



SPVVS'S

**G.P.PORWAL ARTS, COMMERCE &  
V.V.SALIMATH SCIENCE COLLEGE,  
SINDGI**



**BROCHURE**



# DEPARTMENT OF PHYSICS

**CERTIFICATE COURSE**

**2019-20**

**Title : PREPARATION OF POWER SUPPLY**

**DATE:31/07/2019 TO 19/10/2019**

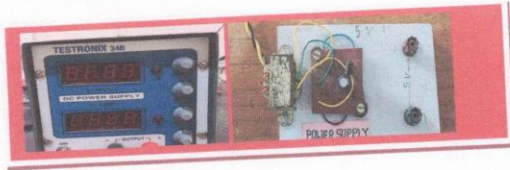
**Inauguration  
31/07/2019  
Time : 10:30 AM**

**Head**  
Dept. of Physics  
G.P.P. Arts, Commerce & V.V.S.Science  
College, SINDAGI - 586 128

**Coordinator IQAC**  
G. P. PORWAL ARTS, COM &  
V. V. SALIMATH Sc. College,  
SINDGI-586128.

**Valedictory  
19/10/2019  
Time : 10:30 AM**

**Principal,**  
G. P. Porwal Arts, Commerce &  
V. V. Salimath Sc. College,  
SINDGI-586128. College Co.



G.P.PORWAL ARTS, COMMERCE AND  
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SINDGI - 586 128

**DEPARTMENT OF PHYSICS**

**CERTIFICATE COURSE DETAILS**

**INSTRUCTIONAL**

NAME OF THE COURSE

PREPARATION OF POWER SUPPLY

OFFERED BY

DEPARTMENT OF PHYSICS

COURSE CODE

PHYPS.2019-20

COURSE COORDINATOR

SHRI M.H.LONI  
HOD, PHYSICS

30 HOURS (This course is of Thirty Hrs duration which include Theory and Practical)

**ABOUT COLLEGE**

G.P.Porwal Arts, Commerce & V.V.Salimath Science College is the first science college in Sindagi Taluk of Vijayapura district which provides education in science stream at U.G. level to the educationally, economically and socially backward students of this Taluk. Since 1988, many students are graduated with B.Sc in Physics is one of the optional subject.

IQAC of G.P.Porwal Arts, Commerce & V.V.Salimath Science College, in its meeting decided to introduce few self financed certificate courses from the academic sessions 2019-20. The continuation of these courses will depend on interest and participation of students

**ELIGIBILITY**

All students belonging to V semester are eligible to enroll for the course

*M.H.Loni*  
**Head**  
**Dept. of Physics**  
G.P.P. Arts, Commerce & V.V.S.Science College, SINDAGI - 586 128.

*M.H.Loni*  
**Coordinator IQAC**  
G. P. PORWAL ARTS, COM &  
V. SALIMATH Sc. College,  
SINDGI-586128.

*M.H.Loni*  
**Principal,**  
G. P. Porwal Arts, Comm &  
V. V. Salimath Sc. College  
SINDGI-586128. College Code: 5234

## **OBJECTIVES**

Every home in the modern world is equipped with Home Appliances which work with the help of Electrical/Electronic power supplies. Some time a casual faults in the equipments e.g. Mixer Grinder, Refrigerator, TV sets, Geysers, Air Conditioners. etc. may be due to loose contact in the connections. When such kind of difficulty arises at homes the people become panic. In such circumstances the students who have completed the certificate course “ PREPARATION OF POWER SUPPLY “ can be able to

- Find out minor faults in electronic equipments
- Repair the Appliances
- Understand basic knowledge about construction of Power supply

The students can Establish a small scale industry

## **BENEFITS OF PREPARATION OF POWER SUPPLY**

1. Safety when power misbehaves

2. Bridge the connectivity gap
3. Protecting reputations
4. Protect the public and other businesses
5. Choose from multiple design

### COURSE OUTCOMES


After completion of course the student is able to


- Design the desired voltage power supply
- Find out the fault in any other power supplies
- To repair minor faults
- Soldering
- Minor carpentry work
- To repair minor household electric wiring faults etc
- Know Short circuit reasons
- Aware of Electric Shocks


