

**CERTIFICATE COURSE
ON
RENEWABLE ENERGY PRACTICES**

**ACADEMIC YEAR- 2021-2022
[FROM 01-11-2021 TO 10-12-2021]**

DEPARTMENT OF PHYSICS



No. Of Participants: 50

No.Of Hours : 30

GOVERNMENT DEGREE COLLEGE, GAMBHIRAOPET

RAJANNA SIRCILLA DIST. 505 304

GOVERNMENT DEGREE COLLEGE, GAMBHIRAOPET
RAJANNA SIRCILLA DIST

DEPARTMENT OF PHYSICS

PERMISSION LETTER

Date:25-10-2021

To
The Principal,
Government Degree College,
Gambhiraopet,
Rajanna Sircilla Dist.-506304

Respected Sir,

Sub:- Department of Physics - Seeking Permission to start Certificate
Course in Physics in our college Request-Reg.

-o0o-

Permitted
We the Department of Physics would like to start Certificate Course in
Physics in our college for the academic year 2021-2022 for the betterment of all
Physics students.

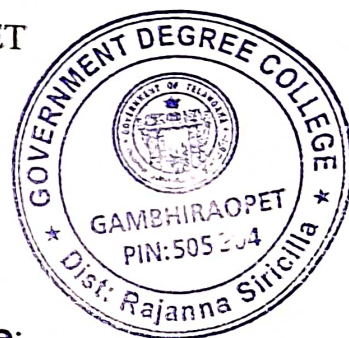
Hence, we request you to permit us to start the Certificate Course on "RENEWABLE ENERGY
PRACTICES" for the above mentioned academic year.

Thanking you sir,



Yours faithfully
N. Adivishnu
N.Adivishnu
In-charge
Department of Physics

GOVERNMENT DEGREE COLLEGE, GAMBHIRAOPET
RAJANNA SIRCILLA DIST



DEPARTMENT OF PHYSICS

Certificate Course on
"RENEWABLE ENERGY PRACTICES"

Curriculum of the Certificate Course:

Total Hours: 30

Unit -I

(8 Hours)

- Fossil fuels & Nuclear energy -Limitations
- Need of non-conventional energy sources
- Wave energy systems
- Biomass
- Biochemical conversion
- Hydroelectricity

Unit -II

(8 Hours)

- Solar green houses
- Sun tracking systems
- Storage of solar energy
- Solar water heater
- Solar cell
- Sun temperature

Unit -III

(8 Hours)

- Fundamentals of wind energy
- Wind turbines
- Electrical machines in wind turbines
- Hydropower resources
- Hydropower technologies
- Environmental impact of hydro power sources

Unit - IV

(6 Hours)

- Physics of piezoelectric effect
- Materials of piezoelectricity
- Piezoelectric parameters
- Piezoelectric generators
- Piezoelectric energy applications

N. Adivishnu

Course coordinator

[Signature]
Principal

Principal

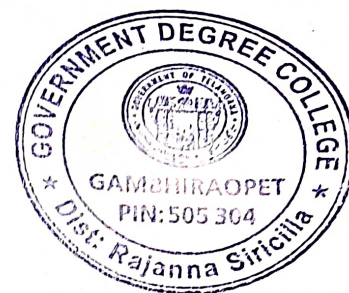
G.D.C.Gambhiraopet

Dist:Rajanna Sircilla-505304

**CERTIFICATE COURSE
ON
RENEWABLE ENERGY PRACTICES**

**ACADEMIC YEAR- 2021-2022
[FROM 01-11-2021 TO 10-12-2021]**

DEPARTMENT OF PHYSICS



AIMS AND OBJECTIVES

- To acquire depth knowledge in area of renewable energy
- To provide clear understanding about energy harvesting techniques.
- To develop lateral thinking about renewable energy practices.
- To obtain specific capabilities of renewable energy concepts.
- To apply suitable techniques to implement energy harvesting challenges.
- To sensitize about the impact of renewable energy.
- To practise methods of renewable energy practices.
- To extend knowledge about renewable energy practices and their impact in the society.
- To demonstrate renewable energy practices for efficient use

N. Adivishnu
Course coordinator

[Signature]
Principal
Principal
G.D.C. Gambhiraopet
Dist: Rajanna Sircilla-505304

**CERTIFICATE COURSE
ON
RENEWABLE ENERGY PRACTICES**

**ACADEMIC YEAR- 2021-2022
[FROM 01-11-2021 TO 10-12-2021]**

DEPARTMENT OF PHYSICS



CIRCULAR

Date: 26-10-2021

All the students are here by informed that we, the Department of Physics planning to Start "RENEWABLE ENERGY PRACTICES" for a period of 30 hours for this Academic Year 2021-22. The classes will be conducted during Zero hours that is from 4:30 P.M to 5:30 P.M (1hour) on all working days. The detailed schedule will be intimated Soon. Interested candidates may enrol their names with Sri.N.Adivishnu, Lecturer in Physics on or before 30-10-2021.

