

Department of Physics & Electronics

## VALUE ADDED COURSE ON REGULATED POWER SUPPLY 2022-23

(For B.Sc Physics & Electronics)

#### **Department of Physics & Electronics**

#### VALUE ADDED COURSE

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Department of Physics S.B.Arts & K.C.P.Science College ""-vapur-586103.

IQAC, Co-o: dinator S.B.Arts & K.C.P.Science College,

Vijayapur,

Principal
Principal,
S.B.Arts & K.G.P. Science College,
VIJAYAPUR.

## B.L.D.E. Association's S.B. ARTS AND K.C.P. SCIENCE COLLEGE, VIJAYAPUR Department of Physics & Electronics

Value added Course for B.Sc Physics & Electronics

Course Title: Regulated Power Supply

Course Code:SBKCP PHY01

#### AIM

To ensure excellent standards that would secure them international acclimation and leadership in tremendous challenging world.

To developing the overall personality of its students by making them not only excellent professionals but also good individuals with understanding and regard for human values.

#### **OBJECTIVES:**

To provide additional learners-centric graded skill oriented technical training with primary objectives of improving the employability skill.

To provide students an understanding of expectations of industry.

To provide an opportunity to develop inter-disciplinary skills.

To identify and develop the talents of students community in both curricular and extra-curricular areas.

#### VISION:

To be a centre of excellence through the process of self evaluation and continual renewal in all our endeavours, namely, learning, teaching, research, consultancy and other related services.

#### MISSION:

We strive towards equipping young people with value based holistic education to provide them a participative and growth oriented ambience.

#### I. SYLLABUS

### Total hours allotted: 30 hours

Unit I: Basic elements (Resistor, Inductor & Capacitor) & its working. Colour coding of resistor & current rating of resistance. Transformers its principal working, types of transformer current rating of trasformer. Multimeter & testing of components using multimeter

4 hours

Unit II: Instantaneous current time period, frequency, wavelength, peak or maximum amplitude, peak to peak value, effective current or RMS value of current & voltage, the average current & Voltage, power in ac ckt. Phase & phase difference. Inductive reactance & capacitive reactance.

4 hours

Unit III: Working of half wave, full wave & bridge rectifier. Rectifier with capacitor filter (shunt capacitor filter), with series inductor filter, LC filter &  $\pi$ -section filter. Ripple factor, efficiency & voltage regulation for each filter.

6 hours

Unit IV: Zener diode: Its working & characteristics, zener diode is used as regulated power supply. Design consideration with one example. Concept of IC, Three pin IC regulator block diagram, 78xx series & 79xx series. Dual power supply.

6 hours

Practicals: Five practical's of two hour duration

10 hours

#### List of experiments

- 1. Half wave, full wave & bridge rectifier
- 2. Rectifier with capacitor filter (shunt capacitor filter)
- 3. Rectifier with LC filter &  $\pi$ -section filter.
- 4. Characteristics, zener diode & used as regulated power supply.
- 5. Dual power supply.

#### Note:

- 1. Experiments are of two hours duration.
- 2. Five experiments to be performed.

#### Reference books

- 1) Solid state electronics by Agarawal & Agarawal
- 2) Basics electronics by B.K. Bagade & Singh
- 3) Principales of electronics by Malivno
- 4) Electricity & magnetism by Murgeshan
- 5) Electricity & magnetism by Brijjal & shubruman

#### II. Duration of the Course:

Theory of twenty hours and Practical ten hours Total 30 Hours

#### V. Evaluation:

Students will be evaluated through the examination conducted by the physics department at the end of the course and they will be awarded course certificate accordingly.

Theory Paper of 100 marks

Practical of

50 marks

Department of Physics S.B.Arts & K.C.P.Science College Vijavapur-586103

IQAC, Co-ordinator
S.B.Arts & K.C.P.Science College,
Vijayapur.

Principal Principal, S.B.Arts & K.C.P. Science College, VIJAYAPUR,

#### DEPARTMENMT OF PHYSICS & ELECTRONICS

Date: 1-10-2022

#### Value Added Course

#### **Notice**

Certificate will be issued to students after completing the Value Added Course from the College.

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Department of Physics S.B.Arts & K.C.P.Science College Vijavapur-586103.

