Department of Physics

REPORT ON CERTIFICATE COURSE

Academic year 2021-2022

1. Name of the Course

: "Skill Enhancement of Electrical and

Electronics Appliances"

2. Department

: Physics

3. Duration

:No. of hours, 30 No. of days: 30

4. Number of Students Enrolled

: 34

5. Whether list of students enclosed : Yes

6. Brief Report

:

The course is specially designed to enhance the understanding of students about Skill enhancement of Electrical and Electronics Appliances, which is very use full in our day to day life. It will help students understand mechanisms of Electrical and Electronics Appliances, developing an understanding of different types of Electrical instruments, their uses and constructions of devices like making of regulated power supply. The course was conducted for 30 hours (2 credits) from 18.04.2022 to 25.05.2022.

7. Outcome

Around 34 students of Physical Science (MPCs and MPC) students participated in this course. The faculty from Departments of Physics participated and enlightened the students on uses and construction of various Electrical and Electronics instruments. Group Discussions and seminars and slip tests were organized and conducted to promote participatory learning. By the end of the course students will be able to understand the importance, develop the skills and construction of Electrical and Electronics Appliances.

Signature of the Principal PRINCIPAL

VIVEKANANDA GOVT. DEGREE COLLEGE Vidyanagar, Hyderabad-44

Notice

The Department of Physics is offering a certificate course in " Skill enhancement of Electrical and electronics appliances" for all B.Sc I and II year students of physics. Students are here by informed to register for the courses on or before 15.03.2022 at the department of physics.

Duration of the course: 30 hours (2 credits)

No of seats

1. July - 5.
3. Surley .

:30

Note: Seat will be filled on first come first serve basis.

PRINCIPAL

VIVEKANANDA GOVT. DEGREE COLLEGE

Vidyanagar, Hyderabad-44

REGISTRATION FORM

Affix recent passport size picture

	1. NAME:	
	2. YEAR:	
	3. GROUP;	
	4. H.T NO.:	
	5. QUALIFICATION:	
	6. ORGANIZATION:	
	7 .DATE OF BIRTH: (dd/mm/yy)	
	8. ADDRESS:	
	9. CONTACT NO:	
	10. E-MAIL:	
_	11. OTHERS (if any)	

Signature of the Candidate

July Survey

G. PRINCIPAL DEGREE COLLEGE Scanned by CamScanner

VIVEKANANDA GOVERNMENT DEGREE COLLEGE VIDYANAGAR HYDERABAD - 44 DEPARTMENT OF PHYSICS

CERTIFICATE COURSE

2021-2022 (CBCS)

SKILL ENHANCEMENT OF ELECTRICAL AND ELECTRONICS APPLIANCES

[30 HOURS]

[2 CREDITS]

The aim of this course is

- 1) To enable the students to familiar and experience with various Electrical and Electronics appliances .
- 2) To enable the students to do minor repairs of the instruments.
- 3) To know the basic mechanics of various Electrical and Electronics appliances

UNIT I

ELECTRICAL INSTRUMENTS:

Resistance - capacitance - inductance and its units - Transformers - Electrical charge - current - potential - units and measuring meters - Ohm's law - Galvanometer, ammeter, voltmeter and multimeter. Electrical energy - power - watt - kWh - consumption of electrical power.

ELECTRICAL AND ELECTRONIC SKILL:

Use of Multimeter . soldering of electrical circuits having discrete components (R,L,C,diode) and ICs on PCB . Operation of oscilloscope . Making regulated Power supply

UNIT II

ELECTRICAL APPLIANCES

AC and Dc - Single phase and three phase connections - RMS and peak values, House wiring - Star and delta connection - overloading - earthing - short circuiting - Fuses - colour code for insulation wires - Inverter - UPS - generator and motor - circuit breaker. Electrical switches.

ELECTRONICS APPLIANCES

Introduction to Semiconductor diode - transistor - LED - LCD - Photo diode - Photo transistor - their uses. Diode rectifiers - half wave and full wave - regulated power supply TV receivers (qualitative study only) - TV antenna's - Dish antenna

PRINCIPAL
PRINCIPAL
VIVEKANANDA GOVT. DEGREE ODLIGO
VIONENTA GOVT. Hyderabad. 44
Vidyanagar, Hyderabad. 44

Books for Study:

- 1. A text book in Electrical Technology BL Theraja, S Chand & Co.
- 2. A text book of Electrical technology A K Theraja
- 3. Performance and design of Ac machines M G Say ELBS Edn.
- 4. Semi conductor physics and opto electronics by P K Palanichamy
- 5. Basic Electronics B L Theraja S Chand & Co.
- 6. Principles of Communication Engineering Arokh Singh and A K Chhabra -

S Chand & Co.