### BOARD OF STUDIES

- 1) Prof. M.H.Loni (HOD)
- 2) Dr.B.G.Math
- 3) Miss.J.N.Handral
- 4) Mr.S.D.Motankar
- 5) Mr.M.U.Madagonda
- 6) Mr.Pradeep Katti, C.M.Managuli college, Sindagi

THANK YOU

  
**Head**  
**Dept. of Physics**  
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**Coordinator IQA**  
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Department of Physics

To,  
The Coordinator,  
IQAC

Date: 18/07/2019

Academic Year: 2019-20


**Sub:** Request for Permission to conduct /Organize/ Introduce .... Bridge Course/Special  
Lecture/  
Seminar/ Workshop/ Field Visit/Certificate Course


**Sir/Madam,**


With reference to subject cited above I would like to bring to your kind information that; our Department is going to conduct /Organize/ Introduce ....Bridge Course/Special Lecture/ Seminar/ Workshop/ Field Visit/ Certificate Course for BA/B.Com/ B.Sc. I/II/III/IV/V and VI semester students. Kindly permit us the same for the welfare of our students.

Hoping that the authority will do the needful and oblige  
Thanking you

Place; Sindgi  
Date:

  
Head of Department,  
Dept. of Physics  
G.P.P. Arts, Commerce & V.V.S. Science  
College, SINDGI - 586 128.

  
**Coordinator IQAC**  
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SINDGI-586128 DIST: Bijapur

---

Department of Physics

Date: 19/07/2019

To,  
Head,  
Department of *physics*

Academic Year:

**Sub:** Permission to conduct /Organize/ Introduce ....Bridge Course/Special Lecture/  
Seminar/ Workshop/ Field Visit/ Certificate Course ✓  
**Ref:** Your letter dated: *18/07/2019*


**Sir/Madam,**

With reference to subject cited above I herewith permit you to conduct  
/Organize/ Introduce ....Bridge Course/Special Lecture/ Seminar/ Workshop/ Field Visit/  
Certificate Course for BA/B.Com/ B.Sc. I/II/III/IV/V and VI semester students  
Thanking you

Place; Sindgi

Date:

**Coordinator IQAC**  
Coordinator,  
G. P. PORWAL ARTS, COM &  
IQAC  
V. V. SALIMATH Sc. College,  
SINDGI-586128.

  
**Head**  
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AND BHASKARACHARYA-II PG CENTRE, SINDGI-586128DIST: Bijapur

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E-mail: [gppprincipal@gmail.com](mailto:gppprincipal@gmail.com) Web: [www.gppcollegesindgi.org](http://www.gppcollegesindgi.org) Ph:08488-221244

Date: 20/7/2019

Department of Physics

NOTICE

It is hereby informed to all the students of BSc V semester that Certificate course on "Preparation of Power supply" will be started in our college from 1<sup>st</sup> Aug 2019. Hence interested students may apply on or before 25-07-2019

Contact:


Prof.Miss Jyoti N Handral

Prof.Sagar D Motankar

Prof.Manjunath U Madagonda

  
Head  
Prof. M. H. Koni  
HOD  
G.P.Porwal Arts, Commerce & V.V.S. Science  
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Department of Physics

Certificate course

➤ Preparation of Power supply Academic Year 2019-20

Syllabus:- 30 hrs

✓ **Capacitor, Resistor, Transformer**

**Capacitor:-** Color code, types of capacitors, tolerance, series and parallel connection of capacitors, voltage rating of capacitors, **Resistors:-** Carbon resistors, wire wind resistors, metal film resistors, color code, tolerance, series and parallel connection of resistors, ohms law, wattage of resistors, **Inductors :-** Air core inductors and iron core inductors, **Transformer:-** term ratio, types i.e. step up and step down transformer, current rating, mutual inductance. regulator using transistor **15 hrs**