N. Adivishnu
Course coordinator

[Signature]
Principal
Principal
G.D.C.Gambhiraopet
Dist:Rajanna Sircilla-505304

**CERTIFICATE COURSE
ON**

RENEWABLE ENERGY PRACTICES
ACADEMIC YEAR- 2021-2022
[FROM 01-11-2021 TO 10-12-2021]
DEPARTMENT OF PHYSICS



Student Enrolment sheet:1

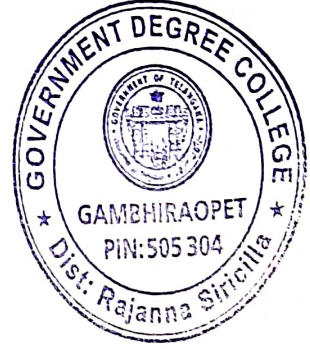
Sl.No	Name of the student	Father name	College ID	Signature of the student
1	P.Shruthija	P.Srinivas	210770864681031	P. Sufi
2	L.Ashwini	L.PrakashReddy	210770864681021	L. Anfi
3	S.Chandana	S.Devaiah	210770864681039	S. Chandana
4	M.Chitti	M.Rajaiah	210770864681025	M. chitti
5	A.Sangeetha	A.Kanakaiah	210770864681002	A. Sangeetha
6	S.Kalyani	S.Mallaiah	210770864681040	S. Kalyani
7	P.Soumya	P.Yellareddy	210770864681033	P. Soumya
8	P.Rekha	P.Rangaiah	210770864681035	P. Rekha
9	B.Sandya	B.Balaiah	210770864681009	B. sandya
10	Md.Nayeem	Md.Hameed	210770864681029	Md. Nayeem
11	A.Revathi	A.Parasaramulu	20077086441001	A. Revathi
12	B.Nirosha	B.Rajam	20077086468003	B. Nirosha
13	D.Manasa	D.Narsimlu	20077086468004	D. Manasa
14	G.Thirupathi	G.Bhoomaiah	20077086441003	G. Thirupathi
15	G.Sravani	G.Srinivas	20077086468010	G. Sravani
16	Sk.Sana	Sk.Dadumiya	20077086468017	SK. Sana
17	T.Nikitha	T.Swamy	20077086468018	T. Nikitha
18	V.Uparna	V.Mallaiah	20077086468020	V. uparna
19	V.Akhila	V.Chandraiah	20077086468021	V. Akhila
20	S.Rakesh	S.Yellaiah	20077086441006	S. Rakesh
21	J.Sivani	J.Rajuyadav	19077086441001	J. Sivani
22	M.Sowmaya	M.Krishna	19077086468016	M. sowmaya
23	T.Analika	T.Swamy	19077086468023	T. Analika
24	V.Divya	V.Ramchandram	19077086468024	V. Divya
25	V.Pavani	V.Kishan	19077086468026	V. Pavani

