152	bsmalade @	100/-	<u>Bhagyavati</u>
02	S2063117	Kanchan %o Sanjeev Kumar	9448426440	3kanchansanjoni	100/-	<u>Kanchan</u>
03	S2062963	Pradeep %o Ramchandra	9108433566	pradeeptupakasa		
04	S2062979	Shivani %o Madayya Suman	6361397363	shivanimadapakisa	100/-	<u>Shivani</u>
05	S2062962	Sindhu %o Mahazudrappa	7760314201	sindhupasaragi1234	100/-	<u>Sindhu</u>
06	S2062953	Pooja Patil %o Shivraj P	9743271830	pp5294149 @		
07	S2062938	Akhila %o Dhansraj	9113557857	akhilaphulari @	100/-	<u>Akhila</u>
08	S2063035	Shweta %o Avinash	9731830708	swornyavinash @		
09	S2063020	Shruti %o Shivanand	9481098261	shrutikollure @	100/-	<u>Shruti</u>
10	S2063072	Ankita %o Sambanna	9591339198	ankitasambanna1 @	100/-	<u>Ankita</u>
11	S2063071	Pooja %o Sunilkumar	8105556122	ragapooja96 @	100/-	<u>Pooja</u>
12	S2063024	Pratibha %o Pralhad	8088541902	karitadarga402 @	100/-	<u>Pratibha</u>
13	S2063028	PremSagar %o Shivaraj	9071887572	premsagarkale @	100/-	<u>Prem</u>
14	S2063039	Basavaraj %o Santosh	9986008126	bshettkar3020 @	100/-	<u>Basavaraj</u>
15	S2063016	Sandeep Reddy	8792435608	reddysandeepD929 @	100/-	<u>Sandeep</u>
16	S2063126	Arvind Alurkar	7795316891	alurkararvind9 @	100/-	<u>Arvind</u>
17	S2062893	Shivaprasad	8884668682	patilshiva820 @	100/-	<u>Shivaprasad</u>
18	S2062899	Omefarsooq	6360561961	omefarsooq5544 @	1	
19	S2062977	Siddesh %o Ashok	8088909790	siddeshpanchalooq	100/-	<u>Siddesh</u>
20	S2062901	Sharanbasappa Mallikarjun	9901078932	sharanbasappachulap	100/-	<u>Sharanbasappa</u>
21						
22						
23						
24						
25						

KRE Society's
Karnatak Arts Science and Commerce College, Bidar
Department of Physics
Certificate Course 2021-22

Notice

D: 31-3-2022

All the enrolled students of certificate courses titled "Basics of Solar Cell and Panels" & "Harnessing Wind Energy", are hereby informed that an exam on these courses will be conducted on 9th April 2022 at the class rooms F-9 & F-10, from 11am to 12 noon.



HOD, Physics

HOD:

Dept. of Physics

Karnatak Arts Sci. & Com. College Bidar



Certificate course In charge



Principal

PRINCIPAL

Karnatak Arts Sci. & Com. College
R I D A R-585 401

Karnatak Arts, Science And Students Attendance Register

K.R.E.

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Admission No.	Roll Number	Names	Date																	
			No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14			
			3	4	5	6	7	8	9	10	11	12	13	14						
D06		Kalpna D/o Pachayya	1	2	3	4	5	6	7	8	9	10	11	12						
D03		Vishnu s/o Sudhakas	0	1	2	3	4	5	6	7	8	9	10	11						
D08		Pooja Kalle D/o Rajappa	1	2	2	3	4	5	6	7	8	9	10	11	12					
D13		Sudhaya sultana	1	2	3	4	5	6	7	8	9	10	11	12	13					
D16		Saetha D/o Shamma	1	2	3	4	5	6	7	8	9	10	11	12						
D17		Akash s/o Madhusree	1	2	3	4	4	5	6	7	8	9	10	11	12					
D05		Aishwarya D/wallikajure	1	2	3	4	4	5	6	7	8	9	10	11	12					

Dipl. of Physics
Karnatak Arts, Science And Commerce College Bidar

Commerce College Bidar For the Month of Jan Feb 2022

Admission No.	Roll Number	Names	Date																		
			No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14				
			10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
			01	02	03	04	05	06	07	08	09	10	11	12							
			22	23	24	25	26	27	28	29	30	31									