✓ **Diode, Rectifier, Filters, Regulator ( Zener diode, 3 pin regulator)**


Semiconductors, intrinsic and extrinsic semiconductors, P type and n type semiconductors, junction diode, transistor, biasing(forward and backward), zener diode, rectifier, half wave rectifier, full wave rectifier using diode, static rectifier, filters, condenser filter, L- section filter, Pi- section filter, breeder resistance, **Testing of power supply:-** open circuit voltage, current rating, output resistance, 3 pin regulator **15 hrs**

**Practicals: 6 hrs**

- ✓ Soldering, Drilling, Terminal fitting
- ✓ Workshop, Preparation of PCB

**Board of Syllabus committee**

- 1) Prof. M.H.Loni (HOD)
- 2) Dr.B.G.Math
- 3) Miss.J.N.Handral
- 4) Mr.M.U.Madagonda
- 5) Mr.Pradeep Katti C.M.Managuli college, Sindagi

  
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**Head**  
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Ph:08488-221244

Certificate Course-2019-20

“ Preparation of Power supply ”

➤ Enrolment of the students :-


Sl.No	Register No.	Name of the students	Class	Sign
1	S1724201	Afreen H Masabinal	B.Sc V sem	
2	S1724203	Akash S Hipparagi	B.Sc V sem	
3	S1724224	Atiya L Gundagi	B.Sc V sem	
4	S1724241	Deepa B Chavan	B.Sc V sem	DBC
5	S1724249	Heenakousar S Jaligheid	B.Sc V sem	
6	S1724254	Kalavati	B.Sc V sem	KGF
7	S1724261	Laxmi S Pawadi	B.Sc V sem	
8	S1724281	Ningappa Hirekurabar	B.Sc V sem	
9	S1724291	Pooja S Hipparagi	B.Sc V sem	
10	S1724308	Rashmi B Biradar	B.Sc V sem	RBB
11	S1724318	Sagar S Simager	B.Sc V sem	S.S.S
12	S1724319	Suma S Benakanalli	B.Sc V sem	
13	S1724322	Sanjeevkumar Paragonda	B.Sc V sem	S.P
14	S1724323	Santrupti Kalburgi	B.Sc V sem	S.B.K
15	S1724335	Shruti Chigari	B.Sc V sem	SSC

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Head  
Dept. of Physics  
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College, SINDGI - 586 128.


16	S1724339	Somaraygouda Patil	B.Sc v sem	
17	S1724340	Soumya Nigadi	B.Sc v sem	SAN
18	S1724342	Sujnyani I chourad	B.Sc v sem	
19	S1724344	Suneel A Telle	B.Sc v sem	
20	S1724295	Pooja Yadrami	B.Sc v sem	


  
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16	S1724339	Somaraygouda Patil	B.Sc v sem
17	S1724340	Soumya Nigadi	B.Sc v sem
18	S1724342	Sujnyani I chourad	B.Sc v sem
19	S1724344	Suneel A Telle	B.Sc v sem
20	S1724295	Pooja Yadrami	B.Sc v sem

  
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Date: 25/7/2019


Department of Physics

: Certificate course :


(only for Fifth semester)

**THEORY & PRACTICAL TIME TABLE -2019-20**

Days	TIME		Name of the faculty
	THEORY	PRACTICAL	
Monday	3PM to 4PM		1) Prof. M.H.Loni (HOD) 2) Dr.B.G.Math 3) Miss.J.N.Handral 4) Mr.S.D.Motankar 5) manjunath madagonda
Tuesday	3PM to 4PM		
Wednesday	3PM to 4PM		
Thursday	3PM to 4PM		
After completion of all theory		3PM TO 5PM 3PM TO 5PM	

  
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Date: 10/10/2019


Department of Physics  
Certificate Course-2019-20  
"Preparation of Power supply"

NOTICE

It is hereby informed to all the students of B.Sc V semester who have participated in Certificate course please attend Practical and Theory exam as per following time table.

Date	Day	Time		Marks
15/10/2019	Tuesday	3:00pm to 4:00pm	Theory	50
17/10/2019	Thursday	3:00pm to 5:00pm	Practical	50

  
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Date: 15/10/2019

## Department of Physics

Certificate Course-2019-2020

“Preparation of Power supply”

(Only for Fifth semester)

Time: 2 Hrs


Question Paper 2019-20


Max Marks: 50


Q.No: 1 Answer any five of the following questions.