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## **B.L.D.E ASSOCIATION'S** S.B ARTS AND K.C.P SCIENCE COLLEGE, VIJAYAPUR **DEPARTMENT OF PHYSICS & ELECTRONICS** Value Added Course - Regulated power supply List of the faculty 2022-23

Sl.No	Name of the staff
1	Prof. C. N. Chougule
2	Prof. A. B. Patil
3	Dr. Anil B. Naik
4	Dr. P. S. Patil
5	Dr. Pradeep Chavan
6	Dr. Vani Desai
7	Smt. Swati Patil

**HOD**Head

Department of Physics S.B.Arts & K.C.P.Science College Vijayapur-586103.

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Vijayapur.

Principal,

S.B.Arts & K.C.P. Science College, VIJAYAPUR.

# B.L.D.E ASSOCIATION'S S.B ARTS AND K.C.P SCIENCE COLLEGE, VIJAYAPUR DEPARTMENT OF PHYSICS & ELECTRONICS Value Added Course-Regulated Power Supply

#### **ADMISSION LIST 2022-23**

Sl.	RCU NO.	Name of the student					
No							
1	U15KM21S0003	VIKAS TOTAD					
2	U15KM21S0014	LAXMI N RAJPUT					
3	U15KM21S0027	AISHWARYA D GADAGI					
4	U15KM21S0034	VINODKUMAR PATIL					
5	U15KM21S0037	SHIVANAGOUDA S TELAGI					
6	U15KM21S0038	PUSHPA HUNNUR					
7	U15KM21S0049	SHRUTI J ALOOR					
8	U15KM21S0051	PRAKASH K RATHOD					
9	U15KM21S0053	MANJUNATH R ANKALAGI					
10	U15KM21S0054	SAHANA S GHANTI					
11	U15KM21S0055	SHIVASHARANAPPA					
12	U15KM21S0061	SAMARTH B DOTIHAL					
13	U15KM21S0068	PREM R CHAVAN					
14	U15KM21S0074	VIJAYALAXMI MANGANNAVAR					
15	U15KM21S0080	SNEHA G HIREMATH					
16	U15KM21S0082	VINAYAK S HUNDEKAR					
17	U15KM21S0091	SIRINA S UMARJI					
18	U15KM21S0093	RAKESH R KAVALE					
19	U15KM21S0099	AKSHITA WALIKAR					
20	U15KM21S0101	RAHUL BIRADAR					
21	U15KM21S0102	SRUSHTI					
22	U15KM21S0104	SARASWATI S BENNI					
23	U15KM21S0107	VISMAYA R					
24	U15KM21S0108	GURURAJ S INDI					
25	U15KM21S0110	SIDDHARTH AKASHI					
26	U15KM21S0112	PRIYA S CHIKKANNAVAR					
27	U15KM21S0113	SHESHANK J YADAHALLI					
28	U15KM21S0117	SATTIGERI P RAMESH					
29	U15KM21S0134	SWAPNA R MUCHCHANDI					
30	U15KM21S0137	SAMPATKUMAR					

HODHead

Department of Physics S.B.Arts & K.C.P.Science College Vijayapur-586103. IQAC, co-ordinator S.B.Arts & K.C.P.Science College, Vijayapur. S.B.Arts & K.C.P. Science College, VIJAYAPUR.

#### DEPARTMENMT OF PHYSICS & ELECTRONICS

Date: 6 -10-2022

#### Value Added Course

#### **Notice**

It is here by informed that the "Value added course" (Regulated Power Supply) Theory and Practical Classes will commence from 10-10-22 for the academic year 222-23

Students those who are selected, attend the classes regularly without fail.

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Vijayapur.

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#### **B.L.D.E ASSOCIATION'S** S.B ARTS AND K.C.P SCIENCE COLLEGE, VIJAYAPUR

#### **DEPARTMENT OF PHYSICS & ELECTRONICS**

#### Value Added Course-Regulated Power Supply

#### **Time Table 2022-23**

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
12.00 pm To 2.00 pm						Practical PHY LAB
1.00 pm To 2.00 pm	Theory ROOM NO:SH 2					

Department of Physics S.B.Arts & K.C.P.Science College Vijayaper-586403

IQAC, Co-ordinator S.B.Arts & K.C.P.Science College, Vijayapur.

Principal Principal, S.B.Arts & K.C.P. Science College, VIJAYAPUR.