Dipl. of Commerce
Karnatak Arts, Science And Commerce College Bidar

Karnatak Arts, Science And Students Attendance Register

Admission No.	Roll Number	Names	Date													
			No.	1	2	3	4	5	6	7	8	9	10	11	12	13

		PC+Pcs [qarun-2] 1	4	11	18	25	01	8	15	22	29					
603		Jaiyashash s/n Manabhai	0	0	0	0	0	0	0	0	0					
609		Shrinivas s/n Shirurmas	0	0	0	0	0	0	0	0	0					
B11		Mallekasjan	1	2	3	4	5	6	7	8	9	10	11	11		
D01		Mohammadarif Siddiqui	1	2	3	4	5	6	7	8	9	10	11	11		
D09		Akash Talwade.	1	2	3	4	5	6	7	8	9	10	11	11		
D03		Shobalata D/o. Murbendya	1	2	3	4	5	6	7	8	9	10	11	12		
D04		Pritya Trakus D/o Ramesh	1	2	3	4	5	6	7	8	9	10	11	12		

HOD
Dept. of Physics
Karnatak Arts Sci. & Com. College Bidar

Society's Commerce College Bidar For the Month of Jan, Feb 2022 & March 2022

Admission No.	Roll Number	Names	Date																											
			No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27

		PC+Pcs [qarun-2] 1	11	18	25	01	8	15	22	29																							
15	16	17	18	19	20	21	22	23	24	25	26	27	28																				

HOD
Karnatak Arts Sci. & Com. College
Bidar P. 485 401

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Admission No.	Roll Number	Names	Date
A19		Ratnamala D/o Rajkumar	
A13		Shweta D/o Shripati	
A14		Bhagyashree D/o Hemant R	
A15		Yogesh S/o Chandabeddy	
A16		Pavan S/o Laxman	
A17		Anusudha D/o Revanappa	
A21		Vaishnavi D/o Vishwanath	
A23		Sangeetha D/o Devendran	
A24		Praveen Koli S/o Kishinath	

Karnatak Arts, Science And
Students Attendance Register

No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	5	12	19	26	9	16	23	30	6	13	20	27		
	1	1	1	2	2	2	2	3	3	3	3			
	22	22	22	22	22	22	22	22	22	22	22			
	1	2	3	4	5	6	7	8	9	10	11			
	1	2	3	4	5	6	7	8	9	10				
	1	2	3	4	5	6	7	8	9	10				
	1	2	3	4	5	6	7	8	9	10				
	1	2	3	4	5	6	7	8	9	10				

Principal
Karnatak Arts & Com. College Bidar

Society's

Commerce College Bidar

For the Month of Jan. Feb 2022 & March 2022

No.	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	12	2	16	2	16	23								
	1	2	3	3	3	3								
	22	22	22	22	22	22								
	1	2	3	4	5	6								
	1	2	3	4	5	6								
	1	2	3	4	5	6								
	1	2	3	4	5	6								
	1	2	3	4	5	6								
	1	2	3	4	5	6								

Principal
Karnatak Arts, Sci. & Com. College Bidar
R.T.D.A. R-585401

Admission No.	Roll Number	Names	Date	
			No.	
		nm ethud		
A01		Ambika D/o Shankkumar		
A02		Agnath D/o Rajshethas G.		
A03		Nandini D/o Rajshethas		
A04		Pooja sani D/o Sanyakanth		
A05		G. Agnitha D/o. G. Ramesh		
A06		Manira D/o Ravindra		
A08		Ambika sani D/o Rangarath		
i0		Shantkumar s/o Vessibethy		
11		Bhagyasree D/o Baranasaj		

Karnatak Arts, Science And
Students Attendance Register

K.R.E.