10 X 5 = 50

- 1) What is resistor? Explain its color code And series and parallel combination of resistors?
- 2) What is semiconductor? Explain its types? Explain biasing of junction diode?
- 3) What is capacitor? Describe its working And explain different types of capacitor?
- 4) What is rectifier and Explain full wave rectifier using diode?
- 5) a) What is transistor and Zener diode? Explain Working of any one?  
b) What is filter? Explain L- section and  $\pi$  – section filters?

  
**Coordinator IQAC**  
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V. V. SALIMATH Sc. College,  
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**Principal,**  
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Department of Physics

Certificate Course-2019-20

"Preparation of Power supply"

Statement Of Marks -2019-20


Sl.No	Register No.	Name of the students	Class	Theory 50 M	Practical 50	Total 100 M	Remark
1	S1724201	Afreen H Masabinal	B.Sc V sem	43	47	90	Pass
2	S1724203	Akash S Hipparagi	B.Sc V sem	42	46	88	Pass
3	S1724224	Atiya L Gundagi	B.Sc V sem	43	45	88	Pass
4	S1724241	Deepa B Chavan	B.Sc V sem	42	45	87	Pass
5	S1724249	Heenakousar S Jaligheid	B.Sc V sem	44	44	88	Pass
6	S1724254	Kalavati	B.Sc V sem	40	45	85	Pass
7	S1724261	Laxmi S Pawadi	B.Sc V sem	44	45	89	Pass
8	S1724281	Ningappa Hirekurabar	B.Sc V sem	42	46	88	Pass
9	S1724291	Pooja S Hipparagi	B.Sc V sem	44	47	91	Pass
10	S1724308	Rashmi B Biradar	B.Sc V sem	44	46	90	Pass
11	S1724318	Sagar S Simager	B.Sc V sem	45	40	85	Pass
12	S1724319	Suma S Benakanalli	B.Sc V sem	42	46	88	Pass
13	S1724322	Sanjeevkumar Paragonda	B.Sc V sem	43	47	90	Pass
14	S1724323	Santrupti Kalburgi	B.Sc V sem	43	46	89	Pass

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Dept. of Phy  
G.P.P. Arts, Commerce & I  
College, SINDGI

15	S1724335	Shruti Chigari	B.Sc V sem	41	45	86	Pass
16	S1724339	Somaraygouda Patil	B.Sc v sem	43	45	88	Pass
17	S1724340	Soumya Nigadi	B.Sc v sem	42	46	88	Pass
18	S1724342	Sujnyani I chourad	B.Sc v sem	40	40	80	Pass
19	S1724344	Suneel A Telle	B.Sc v sem	44	46	90	Pass
20	S1724295	Pooja Yadrami	B.Sc v sem	41	46	87	Pass

  
 Head  
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Date:

Department of Physics


CERTIFICATE COURSE OUTCOMES

After completion of course the student is able to

- Design the desired voltage power supply
- Find out the fault in any other power supplies
- To repair minor faults
- Soldering
- Minor carpentry work
- To repair minor household electric wiring faults etc
- Know Short circuit reasons
- Aware of Electric Shock
- Basic things about Electric power production

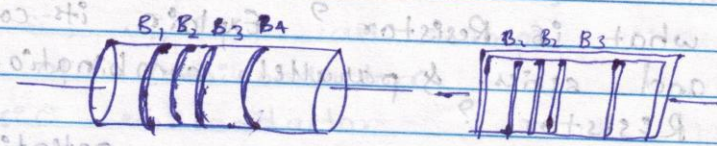
  
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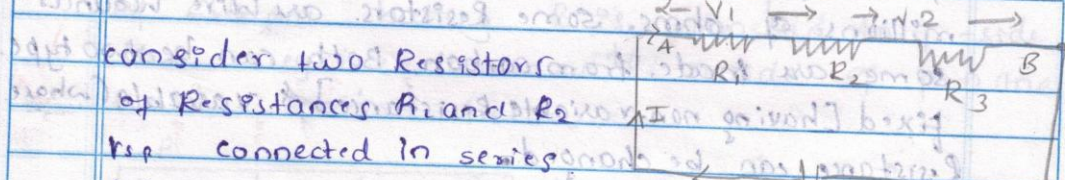
To get total Resistance. The fourth band given tolerance, known as. Limit accuracy, or permitted variation in value of Resistance. Therefore  $(ab \times 10^c \pm d) \Omega$