MINUTES OF THE MEETING

The following resolutions are taken in the meeting:-

- 1) The department of physics is established in the year 2018-2019.
- 2) After discussion of syllabus and examination pattern the BOS PHYSICS OU has approved the syllabus and scheme of examination of certificate course to be introduced in Vivekananda government degree college, Vidyanagar, Hyderabad.
- 3) It is resolved to conduct the examination internally as per approved pattern and the certificates may be given to passed out students.

Members:

1) Dr. J. Chinna Babu

Assistant Professor of Physics VGDC, Vidyanagar, Hyderabad. Prof. D.Ravinder

BOS IN PHYSICS OSMANIA UNIVERSITY **HYDERABAD**

2) Ms. B. Vijaya Nirmala

Associate Professor of Physics VGDC, Vidyanagar, Hyderabad.

8. lli 1-7

3) Dr.S. Laxmi Srinivas Rao

Associate Professor of Physics VGDC, Vidyanagar, Hyderabad

> VIVEKANANDA GOVT. DEGREE COLLEGE Vidyanagar, Hyderabad-44

VIVEKANANDA GOVERNMENT DEGREE COLLEGE VIDYANAGAR' HYDERABAD - 44 DEPARTMENT OF PHYSICS

CERTIFICATE COURSE 2021-2022 (CBCS)

SKILL ENHANCEMENT OF ELECTRICAL AND ELECTRONICS APPLIANCES

[30 HOURS]

[2 CREDITS]

SCHEME OF EVALUATION

TIME DURATION = 1 ½ HOURS

MAXIMUM MARKS = 50

- ➤ Assignment = 10 marks
- \triangleright Short answer type question (8 x 5 = 40 marks)

Answer any Eight questions, each question carries FIVE marks

UNIT I

- 1)
- 2)
- 3)
- 4)
- 5) 6)

- UNIT II 1)
- 2)
- 3)
- 4)
- 5)

6)

July.

8. U.1 - 2.

VIVEKANANDA GOVERNMENT DEGREE COLLEGE

Vidyanagar, Hyderabad - 500 044. Telangana.

Accredited by NAAC with B Grade

CERTIFICATE

This is to certify that Mr./Ms. B. Haj Sumar Vanna Roll Number 124, 2145800 Sf

B.Sc. MPC/MPS/MPCS, 1/ 11/ 111 Year has Successfully Completed the Certificate Course in Skill

Enhancement of Electrical and Electronic applliances held from 18/4/2022 to 25/4/Jod2

Organised by The Department of Physics for the academic year_

In-charge, Dept. Of Physics

Principal Participal Principal Princ

Scanned by CamScanner

PH	YSICS DEPARTMENT
\sim	
	in the succession of
	in the second se
	KILL ENHANCEMENT
1	in the state of the state of about the
OF ELEC	CTRICAL AND ELECTRONICS
, A. S	and the state of t
	APPLIANCES
A =	21 - 2022 Manual 11