No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Date	
															1	2
	6	13	20	27	3	10	17	24	31	10	17	24			22	22
	1	1	1	1	2	2	2	2	3	3	3	3			22	22
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
	1	2	3	4	5	6	7	8	9	10						
	1	2	3	4	5	6	7	8	9	10						
	1	2	3	4	5	6	7	8	9	10						
	1	2	3	4	5	6	7	8	9	10						
	1	2	3	4	5	6	7	8	9	10						
	1	2	3	4	5	6	7	8	9	10						
	1	2	3	4	5	6	7	8	9	10						

Society's
Commerce College Bidar

For the Month of Jan, Feb 2022 & March 2022

	13	27	10	24	10	24											
	1	1	2	2	2	3	3										
	1	2	3	4	5	6											
	1	2	3	4	5	6											
	1	2	3	4	5	6											
	1	2	3	4	5	6											
	1	2	3	4	5	6											
	1	2	3	4	5	6											
	1	2	3	4	5	6											
	1	2	3	4	5	6											

Karnatak Arts, Science And Students Attendance Register

Admission No.	Roll Number	Names	Date													
			No.	1	2	3	4	5	6	7	8	9	10	11	12	13

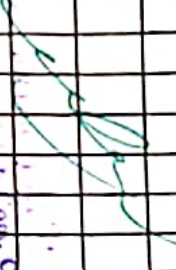
A24		Premnaga slo Shivraj	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A25		Balraj slo Santosh	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A28		Sandeep sreddy slo Dattatray	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A33		Shanku slo Shivnand	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A34		Bhagavathi slo Saaganna	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A35		Shubha slo Avinash	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A37		Akhila slo Dharaaj	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A38		Pooja slo Sunilkumar	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A39		Pratibha slo Prashant	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A57		Shashankappa slo Mallikarjun	1	2	3	4	5	6	7	8	9	10	11	12	13	14


 P. M.
 Princi-
 Dept. of
 Arts, Sci. & Com. Culture Bidar

Society's Commerce College Bidar For the Month of Jan, Feb 2022 & March 2022

Admission No.	Roll Number	Names	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
---------------	-------------	-------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

15	16	17	18	19	20	21	22	23	24	25	26	27	28								


 P. M.
 Princi-
 Karnatak Arts, Sci. & Com. Bidar
 Bidar - 585 401

K.R.E.

Karnatak Arts, Science And Students Attendance Register

Admission No.	Roll Number	Names	Date																	
			No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14			
19	A01	Ankita D/o Lambana																		
	A02	Rajia Patil D/o Shreeg Patel																		
	A04	Ashwani D/o Mahayyasamy																		
	A07	Kanchan D/o Rajeevkumar																		
	A09	Sindhu D/o Mahasudhepa																		
	A10	Yashdeep S/o Ramchandra																		
	A13	Siddharth S/o Ashok																		
	A15	Arvind S/o Tukaram																		
	A18	Omprasad S/o Md. Jalil Ahmed																		
	A22	Shirpaard S/o Anilkumar																		

Society's Commerce College Bidar

For the Month of Jan/Feb 2022 & Month 202

11	25	8	22	19	21	22														
	1	2	3	4	5	6														
	1	2	3	4	5	6														
	1	2	3	4	5	6														
	1	2	3	4	5	6														
	1	2	3	4	5	6														
	1	2	3	4	5	6														

KRE SOCIETY'S
KARNATAK ARTS SCIENCE AND COMMERCE COLLEGE BIDAR
DEPARTMENT OF PHYSICS

CERTIFICATE COURSE – 1
2021-22
Basics of Solar Cell & Panels
Students Exam Attendance

SL. NO	REG.NO.	Name of Student	Sign
01	S2062909	Bhagyavati.Sangappa	Bhagyavati
02	S2063117	Kanchan.Sanjeekumar	Kanchan
03	S2062963	Pradeep.Ramchandra	Pradeep
04	S2062979	Shivani.MAdayya Swamy	Shivani
05	S2062982	Sindhu.Maharudrappa	Sindhu
06	S2062953	Pooja Patil.Shivraj.P	Pooja
07	S2062938	Akhila.Dhanraj	Akhila
08	S2063035	Shweta.Avinash	Shweta
09	S2063020	Shruti.Shivanand	Shruti
10	S2063072	Ankita.Sambanna	Ankita
11	S2063071	Pooja.Sunilkumar	Pooja
12	S2063024	Pratibha.Pralhad	Pratibha
13	S2063028	PremSagar.Shivraj	Prem
14	S2063039	Basavaraj.Santosh	Basavaraj
15	S2063016	Sandeep Reddy	Sandeep
16	S2063126	Arvind Alurkar	Arvind
17	S2062893	Shivprasad	Shivprasad
18	S2062899	Omerfarooq	Omer Farooq
19	S2062977	Siddesh.Ashok	Siddesh
20	S2062901	Sharanbasappa.Mallikarjun	Sharan