### Combination of series & parallel Resistor

#### Series combination

Two or more Resistors are said to be connected in series if they are connected one after the other such that same current flows through all the Resistors when some potential difference is applied across the combination.



Let  $I$  be current flowing through each Resistor and  $V$  be potential difference across series combination. If  $V_1$  and  $V_2$  be potential difference across the Resistors  $R_1$  &  $R_2$  respectively.

$$V = V_1 + V_2$$

$$V = IR_1 + IR_2$$

$$V = I(R_1 + R_2)$$

Let  $R_s$  be effective equivalent Resistance of the series combination then

$$V = IR_s$$

$$IR_s = I(R_1 + R_2)$$

$$R_s = R_1 + R_2$$

~~n~~ Resistor connected in series.

## parallel combination

two or more Resistor are

said to be connected in parallel if one end of a

Resistor, connected one end of

other Resistor, and second end of 1<sup>st</sup> Resistor is connected to 2<sup>nd</sup> second other Resistor such that potential difference across each Resistor is equal to opposite applied Potential difference across the combination

consider two Resistor  $R_1$  &  $R_2$  respectively connected parallel

Let  $V$  be potential difference across Resistor Current  $I$ , Let current  $I_1$  &  $I_2$  flow through  $R_1$  &  $R_2$

$$I = I_1 + I_2$$

$$I_1 = V/R_1 \quad I_2 = V/R_2 \quad I_3 = V/R_3$$

$$\therefore I = \frac{V}{R_1} + \frac{V}{R_2} + \frac{V}{R_3}$$

Then  $n$  Resistors connected

$R_p$  is effective Resistance of the parallel combination

$$I = V/R_p$$

$$V/R_p = V/R_1 + V/R_2 + V/R_3$$

$$\frac{1}{R_p} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$

$$R_p = \frac{R_1 R_2 R_3}{R_1 R_2 + R_2 R_3 + R_1 R_3}$$

Head  
Dept. of Physics  
G.P.P. Arts, Commerce & V.V.S. Science  
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2) what is semiconductor? Explain types

Explain biasing of junction diode?

Semiconductor are those whose electrical properties lie between those of conductors & insulators

Ge, Si, & Se are examples

Types of semiconductors

1. Intrinsic semiconductor

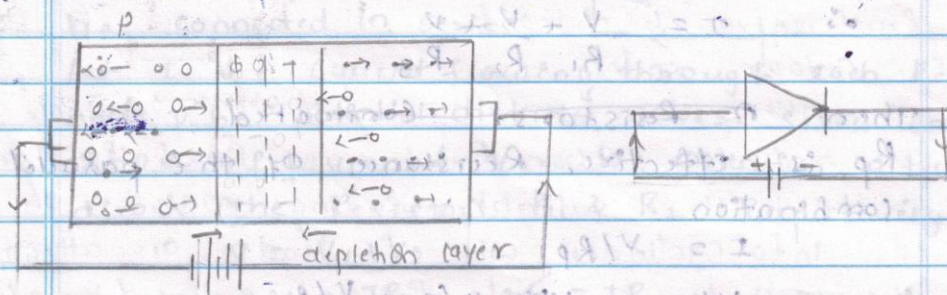
2. Extrinsic semiconductor

but Extrinsic semiconductor may be further be classified as

a. n-type extrinsic semiconductor

b. p-type extrinsic semiconductor

Forward Biasing  $\rightarrow$  A p-n junction is said to be forward biased if positive terminal of external battery B is connected to p-side & the negative terminal to n-side of p-n junction. Show below.