N. Adivishnu
Course coordinator

Principal

CERTIFICATE COURSE
ON Dist: Rajanna Sircilla-505304

RENEWABLE ENERGY PRACTICES
ACADEMIC YEAR- 2021-2022
[FROM 01-11-2021 TO 10-12-2021]
DEPARTMENT OF PHYSICS



Student Enrolment sheet:2

Sl.No	Name of the student	Father name	College ID	Signature of the student
26	V.Srinivasgoud	V.Devaiah	19077086468025	V. Srinu
27	Md.Sajid	Md.Kareem	19077086468017	Md. Sajid
28	G.Sruthi	G.Devaiah	19077086468007	G. Sruthi
29	S.Sampath	S.Shankar	19077086468022	S. Sampath
30	D.Ramya	D.Srinivas	19077086468003	D. Ramya
31	S.Kasturi	S.Devaiah	19077086468021	S. Kasturi
32	K.Soumya	K.Ramesh	19077086468011	K. Soumya
33	L.Ashwita	L.Prakash reddy	19077086468013	L. Ashwita
34	N.Deepthi	N.satyam Reddy	19077086468019	N. Deepthi
35	B.Nikita	B.Lingam	19077086468002	B. Nikita
36	B.Venu	B.Yellaiah	20077086441002	B. Venu
37	G.Rohit	G.Rajanarsu	20077086468005	G. Rohith
38	G.Rajitha	G.Durgaiah	20077086468006	G. Rajitha
39	K.Tarun	K.Chandram	20077086468011	K. Tarun
40	M.Sandhya	M.Raju	20077086468013	M. Sandhya
41	A.Ganesh	A.Kishan	210770864681003	A. Ganesh
42	C.Somesh	C.Balellu	210770864681010	C. Somesh
43	C.Rachana	C.Anjaiah	210770864681011	C. Rachana
44	G.Kalyani	G.Sudhakar	210770864681017	G. Kalyani
45	M.Dilip	M.Venkatesh	210770864681023	M. Dilip
46	M.Navya	M.Rajaiah	210770864681028	M. Navya
47	S.Shravani	S.Laxman Rao	210770864681042	S. shravani
48	U.Susmitha	U.Devaiah	210770864681044	U. Susmitha
49	B.Sateesh	B.Srinivas	210770864681008	B. Sateesh
50	D.Madhu	D.Narsimulu	210770864681012	D. Madhu