		12	*			
8 –	SiNO	L. Roll No.	Name	18/4/2022	19/4/22	20/4/22
The state of the s	1		Kollati Sai Kiran	(b)	QJai,	Q.Sei
8 *	2	124421468084	Thyavola Ulray	Trus	Tix	Try
S _	3.	124421468058	Nenavorth. Horathi	Hay	Acres	Hey
*	u·	124421 4680 33	J. Braneth claver	eline	duy 1	chul
9	5.	124421468081	δυμαίμα Begum	appenna	Sumaily	Sumaiya
<u> </u>	6-	124421468057	Nagilla · Samertha	N. Samatha	10.5 amatha	N-Sumatha N
% —	7.	124421468075	S. Henalatha	S. Hemalaties.	Hemalatha	Hemalatta,
) P	8.	124421468082		To Sarasusti	1- Salasudy	T-Suraloction 7
Ø.—	9.	BUULIUG ROPA	Misurya sa: Kiyan	Sedecif	Colly,	Esking.
****	(0)	124421468002	Allshelle Paghy	-A. Poghi	A Raghi	A Regh -
<u> </u>		124421468043	k. Rani	k. Ran	KiRani	k.Rani
NX.	[2]	124421468023	G. Paly	E. Paje	E. Raju	E. Raise
	′	124421468029	G. Jayolazmi	G. Jayalarm;	G. Doly	Gr. Jour
2	4)	124421468052	M.Manasa	marasa.	Morara	Anarelog !
2000	2)	124421468054	M. Ashwini	Ashy	Ashel	Ashy
1 3	>	124421468041	K. Muni kuras goval	K. Muni kuway		K. Muni kumer
		24421466089	V. Pavan Cumous	V. Pavan Rumas	Le Doven Kum	4 ponas /cumas
/XX	8)	124421468032	J. Keertlü	J. Koesthu	15 Keerthi	J. Keethi
2	D	124421468090	V. Bhagya	V. Bhagya	V. Bhagy a	V. Bhagya
5 20	1	24421468073	P. Nothin Kumar	(P)		(Doct)
21		24421468074	P. Pavan kumar	Paristro	Pouralenne	Pomentand
22		24421468028	Q. Manisha	G. Manisha	B. Moniste	Gimansla
23	+1	24421468040	t. Maneesha	k. Maneesha	b. Clanes	
<u> 24.</u>	1 , 0	2442-4680/6	B. reereth	Privereth	Drewen	
25.	12	4421468066	P. Naga Jyothi	P-Newl	P. Nul	P-Nrul
<u> 36.</u>	10	1421468049	M. Snehith	Swhoth	Snewth	Schott
27.	12	4421468078	5. Vulsatesh	Tiblan	Siday	Siltay
28	12	4421468079	Skryby	1	,	, , , , , , , , , , , , , , , , , , , ,
29	12.	81083MCM	C. Habi Roma Kolilia	skmyby	S.K. Myhu	she my by
30		4421468076	S. Nandy		Q	0
31.		adsinishn	ch. Someth	Hand	Hours	Horas
32.			B. Path a	ch. somes	_	John som
33,		4421468013	B. Rejkumay vwima.	Post	Pail	Paris
7.21	-		B. Ouf	B. Out	B. Que	12.00
341	12	4421468045	ROSTY		4	
				fary,	Rasy	Rath
	Marie Salar A			1	1	

20/4/22	21/4/22	22/4/22	23/4/22	25/4/22	28/4/22	27/4/22
Que	DAOI		Qui	Dai	28/4/22 Dai	المعركي
Try	1.4	Tiy	- EM	T. W	Tivo	Tiv
Hey	Hey			Lug	alley	Hey
duf	chup	chy	chie	duf	chief	duy
Sumaiya	Sumaiya	Surraiya	Sumaiya	Sumalya	Sum=942	Sumaiya
N. Samatha		N. samoutha	N.samatha	N.samatha	Nsamatha	N-samatha.
Hemalatta		Henalactic			Hanalatta	Hemalatha
	i To SalaSwath			To Saeasiti		
adring.		Delay			Edin	Jesting
-A. Reigh	-A-Roighy	1		-A. Pagne	Ao Raghel	-A. Paghu.
k.Rani	K. Rani	K. Rani	K. Rani	K. Rani	K. Rani	K.Rani
	€ Rafes			E Paly		E. Rojes
Gr. Jour	B .			Gr. Fdy	G. Fay	G. For
- Asarla		Manera	N.		marason	maraso.
Achif	_	1	Ash	1 .	1	Achif
	ur K. Moni kumar	1	1	1	K.Mni kumar	K. Mini kumar.
1	u cf Penan Rumas				V. Javan Eumac	
J. Keethi		1	51	1	J'keestlo'	J-Keerolo'
V. Bhagy	a V.Bhagya	V. Bhagy	a V.Bhagya	V.Bhagya	1 Bhogga	V. Bragyon
Powerland	- Pourauland	Powerly	Pomere	Parekury	Parking	Pourhung
G. manishe	1		G. Manister	G. non isla	G. nonista	G. nonisha
	a ki manesha		g .			1
Direrelly			. 1	1) Direcreth	1. moneyha	17. reerest
P-Nrel	P-Neel	P- Nul	P-Nul	P-Newl	P-Nul	P. Nort
Siehett	Snehitt	Suchth	Suelett	Sulit	Gelite	Shelit
sittay	Siffan	Siffan	Sitran	1	s; yay	Sparl
she my bu		SR Mybu	N .	2 See My Du	Se Myson	Skryby
- Dry	Ri	Dy	(A)	Du	Bly	Day.
Horal	Hoult	abund	Mans.	1 Landy	1 Smoli	Hand
Mohi som	In Someth	Jr. gome	M ch. sey	Thisome	of thisomen	ch gowan
- Japa	Day .	Buil	2 m/p	delia	Lay.	all the same of th
17. Quf	B. mil	REL	Phey	FOU	F. Q	REST
Ravy	Rary	Rum	Rasy	Naon	KATY	Ruel
	,		1			