In forward biasing forward bias voltage oppose the potential barrier  $V_B$ , due to it potential barrier is considerably reduced. The depletion region becomes thin. The majority carriers - electrons in n-region are repelled by negative potential due to battery B and move towards p-n junction. Similarly

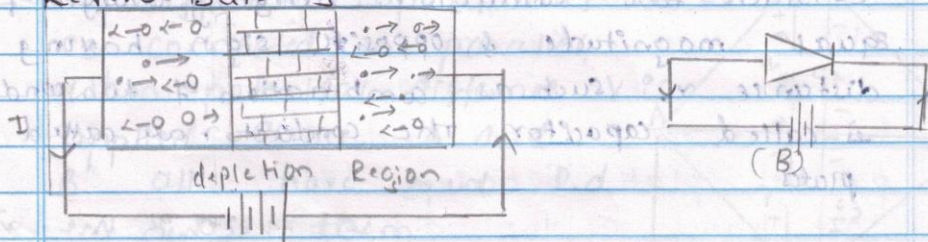
The majority carriers hole in p-region are repelled by positive potential towards

Junction

The positive potential of p-region attracts electrons from n-region & negative potential of n-region attracts hole from p-region

Since small increase in forward voltage show large increase in forward current. Hence Resistance of p-n junctions is low glow of current when forward biased.

### Reverse Biasing



A P-N junction is said to be Reverse biased if the positive terminal of the external battery B is connected to n-side the negative type, to p-side of P-N junction as show above fig.

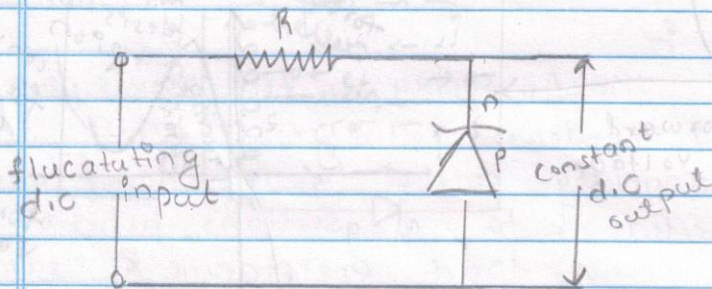
The circuit diagram for the reverse biasing of P-N junctions. In Reverse biasing reverse bias voltage supports the potential barrier  $V_B$ . Now, now majority carrier, pulled away from Junction & depletion Region become thick. There is no conduction across junction due to majority carrier. However few minority carriers (hole in n-region, & electron in p-region) of P-n junction diode

across junction after being accelerated by high Reverse bias voltage. They constitute current

in opposite direction. This is called Reverse current or leakage current.

The zener diode providing a constant voltage supply. This use Zener diode is based on fact that Reverse breaks down. Region a very small change in current of Voltage across Zener diode produces, a very large change in current through circuit. If Voltage is increased beyond, zener diode.

Resistor of Resistance of zener diode drops considerably. Consider Resistor  $R$  is called dropping Resistor connected fluctuating D.C supply say a Rectifier such that zener diode is Reverse biased, whenever voltage across diode tends to increase, current through diode rises to proportional & causes sufficient increase in Result, output voltage, flows back to the normal values.