N. Adivishnu
 Course coordinator

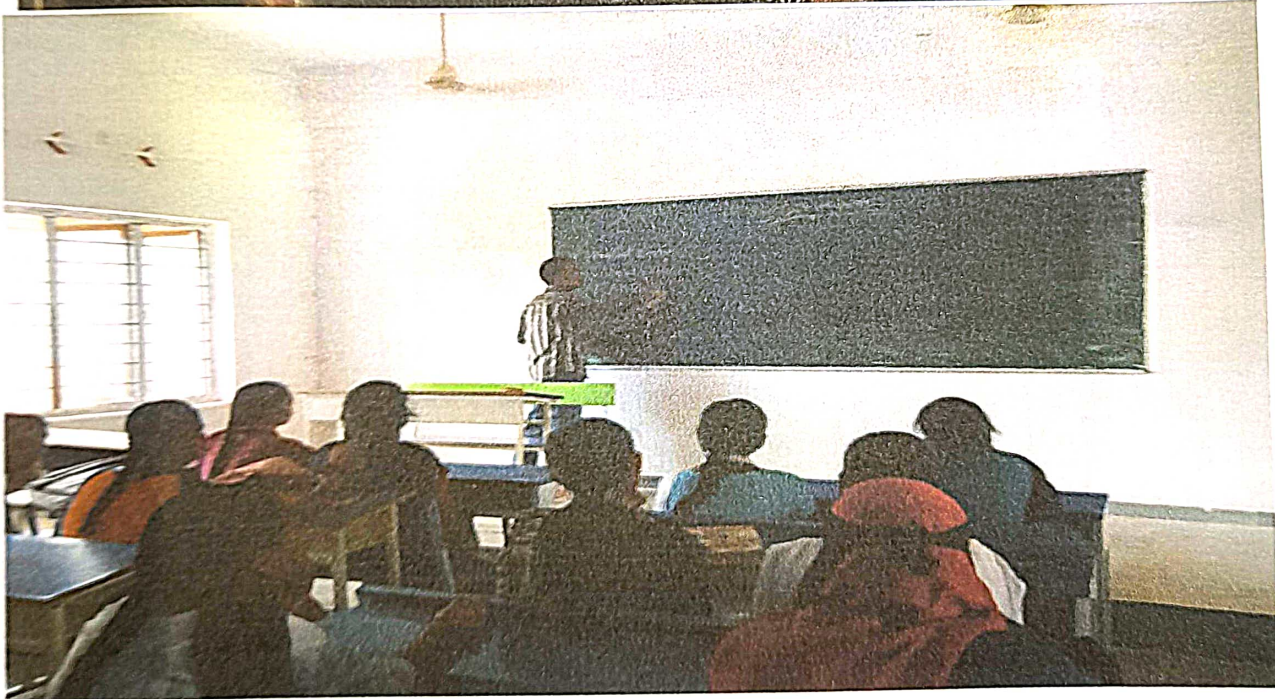
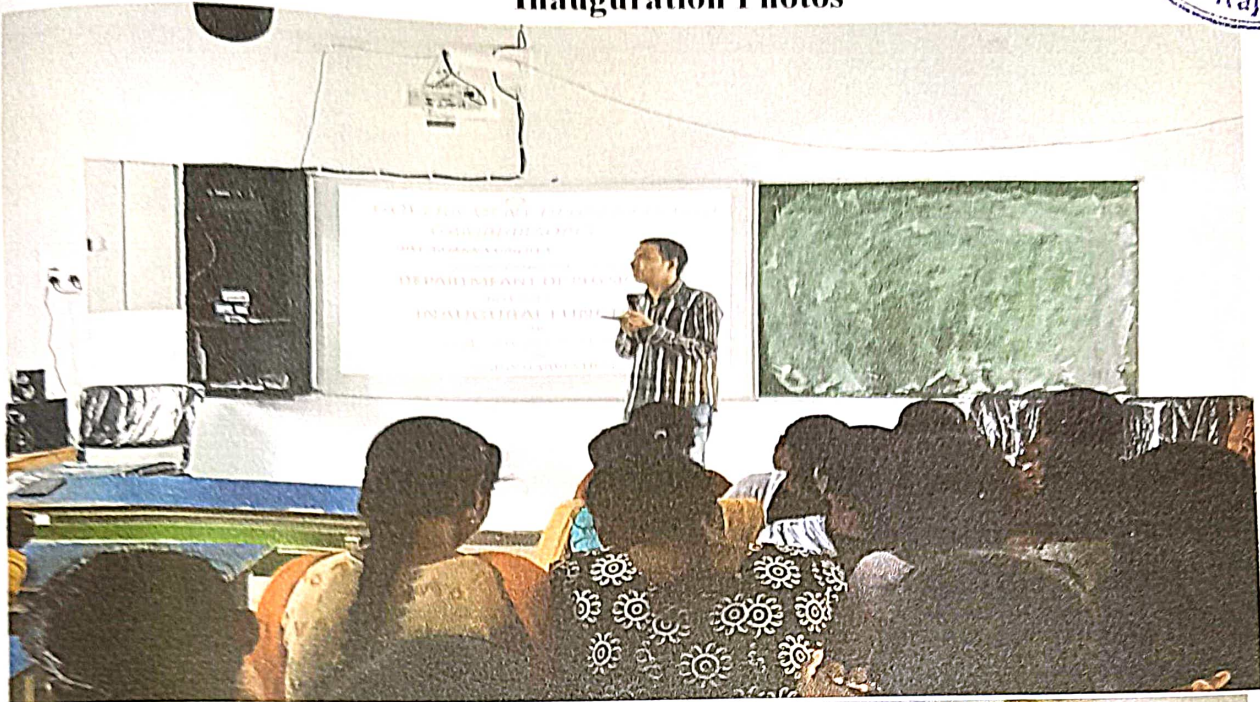
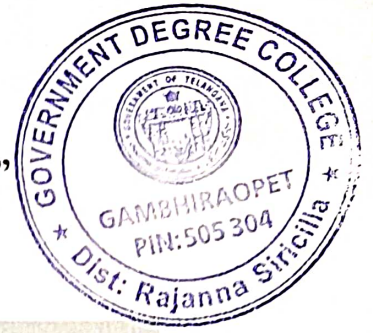
[Signature]
 Principal

GOVERNMENT DEGREE COLLEGE, GAMBHIRAOPET-505304
 G.D.C. Gambhiraopet
 RAJANNA SIRCILLA, DIST. RAJANNA SIRCILLA-505304

DEPARTMENT OF PHYSICS
Certificate Course on: "Renewable Energy Sources"

Academic Year 2021-2022

Inauguration Photos



N. Advishanku
Course coordinator

[Signature]
Principal
Principal
G.D.C. Gambhiraopet
ON Dist: Rajanna Sircilla-505304