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# B.L.D.E ASSOCIATION'S S.B ARTS AND K.C.P SCIENCE COLLEGE, VIJAYAPUR DEPARTMENT OF PHYSICS & ELECTRONICS

Value Added Course-Regulated Power Supply

**Theory Attendance Report 2022-23** 

	Theory Attendance 225p																					
Sl. No	RCU NO.	Name	10-10-22	11-10-22	12-10-22	13-10-57	14-10-22	17-10-22	18-10-25	19-10-22	20-10-22	21-10-22	24-10-22	25-10-52	26-10-22	127-10-23	28-10-22	31-10-22	1-11-22	3 2-11-22	3-11-22	524-11-22
1	U15KM21S0003	VIKAS TOTAD	1	2	3	4	5	6	7	7	8	9	10	11	12	13	14	13	16	17	18	,
2	U15KM21S0014	LAXMI N RAJPUT	١	2	3	4	5	6	7	7	8	9	10	11	12	13	14	15	16	17	18	19
3	U15KM21S0027	AISHWARYA D GADAGI	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	16	17	18	19
4	U15KM21S0034	VINODKUMAR PATIL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	FI	17	18	19
5	U15KM21S0037	SHIVANAGOUDA S TELAGI	1	2	3	4	5	6	7	8	5	10	11	12	12	13	19	12	16	1+	18	19
6	U15KM21S0038	PUSHPA HUNNUR	1	2	3	4	5	6	7	8	9	10	11	12	13	19	15	10	17	18	19	20
7	U15KM21S0049	SHRUTI J ALOOR	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
8	U15KM21S0051	PRAKASH K RATHOD	1	2	3	3	4	5	6	7	8	9	10	11	12	13	14	12	16	17	18	19
9	U15KM21S0053	MANJUNATH R ANKALAGI	i	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
10	U15KM21S0054	SAHANA S GHANTI	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	12	16	1+	18	119
11	U15KM21S0055	SHIVASHARANAPPA	1	1	2	3	4	5	6	7	8	9	10	11	13	14	12	16	17	18	19	20
12	U15KM21S0061	SAMARTH B DOTIHAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	12	16	17	18	19	20
13	U15KM21S0068	PREM R CHAVAN	0	1	2	3	4	5	6	7	8	9	10	11	15	13	14	13	16	17	18	14
14	U15KM21S0074	VIJAYALAXMI MANGANNAVAR	1	2	3	4	5	6	7	8	5	10	11	12	13	. 14	12	16	17	18	19	20
15	U15KM21S0080	SNEHA G HIREMATH	i	2	3	4	5	6	7	-8	9	19	11	12	13	14	15	16	11	118	119	20

Sl. No	RCU NO.	Name	10-10-57	11-10-25	12-101-27	13-10-22	~	12-10-57	18-10-22	19-10-22	25-10-22	21-10-22	24-10-22	25-10-22	72-01-97	27-10-55	28-10-25	31-10-23	1-11-52	27-11-2	3-11-5	24-11-22
16	U15KM21S0082	VINAYAK S HUNDEKAR	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
17	U15KM21S0091	SIRINA S UMARJI	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	18	17	18	19	20
18	U15KM21S0093	RAKESH R KAVALE	1	2	3	4	5	6	Ť	8	9	9	10	11	12	12	14	15	16	17	18	19
19	U15KM21S0099	AKSHITA WALIKAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	U15KM21S0101	RAHUL BIRADAR	1	2	3	4	5	6	7	8	3	6/	11	12	13	14	15	16	17	18	19	20
21	U15KM21S0102	SRUSHTI	1	2	3	4	5	6	6	7	8	9	10	11	12	13	14	15	16	17	18	19
22	U15KM21S0104	SARASWATI S BENNI	1	2	3	4	5	6	6	7	8	9	10	11	12	13	14	15	16	17	18	19
23	U15KM21S0107	VISMAYA R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	15	16	17	18	19
24	U15KM21S0108	GURURAJ S INDI	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
25	U15KM21S0110	SIDDHARTH AKASHI	1	2	3	4	5	6	7	8	8	9	10	11	12	13	14	15	16	17	18	19
26	U15KM21S0112	PRIYA S CHIKKANNAVAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
27	U15KM21S0113	SHESHANK J YADAHALLI	1	1	2	.3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
28	U15KM21S0117	SATTIGERI P RAMESH		2	. 3	4	5	2	7	8	9	10	11	12	13	14	15	16	FI	18	19	20
29	U15KM21S0134	SWAPNA R MUCHCHANDI	1	1	2	3	4	5	6	7	8	9	10	11	12	12	14	-15	16	17	18	19
30	U15KM21S0137	SAMPATKUMAR	1	1	2	3	4	5	6	7	- 8	9	10	11	12	13	14	16	16		18	19
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Department of Physics S.B.Arts & K.C.P.Science College Vijayapur-586103.