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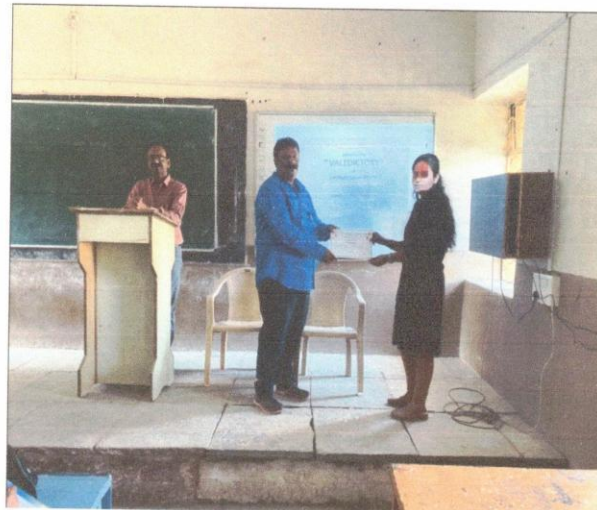
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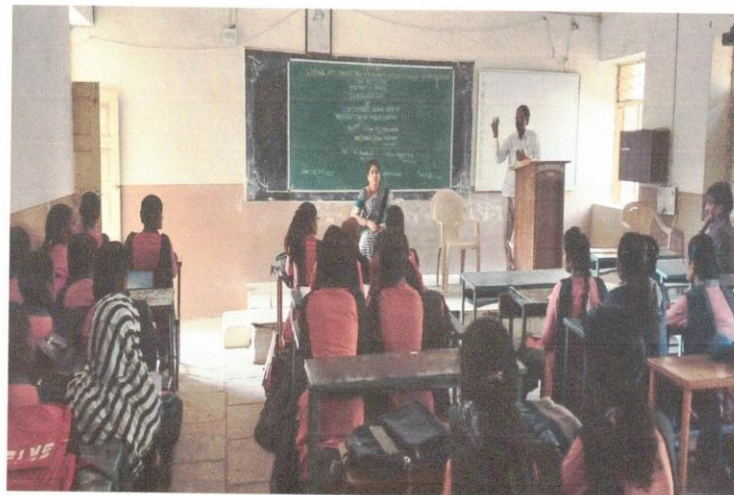
  
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SL NO	Regd No.	StudentName	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20
1	S1724201	Afreen H Masabinal	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen
2	S1724203	Akash S Hipparagi	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash
3	S1724224	Atiya L Gundagi	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya
4	S1724241	Deepa B Chavan	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa
5	S1724249	Heenakousar S Jaligidad	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar
6	S1724254	Kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati
7	S1724261	Laxmi S Pawadi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi
8	S1724281	Ningappa Hirekurabar	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa
9	S1724291	Pooja S Hipparagi	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja
10	S1724308	Rashmi B Biradar	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi
11	S1724318	Sagar S Simager	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar
12	S1724319	Suma S Benakanalli	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma
13	S1724322	Sanjeevkumar Paragonda	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar
14	S1724323	Santrupti Kalburgi	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti
15	S1724335	Shruti Chigari	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti
16	S1724339	Somaraygouda Patil	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda
17	S1724340	Soumya Nigadi	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya
18	S1724342	Sujnyani I chourad	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani
19	S1724344	Suneel A Telle	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel
20	S1724295	Pooja Yadrami	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja

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SUBJECT : Physics			B.S.C. V SEMESTER 2019-20																			
SL NO	Regd No.	StudentName	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	S1724201	Afreen H Masabinal	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen	afreen
2	S1724203	Akash S Hipparagi	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash	akash
3	S1724224	Atiya L Gundagi	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya	atiya
4	S1724241	Deepa B Chavan	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa	deepa
5	S1724249	Heenakousar S Jaligidad	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar	heenakousar
6	S1724254	Kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati	kalavati
7	S1724261	Laxmi S Pawadi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi	laxmi
8	S1724281	Ningappa Hirekurabar	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa	ningappa
9	S1724291	Pooja S Hipparagi	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja
10	S1724308	Rashmi B Biradar	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi	rashmi
11	S1724318	Sagar S Simager	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar	sagar
12	S1724319	Suma S Benakanalli	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma	suma
13	S1724322	Sanjeevkumar Paragonda	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar	sanjeevkumar
14	S1724323	Santrupti Kalburgi	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti	santrupti
15	S1724335	Shruti Chigari	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti	shruti
16	S1724339	Somaraygouda Patil	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda	somaraygouda
17	S1724340	Soumya Nigadi	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya	soumya
18	S1724342	Sujnyani I chourad	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani	sujnyani
19	S1724344	Suneel A Telle	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel	suneel
20	S1724295	Pooja Yadrami	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja	pooja

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This is to certify that Kumar/ Kumari.....

of B.Sc. has successfully completed 30 Hrs Certificate Course in "PREPARATION OF POWER SUPPLY" during the year 2019-20

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