RENEWABLE ENERGY PRACTICES
ACADEMIC YEAR- 2021-2022
[FROM 01-11-2021 TO 10-12-2021]
DEPARTMENT OF PHYSICS



Student's attendance sheet: 1

Sl. No	Student name	November																														December										Student Signature																		
		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	28	29	30	1	2	3	4	5	6	7	8	9	10																			
1	P.Shruthija	1	2	3	4	5	6	6	7	8	9	10	10	11	12	13	14	15	16	17	17	18	19	20	21	22	23	24	25	26	27																					P.								
2	L.Ashwini	1	2	2	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	19	20	21	22	23	24	25	26																									P. Suti					
3	S.Chandana	1	2	3	4	5	6	7	8	9	10	11	11	12	13	14	15	16	17	17	18	19	20	21	22	23	24	25	26																													L. Anshu		
4	M.Chitti	1	2	3	4	4	5	6	7	7	8	9	10	11	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25																													S. Chandana		
5	A.Sangeetha	1	1	2	3	4	5	5	6	7	8	8	9	9	10	11	12	13	14	15	16	16	17	18	19	20	21	22	23	24																													M. Chitti	
6	S.Kalyani	1	1	1	2	3	4	5	6	7	8	8	9	9	10	11	12	13	14	15	16	16	17	18	19	20	21	22	23	24																														A. Sangeetha
7	P.Soumya	1	2	2	3	3	4	5	5	6	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																														S. Kalyani	
8	P.Rekha	1	1	2	3	4	5	6	6	7	8	9	10	11	12	13	14	15	16	17	17	18	19	20	21	22	23	24																														P. Soumya		
9	B.Sandya	1	2	3	4	5	5	6	7	8	9	10	11	12	13	13	14	15	16	17	17	18	19	20	21	22	23	24																															P. Rekha	
10	Md.Nayeem	1	1	2	3	4	4	5	5	6	7	8	9	10	11	12	12	13	14	15	16	17	17	18	19	20	21	22	23																														B. Sandya	
11	A.Revathi	1	2	3	3	4	5	6	7	8	9	10	10	11	12	13	14	15	16	17	17	18	19	20	21	22	23	24																														Nayeem		
12	B.Nirosha	1	1	2	3	4	5	6	7	8	9	10	10	11	12	13	14	15	16	17	17	18	19	20	21	22	23	24																															A. Revathi	
13	D.Manasa	1	1	2	3	4	5	5	6	6	7	8	9	10	11	11	12	13	14	15	16	17	18	19	20	21	22	23																														B. Nirosha		
14	G.Thirupathi	1	2	3	4	5	6	6	7	8	9	10	11	11	12	13	14	15	16	17	18	18	19	20	21	22	23	24																															D. Manasa	
15	G.Sravani	1	2	3	4	5	6	7	8	8	9	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																															G. Sravani		
16	Sk.Sana	1	1	1	2	3	4	5	6	7	8	9	9	10	11	12	13	14	15	16	17	18	18	19	20	21	22	23																														Sk. Sana		
17	T.Nikitha	1	2	3	3	4	5	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																														T. Nikitha			
18	V.Uparna	1	2	3	3	4	4	5	6	7	8	8	9	10	11	11	12	13	14	15	16	17	18	19	20	21	22	23																														V. Uparna		
19	V.Akhila	1	2	3	4	5	5	6	7	7	8	9	10	11	12	13	14	15	16	17	18	18	19	20	21	22	23																														V. Akhila			
20	S.Rakesh	1	1	2	2	3	4	5	5	5	6	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22																														S. Rakesh		
21	J.Sivani	1	2	3	4	5	6	7	8	9	10	11	11	12	13	14	15	16	17	18	19	20	21	22	23	24																														J. Sivani				
22	M.Sowmaya	1	1	1	2	3	4	5	6	7	7	8	9	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23																														M. Sowmaya		
23	T.Analika	1	2	3	4	5	6	7	8	9	10	11	11	12	13	14	15	16	17	18	19	20	21	22	23	24																														T. Analika				
24	V.Divya	1	2	3	4	5	6	7	8	9	9	10	11	11	12	13	14	15	16	17	18	19	20	21	22	23																														V. Divya				
25	V.Pavani	1	2	3	4	5	6	7	7	8	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23																														Pavani				

N. Adivishnu
Course coordinator

[Signature]
Principal
Principal
G.D.C.Gambhiraopet
Dist: Rajanna Sircilla-505304

CERTIFICATE COURSE
ON
RENEWABLE ENERGY PRACTICES
ACADEMIC YEAR- 2021-2022
[FROM 01-11-2021 TO 10-12-2021]
DEPARTMENT OF PHYSICS