IQAC, Co-ordinator S.B.Arts & K.C.P.Science College, Vijayapur.

Principal, \$.B.Arts & K.C.P. Science Colleg-VIJAYAPUR.

# B.L.D.E ASSOCIATION'S S.B ARTS AND K.C.P SCIENCE COLLEGE, VIJAYAPUR DEPARTMENT OF PHYSICS & ELECTRONICS Value Added Course-Regulated Power Supply

**Practical Attendance Report 2022-23** 

SI. No	RCU NO.	Name	510-22	22/02	29/10/2	514-22	2-11-2	26/11
1	U15KM21S0003	VIKAS TOTAD	1	2	3	4	5	6
2	U15KM21S0014	LAXMI N RAJPUT	1	2	3	4	5	6
3	U15KM21S0027	AISHWARYA D GADAGI	i	1	2	3	1	5
4	U15KM21S0034	VINODKUMAR PATIL	1	2	3	4	35	6
5	U15KM21S0037	SHIVANAGOUDA S TELAGI	1	2	3	A	5	6
6	U15KM21S0038	PUSHPA HUNNUR	1	2	3	4	5	6
7	U15KM21S0049	SHRUTI J ALOOR	1	2	2	4	0	6
8	U15KM21S0051	PRAKASH K RATHOD	1	2	3	4	3	6
9	U15KM21S0053	MANJUNATH R ANKALAGI	1	2	3	4	5	6
10	U15KM21S0054	SAHANA S GHANTI		2	2	1	5	6
11	U15KM21S0055	SHIVASHARANAPPA	1	2	3	4	5	6
12	U15KM21S0061	SAMARTH B DOTIHAL	1	2	3	4	5	6
13	U15KM21S0068	PREM R CHAVAN	1	2	3	4	-	6
14	U15KM21S0074	VIJAYALAXMI MANGANNAVAR	0	1	2	3	4	5
15	U15KM21S0080	SNEHA G HIREMATH	1	2	3	4	5	6
16	U15KM21S0082	VINAYAK S HUNDEKAR	1	2	3	A	5	6
17	U15KM21S0091	SIRINA S UMARJI	1	2	3	4	5	6
18	U15KM21S0093	RAKESH R KAVALE	1	2	3.	4	5	6
19	U15KM21S0099	AKSHITA WALIKAR	0	1	2	2	4	5
20	U15KM21S0101	RAHUL BIRADAR	1	2	3	1	6	6
21	U15KM21S0102	SRUSHTI	1	2	3	A	6	6
22	U15KM21S0104	SARASWATI S BENNI	1	2	3	4	5	6
23	U15KM21S0107	VISMAYA R		2	3	4	5	6
24	U15KM21S0108	GURURAJ S INDI	11	2	3	4	(	6
25	U15KM21S0110	SIDDHARTH AKASHI		2	3	4	5	6
26	U15KM21S0112	PRIYA S CHIKKANNAVAR	1	2	3	1	1	6
27	U15KM21S0113	SHESHANK J YADAHALLI	li	2	3	4	6	6
28	U15KM21S0117	SATTIGERI P RAMESH	0	1	1	A	6	6
29	U15KM21S0134	SWAPNA R MUCHCHANDI		12	3	4	6	6
30	U15KM21S0137	SAMPATKUMAR	1	2	3	4	1	10

Faculty Signatures

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Department of Physics
S.B.Arts & K.C.P.Science College
Vijavapur-586103.

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#### DEPARTMENMT OF PHYSICS & ELECTRONICS

#### Value Added Course Examination 2022-23

Date: 5-11-2022

#### **Notice**

The value added course theory & practical examinations will be conducted on the below dates. All the students attend both the exams without fail.