HOD, Physics

Dept. of Physics

Karnatak Arts Sci. & Com. College Bidar

Principal

PRINCIPAL

Karnatak Arts Sci. & Com. College
RTD A R-585 401

KRE SOCIETY'S
KARNATAK ARTS SCIENCE AND COMMERCE COLLEGE BIDAR
DEPARTMENT OF PHYSICS
CERTIFICATE COURSE - I
2021 - 22
Basics of Solar Cell & Panels
Students Exam Attendance

B.Sc I sem

Sl.No	UUCMS No	Name	Sign
1	U04AE21S0003	Pavan	Pavan
2	U04AE21S0024	Aishwarya	Aishwarya
3	U04AE21S0029	Ratnamala	Ratna
4	U04AE21S0032	Bhagyashree	Bhagyashree
5	U04AE21S0037	Shantkumar	Shantkumar
6	U04AE21S0059	Arpita Gachinmath	Arpita
7	U04AE21S0075	Bhagyashree	B.H. Reddy
8	U04AE21S0079	Praveen	Praveen
9	U04AE21S0082	Yogesh	Yogesh
10	U04AE21S0110	Kalpana	Kalpana
11	U04AE21S0114	Preeti koli	Preeti
12	U04AE21S0122	Anuradha gayamukhe	Anuradha
13	U04AE21S0131	Shweta	Shweta
14	U04AE21S0132	Nandini	Nandini
15	U04AE21S0143	Ambika	Ambika
16	U04AE21S0153	Vaishnavi	Vaishnavi
17	U04AE21S0175	Poojarani	Poojarani
18	U04AE21S0180	Ambikarani reddy	Ambikarani
19	U04AE21S0179	Akash talwade	Akash
20	U04AE21S0188	Aarati	Aarati
21	U04AE21S0207	Sadiya sultana	Sadiya
22	U04AE21S0219	Jayprakash reddy	Jayprakash
23	U04AE21S0227	Sangeeta	Sangeeta
24	U04AE21S0225	Priya thakur	Priya
25	U04AE21S0245	Sarika	Sarika
26	U04AE21S0243	Mohammad saif siddiqui	Mohammad
27	U04AE21S0250	Monika	Monika
28	U04AE21S0254	Snehalata	Snehalata
29	U04AE21S0280	Shrinivas	Shrinivas
30	U04AE21S0283	Vishnu	Vishnu
31	U04AE21S0287	Sangamesh	Sangamesh
32	U04AE21S0297	Akash	Akash
33	U04AE21S0299	Akshata	Akshata
34	U04AE21S0303	Pradeep	Pradeep
35	U04AE21S0333	Praveen kumar	Praveen
36	U04AE21S0339	Mallikarjun	Mallikarjun
37	U04AE21S0340	Rajeshri	Rajeshri

HOD, Physics

H. O. D.

Dept. of Physics

Karnatak Arts Sci. & Com. College Bidar

Principal

PRINCIPAL

Karnatak Arts Sci. & Com. College
BIDAR-585 401

KRE Society's
Karnatak Arts Science and Commerce College, Bidar
Department of Physics
Certificate Course-I
Basics of Solar Cell & Panels
Question Paper 2021-22

Class :
Name of Student :
Reg. No. :

Date :
Time : 1hour
Max. Marks : 30

Q.I Choose the correct answer for the following Questions

15x1= 15

1. The voltage of a single solar cell is.....
 - (a) 0.2V
 - (b) 0.5V
 - (c) 1V
 - (d) 2V

2. A solar cell works on the principle of _____
 - (a) Photo electricity
 - (b) Photographic camera
 - (c) Photovoltaic conversions
 - (d) Photosynthesis