Valedictory photo



N. Adivisanku
Course coordinator

[Signature]
Principal
G.D.C. Gambhiraopet
Dist: Rajanna Sircilla-505304

CERTIFICATE COURSE
ON
RENEWABLE ENERGY PRACTICES
ACADEMIC YEAR- 2021-2022
[FROM 01-11-2021 TO 10-12-2021]
DEPARTMENT OF PHYSICS



Resource Person: Sri. N.Adivishnu, Lecturer in physics

Learning outcomes

After studying this course, you should be able to:

- The graduate will be able to acquire in depth knowledge in the area of Renewable energy and energy cultivation techniques.
- The graduate will attain the lateral thinking and problem solving capabilities in the area of Renewable energy cultivation techniques.
- The graduate will obtain the capabilities of critical thinking, analyzing real world problems and handling the complexities to arrive feasible and optimal solutions considering social and environmental factors.
- The graduate will be able to apply appropriate analytical techniques and tools to solve Renewable energy cultivation challenges.
- To sensitize the graduate about the impact of Renewable energy cultivation challenges in social and environmental contents and demonstrates the knowledge of and need for sustainable developments.
- The graduate will become socially responsible and follow ethical practices to contribute to the community for sustainable development of society.
- The graduate will demonstrate knowledge and understanding of Renewable energy cultivation principles and apply the same for efficient energy use.

N. Adivishnu
Course coordinator

[Signature]
Principal
Principal
G.D.C. Gambhiraopet
Dist: Rajanna Sircilla-505304



**CERTIFICATE COURSE
ON
RENEWABLE ENERGY PRACTICES
ACADEMIC YEAR- 2021-2022
[FROM 01-11-2021 TO 10-12-2021]
DEPARTMENT OF PHYSICS**

Certificate Course Summary

Name of the course : Renewable Energy Practices
Name of the course coordinator : N. AdiVishnu
Number of students attended the course : 45
No of hours of the course taken : 30
Dates of the course (from – to) : 01-11-2021 to 10-12-2022
Name of the department conducted : Physics

N. Adivishnu
Course coordinator

[Signature]
Principal
Principal
G.D.C. Gambhiraopet
Dist: Rajanna Sircilla-505304

GOVERNMENT DEGREE COLLEGE - GAMBHIRAOPET
(Affiliated to Satavahana University)

DEPARTMENT OF PHYSICS

Academic Year :2021-2022

**Students Feed Back Analysis on Certificate Course in
RENEWABLE ENERGY PRACTICES**

Name of the Lecturer: N.ADIVISHNU		Subject: PHYSICS					
Sl. No.	Questionnaire	Excellent	Very Good	Good	Average	Poor	Total
1	Syllabus	5	5				10
2	Coverage of Syllabus	6	4				10
3	Explanation of the topics	3	5	2			10
4	Teaching Methods	4	4	2			10
5	Interaction	4	5	1			10
6	Doubts Clarification	3	6	1			10
7	Teacher Presentation	5	4	1			10
8	Generating interest	5	5				10
9	Time Maintenance	6	4				10
10	Overall opinion	6	4				10
Remarks of the Principal on Certificate Course							



Principal

PRINCIPAL
GOVT. DEGREE COLLEGE
GAMBHIRAOPET-505304
RAJANNA SIRCILLA (DIST)T.S.



GOVERNMENT DEGREE COLLEGE

GAMBHIRAOPET, Dist: RajannaSircilla -T.S.



CERTIFICATE

This is to Certify that Mr/Miss.....*P. Shruithya*.....

B.A./B.Sc./B.Com.....*I*.....Year bearing the Roll No...*210770864681031*.....

has successfully Completed the Certificate Course in...*Renewable Energy Practices*.....

Organised by Department of...*Physics*.....



N. Divisankar
Head of the Department

N. Divisankar
Co-ordinator

[Signature]
Principal



GOVERNMENT DEGREE COLLEGE

GAMBHIRAOPET, Dist: RajannaSircilla -T.S.



CERTIFICATE

This is to Certify that Mr/Miss.....

B.A./B.Sc./B.Com.....Year bearing the Roll No.....

has successfully Completed the Certificate Course in.....

Organised by Department of.....



Head of the Department

Co-ordinator

Principal