	Date	Room No	Time
Theory	24-11-2022	SH-2	12pm to 3 pm
Practical	26-11-2022	Physics Lab	12pmto3pm

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#### DEPARTMENMT OF PHYSICS & ELECTRONICS

Value Added Course - Theory Examination 2022-23

Subject code: SBKCPPHY01

Time: 03 hrs

Max. Marks: 100

#### Answer any 10 questions:

(10x10=100)

- 1. Explain the working of Dual power supply.
- 2. Give the principle of transformer. Explain its working.
- 3. Explain the working of 78xx series.
- 4. Describe the testing of electronic components using multimeter.
- 5. Explain the terms Amplitude, Time period, Frequency, Wave length, and Phase
- 6. Explain the terms RMS value of current, Power of an ac circuit, Inductive reactance and capacitive reactance
- 7. Explain the working of Half wave rectifier with neat diagram.
- 8. Explain the working of capacitor filter with neat diagram.
- 9. Explain the working of Inductor filter with neat diagram.
- 10. Explain the working of Full wave rectifier with neat diagram.
- 11. Explain the working & characteristics of Zener diode with suitable diagram.
- 12. Explain the identification of carbon resister value by colour code.

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VIJAYAPUR,

#### DEPARTMENMT OF PHYSICS & ELECTRONICS

#### Value Added Course Practical Examination 2022-23

#### List of Question Slips

Subject code: SBKCPPHY01

Time: 03 hour

Max. Marks: 50

- 1. Set up full wave rectifier with capacitor filter. Study the variation of voltage with load. Calculate percentage of regulation.
- 2. Set up half wave & full wave rectifiers using semiconductor diodes. Study the variation of voltage with load. Calculate percentage of regulation.
- 3. Set up dual power supply. Study its dual characteristics.
- 4. Study the characteristics of zener diode. Mark the break down voltage & break down region on the graph. Calculate resistance of zener diode.
- 5. Set up full wave rectifier with Inductor-capacitor filter. Study the variation of voltage with load. Calculate percentage of regulation.
- 6. Set up full wave bridge rectifier. Study the variation of voltage with load. Calculate percentage of regulation.

**HOD**ad

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VIJAYAPUR:

# B.L.D.E ASSOCIATION'S S.B ARTS AND K.C.P SCIENCE COLLEGE, VIJAYAPUR DEPARTMENT OF PHYSICS & ELECTRONICS Value Added Course:2022-23

#### **MARKS LIST**

Sl.	RCU NO.	Name of Students		Marks	
No	Recono.		Theory	Practical	Total
1	U15KM21S0003	VIKAS TOTAD	95	50	145
2	U15KM21S0014	LAXMI N RAJPUT	95	50	145
3	U15KM21S0027	AISHWARYA D GADAGI	74	40	114
4	U15KM21S0034	VINODKUMAR PATIL	87	43	130
5	U15KM21S0037	SHIVANAGOUDA S TELAGI	70	40	110
6	U15KM21S0038	PUSHPA HUNNUR	91	50	141
7	U15KM21S0049	SHRUTI J ALOOR	75	40	115
8	U15KM21S0051	PRAKASH K RATHOD	80	45	125
9	U15KM21S0053	MANJUNATH R ANKALAGI	85	44	129
10	U15KM21S0054	SAHANA S GHANTI	40	40	110
11	U15KM21S0055	SHIVASHARANAPPA	95	50	1.45
12	U15KM21S0061	SAMARTH B DOTIHAL	90	50	140
13	U15KM21S0068	PREM R CHAVAN	71	40	111
14	U15KM21S0074	VIJAYALAXMI SMANGANNAVAR	85	47	132
15	U15KM21S0080	SNEHA G HIREMATH	87	50	137
16	U15KM21S0082	VINAYAK S HUNDEKAR	91	50	141
17	U15KM21S0091	SIRINA S UMARJI	83	44	127
18	U15KM21S0093	RAKESH R KAVALE	87	50	12-
19	U15KM21S0099	AKSHITA WALIKAR	95	50	149
20	U15KM21S0101	RAHUL BIRADAR	92	50	142
21	U15KM21S0102	SRUSHTI	80	46	126
22	U15KM21S0104	SARASWATI S BENNI	7-8	45	123
23	U15KM21S0107	VISMAYA R	96	50	14
24	U15KM21S0108	GURURAJ S INDI	95	50	140
25	U15KM21S0110	SIDDHARTH AKASHI	95	50	14
26	U15KM21S0112	PRIYA S CHIKKANNAVAR	87	43	130
27		SHESHANK J YADAHALLI	70	40	110
28	U15KM21S0117	SATTIGERI P RAMESH	.91	50	141
29	U15KM21S0134	SWAPNA R MUCHCHANDI	75	40	110
30	11171410100107	SAMPATKUMAR	80	45	120

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Head
Department of Physics
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Vijayapur-586103

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S.B.Arts & K.C.P. Science College VIJAYAPUR.