3. The efficiency of the solar cell is about _____
 - (a) 25 %
 - (b) 15 %
 - (c) 40 %
 - (d) 60 %

4. A module in a solar panel refers to _____.
 - (a) Series arrangement of solar cells.
 - (b) Parallel arrangement of solar cells.
 - (c) Series and parallel arrangement of solar cells.
 - (d) None of the above

5. The solar or photo voltaic cell converts _____
 - (a) Chemical energy to electrical energy
 - (b) Solar radiation into electrical energy
 - (c) Solar radiation into thermal energy
 - (d) Thermal energy into electrical energy

6. A pyranometer is used for measurement of.....
 - (a) Direct radiation only
 - (b) Diffuse radiation only
 - (c) Direct as well as diffuse radiation
 - (d) All of the above

7. The most commonly used semiconducting material used to prepare a solar cell is _____
- (a) Gallium arsenide
 - (b) Indium arsenide
 - (c) Cadmium arsenide
 - (d) Silicon
8. LEDs used for giving infrared radiations are prepared from _____
- (a) Silicon dioxide
 - (b) Gallium arsenide [Ga As]
 - (c) Gallium phosphide [Ga P]
 - (d) Gallium arsenide phosphide [Ga As P]
9. Sun tracking system is required in the case of _____
- (a) Cylindrical and parabolic and parabolic
 - (b) Flat plate collector
 - (c) Both (a) and (b)
 - (d) None of the above
10. The Zenith Angle complement is _____
- (a) Surface Azimuth Angle
 - (b) Slope
 - (c) Solar Altitude Angle
 - (d) Solar Azimuth Angle
11. A Solar cell is a p - n Junction operating in _____
- (a) Reverse bias condition
 - (b) Unbiased condition
 - (c) Forward bias condition
 - (d) In both forward and reverse bias condition
12. Solar cooker is a device which converts solar energy into _____
- (a) Electric energy
 - (b) Sound energy
 - (c) Thermal Energy
 - (d) All of the above
13. The energy radiated by the sun in bright sunny day is about _____
- (a) 2.5 kW/m²
 - (b) 1.0 kW/m²
 - (c) 500 W/m²
 - (d) 200 W/m²
14. Which meter is used to measure the solar radiation flux _____
- (a) Pyranometer
 - (b) Sunshine Recorder
 - (c) Anemometer
 - (d) All of the above

15. Which type of solar cell give the highest efficiency?

- (a) Mono Crystalline
- (b) Polycrystalline Germanium
- (c) Thin film
- (d) Polycrystalline Silicon

3x5= 15

Q II. Answer the Flowing Questions

1. What are Solar collectors? Mention the types of solar collectors.
2. What is Solar Photo voltaic array? Explain the series and parallel connection of solar panels.
3. List out the solar power plants in India.

KRE Society's
Karnatak Arts Science and Commerce College, Bidar
Department of Physics

Certificate Course-I
Basics of Solar Cell & Panels
Question Paper 2021-22

27
30

Class : BSc 3rd Sem
Name of Student : Anurag Sambanna
Reg No. : 52063072

Date : 3.4.22
Time : 1hour
Max. Marks : 30

Q.I Choose the correct answer for the following Questions

15x1= 15

1. The voltage of a single solar cell is.....

- (a) 0.2V
 (b) 0.5V
(c) 1V
(d) 2V

2. A solar cell works on the principle of _____

- (a) Photo electricity
(b) Photographic camera
 (c) Photovoltaic conversions
(d) Photosynthesis

3. The efficiency of the solar cell is about _____

- (a) 25 %
(b) 15 %
 (c) 40 %
(d) 60 %

4. A module in a solar panel refers to _____

- (a) Series arrangement of solar cells.
(b) Parallel arrangement of solar cells.
 (c) Series and parallel arrangement of solar cells.
(d) None of the above

5. The solar or photo voltaic cell converts _____

- (a) Chemical energy to electrical energy
 (b) Solar radiation into electrical energy
(c) Solar radiation into thermal energy
(d) Thermal energy into electrical energy

6. A pyranometer is used for measurement of.....

- (a) Direct radiation only
(b) Diffuse radiation only
(c) Direct as well as diffuse radiation
 (d) All of the above