#### B.L.D.E. Association's

# S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR DEPARTMENMT OF PHYSICS & ELECTRONICS

## Value Added Course on Regulated Power Supply

## Report on Course Outcome

Our Department has conducted Value added course for B.Sc students on Regulated Power Supply for the academic year 2022-23. The duration of the certificate course is 30 hrs. Theory and practical classes were conducted for about 30 students who have enrolled their names for the course.

A regulated power supply is an embedded circuit; it converts unregulated AC (Alternating Current) into a constant DC (Direct Current). With the help of a rectifier it converts AC supply into DC. Its function is to supply a stable voltage, to a circuit or device that must be operated within certain power supply limits. A regulated power supply with multiple regulators can offer multiple output voltages for operating different devices. Regulated power supplies maintain the voltage at the desired level and are ideal for almost all types of electronic devices because of the smooth, steady supply of voltage they offer.

The use of regulated power supply is very simple. When it is in use, attention should be paid to the polarity of the required DC voltage. If a positive voltage needs to be output, the output end of the DC voltage regulated power supply "-" connects with the "ground" end of the electrical equipment, and the terminal "+" should be connected to the required positive voltage terminal. If you need to output negative voltage, you need to reverse the above wiring method. Before electrifying, measure it with a multimeter to check whether the output voltage meets the requirements, so as to avoid excessive voltage damage to the electrical equipment.

In order to make the electrical equipment work properly and not to affect the stable and reliable operation of the electrical equipment because of the poor performance of the DC power supply, it is best to test it simply before acting on the regulated power supply. The main contents of the test are: the regulation range of the output voltage, the stability degree, the ripple voltage and the overcurrent protection and so on.

Advantages for Regulated power supplies include simplicity, reliability, low noise levels and low cost. These power supplies, also known as linear regulators (LR), have a very simple design in that they require few components making it an easy device for design engineers to work with.

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Department of Physics S.B.Arts & K.C.P.Science College Vijayapur-586103. QAC

IQAC Co-o: dinator
S.B.Arts & K.C.P.Science College,
Vijayapur.

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Head of the Department

## S.B ARTS & K.C.P. SCIENCE COLLEGE, VIJAYAPUR



Principal '

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## Internal Quality Assurance Cell Initiative

### VALUE ADDED COURSE

## Certificate

This is to certify that Mr./M	s. Sattigen P Rame	sh of B.Sc
Programme Studying	Semester has completed	the Value Added Course on
Regulated Pour	per Supply C	onducted by the Department
of Physics	during the Academic Year 202	2-23
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**Head of the Department** 

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Principal 4

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# Internal Quality Assurance Cell Initiative VALUE ADDED COURSE

Certificate

This is to certify that Mr./Ms. She	shank J Yadahalli of B.SC
Programme Studying	_ Semester has completed the Value Added Course on
Regulated Powe	Conducted by the Department the Academic Year 2022-23
of Physics during	the Academic Year 2022-23
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**Head of the Department** 

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## **Internal Quality Assurance Cell Initiative**

## **VALUE ADDED COURSE**

## Certificate

This is to certify that Mr./M	Is. Priya S Chikkann	avae of B.Sc
Programme Studying	Semester has complet	ed the Value Added Course on
Regulated Po	during the Academic Year 2	_Conducted by the Department
of Physics	_during the Academic Year2	022-23
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## **Internal Quality Assurance Cell Initiative**

## **VALUE ADDED COURSE**

### Certificate

This is to certify that Mr.	Ms. Siddhaeth Aka	shi of B.Sc
Programme Studying	Semester has comple	eted the Value Added Course on
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of Physics	during the Academic Year	2022-23
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Head of the Department	<b>IQAC Co-ordinator</b>	Principal



Head of the Department

## S.B ARTS & K.C.P. SCIENCE COLLEGE, VIJAYAPUR



Principal

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## **Internal Quality Assurance Cell Initiative**

### **VALUE ADDED COURSE**

### Certificate

Thi	s is to certify that N	Mr./Ms. que	euroij S	Indi	of B.Sc
Programi	me Studying	1	Semester has co	ompleted the	Value Added Course on
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of	Physics	during th	ne Academic Year	2022	-23
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