15. Which type of solar cell give the highest efficiency?
 (a) Mono Crystalline

7. The most commonly used semiconducting material used to prepare a solar cell is _____

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- (b) Indium arsenide
- (c) Cadmium arsenide
- (d) Silicon

8. LEDs used for giving infrared radiations are prepared from _____

- (a) Silicon dioxide
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- (c) Gallium phosphide [Ga P]
- (d) Gallium arsenide phosphide [Ga As P]

9. Sun tracking system is required in the case of _____

- (a) Cylindrical and parabolic and parabolic
- (b) Flat plate collector
- (c) Both (a) and (b)
- (d) None of the above

10. The Zenith Angle complement is _____

- (a) Surface Azimuth Angle
- (b) Slope
- (c) Solar Altitude Angle
- (d) Solar Azimuth Angle

11. A Solar cell is a p - n Junction operating in _____

- (a) Reverse bias condition
- (b) Unbiased condition
- (c) Forward bias condition
- (d) In both forward and reverse bias condition

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- (a) Electric energy
- (b) Sound energy
- (c) Thermal Energy
- (d) All of the above

13. The energy radiated by the sun in bright sunny day is about _____

- (a) 2.5 kW/m²
- (b) 1.0 kW/m²
- (c) 500 W/m²
- (d) 200 W/m²

14. Which meter is used to measure the solar radiation flux _____

- (a) Pyranometer
- (b) Sunshine Recorder
- (c) Anemometer
- (d) All of the above


34 List of Solar power plants in India

- 1] Bhadla Solar park - Rajasthan
- 2] Pavagada Solar park - Karnataka
- 3] Kurnool ultra mega solar park - Andhra Pradesh
- 4] NP Konda - Andhra Pradesh
- 5] Floating solar park - Jharkhand
- 6] Kaza Solar park - Himachal Pradesh
- 7] Dholera Solar park Ph-II - Gujarat

5

DEPARTMENT OF PHYSICS
CERTIFICATE COURSE - I
2021 - 22
Basics of Solar Cell & Panels
Marks List
B.Sc V sem

SL. NO	REG.NO.	Name of Student	Max. Marks	Obtained Marks
01	S2062909	Bhagyavati Sangappa	30	24
02	S2063117	Kanchan Sanjeeskumar	30	24
03	S2062963	Pradeep Ramchandra	30	21
04	S2062979	Shivani.MAdayya Swamy	30	25
05	S2062982	Sindhu.Maharudrappa	30	26
06	S2062953	Pooja Patil.Shivraj.P	30	26
07	S2062938	Akhila.Dhanraj	30	25
08	S2063035	Shweta.Avinash	30	26
09	S2063020	Shruti.Shivanand	30	27
10	S2063072	Ankita.Sambanna	30	27
11	S2063071	Pooja.Sunilkumar	30	27
12	S2063024	Pratibha.Pralhad	30	17
13	S2063028	PremSagar.Shivraj	30	27
14	S2063039	Basavaraj.Santosh	30	26
15	S2063016	Sandeep Reddy	30	25
16	S2063126	Arvind Alurkar	30	23
17	S2062893	Shivprasad	30	25
18	S2062899	Omerfarooq	30	25
19	S2062977	Siddesh.Ashok	30	27
20	S2062901	Sharanbasappa.Mallikarjun	30	25


HOD Physics

HOD:

Dept. of Physics

Karnatak Arts Sci. & Com. College Bidar


Principal

PRINCIPAL

Karnatak Arts Sci. & Com. College
BIDAR-585 401

DEPARTMENT OF PHYSICS
CERTIFICATE COURSE – I
2021 – 22
Basics of Solar Cell & Panels
Marks List
B.Sc I sem

Sl.No	UUCMS No	Name	Max. Marks	Obtained Marks
1	U04AE21S0003	Pavan	30	19
2	U04AE21S0024	Aishwarya	30	25
3	U04AE21S0029	Ratnamala	30	24
4	U04AE21S0032	Bhagyashree	30	20
5	U04AE21S0037	Shantkumar	30	27
6	U04AE21S0059	Arpita Gachinmath	30	27
7	U04AE21S0075	Bhagyashree	30	19
8	U04AE21S0079	Praveen	30	20
9	U04AE21S0082	Yogesh	30	20
10	U04AE21S0110	Kalpana	30	28
11	U04AE21S0114	Preeti Koli	30	15
12	U04AE21S0122	Anuradha Gayamukhe	30	20
13	U04AE21S0131	Shweta	30	27
14	U04AE21S0132	Nandini	30	28
15	U04AE21S0143	Ambika	30	26
16	U04AE21S0153	Vaishnavi	30	18
17	U04AE21S0175	Poojarani	30	27
18	U04AE21S0180	Ambikarani Reddy	30	20
19	U04AE21S0179	Akash Talwade	30	21
20	U04AE21S0188	Aarati	30	29
21	U04AE21S0207	Sadiya sultana	30	20
22	U04AE21S0219	Jayprakash Reddy	30	20
23	U04AE21S0227	Sangeeta	30	21
24	U04AE21S0225	Priya Thakur	30	25
25	U04AE21S0245	Sarika	30	20
26	U04AE21S0243	Mohammad saif Siddiqui	30	19
27	U04AE21S0250	Monika	30	21
28	U04AE21S0254	Snehalata	30	24
29	U04AE21S0280	Shrinivas	30	22
30	U04AE21S0283	Vishnu	30	27
31	U04AE21S0287	Sangamesh	30	24
32	U04AE21S0297	Akash	30	20
33	U04AE21S0299	Akshata	30	Ab
34	U04AE21S0303	Pradeep	30	25
35	U04AE21S0333	Praveenkumar	30	26
36	U04AE21S0339	Mallikarjun	30	20
37	U04AE21S0340	Rajeshri	30	20

HOD, Physics

HOD:

D-pt. of Physics

Karnatak Arts & Com. College Bidar

Principal

PRINCIPAL


Karnatak Arts Sci. & Com. Collge.

R T D A R-585 401

KRE SOCIETY'S
KARNATAK ARTS SCIENCE AND COMMERCE COLLEGE BIDAR
DEPARTMENT OF PHYSICS
Certificate Course
1. Basics of Solar Cell and Panels &
2. Harnessing Wind Energy
Certificate Distribution
2021-22




HOD,
Dept. of Physics
Karnatak Arts Sci. & Com. College Bidar.


PRINCIPAL
Karnatak Arts Sci. & Com. Coll
D. D. A. R-SRS 401



KRE SOCIETY'S
KARNATAK ARTS, SCIENCE AND COMMERCE COLLEGE, BIDAR
DEPARTMENT OF PHYSICS

2021-22

CERTIFICATE

This is to certify that Kumar/ Kumari *Kanchar Sajjan*.....
of class B.Sc I/III/IV Sem bearing Reg. No. *20203117*...has successfully completed
the short term course titled "BASICS OF SOLAR CELL AND PANELS"
during the Academic year 2021-22.

S.P. Janawadkar
Sri. S.P. Janawadkar
Head, Dept. of Physics

Dr. M.S. Chelva
Principal
PRINCIPAL

Dr. M.S. Chelva
Principal
PRINCIPAL
Karnatak Arts Sci. & Com. College
Bidar - 585 401

"Energy is the need of the hour"

KRE SOCIETY'S
KARNATAK ARTS SCIENCE AND COMMERCE COLLEGE BIDAR
DEPARTMENT OF PHYSICS
Certificate Course – Harnessing Wind Energy
Report
2021-22


The department has continued & self financed two certificate courses of 30 hrs duration, during the year 2021- 2022, titled “Basics of Solar Cell & Panels” & “Harnessing Wind Energy”

I. Course title : Basics of Solar Cell & Panels
Duration : 30hrs
Enrolled students : 57

II. Course title : Harnessing Wind Energy
Duration : 30hrs
Enrolled students : 33

Methodology : The introduction of B.Voc course in Renewable Energy & corresponding lab, Installation of **45kW Roof Top Solar Plant** in the college premises made us to start this certificate course. To complete the theory part we utilized the beginning period of the semester when practical classes are about to start. As skill component part of this course 6 experiments are demonstrated batch wise. All the participants are given a booklet containing related theory & experimental details.

Conclusion: Students show good interest in both the certificate courses and express their opinion about these courses by giving feedback.


HOD,
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