

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



**Department of Physics & Electronics**

**VALUE ADDED COURSE ON  
REGULATED POWER SUPPLY**

**BATCH-I**

**2016-17**

**(For B.Sc Physics & Electronics)**

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

**Department of Physics & Electronics**

**VALUE ADDED COURSE**

**CONTENTS**

Sl.No	Title
1	Syllabus
2	Admission Notice
3	List of faculty
4	List of Students
5	Time table
6	Student Attendance
7	Exam. time table notice
8	Question paper -Theory
9	Question paper -Practical
10	Marks list
11	Report on Course Outcome



**Head**

**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,**  
**S.B. Arts and KCP 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 transformer. 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 60 marks

Practical of 40 marks

Total 100 marks

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

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

  
**Principal,**  
 S.B. Arts and KCP Science College  
 VIJAYAPUR

B.L.D.E. Association's

S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR

DEPARTMENT OF PHYSICS & ELECTRONICS

Date: 1-7-16

## Value Added Course

### Notice

Our Department is conducting "Value added course" (30 hours duration) on "Regulated Power Supply" for B.Sc. Students in Physics & Electronics during the year 2016-17. Interested Students give their names to Head of the Department on or before 7-7-16.

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



Head of the Department.



Head  
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,  
S.B. Arts and KCP 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*

List of the faculty

2016-17

Batch - I

Sl.No	Name of the staff
1	Prof. S. B. Pattadkal
2	Prof.P.S.Koraddi
3	Prof. S Y Achakanalli
4	Prof. C N Chougulae
5	Prof. N D Adigonde
6	Prof. S S. Kori
7	Prof. M.S. Yadagiri
8	Prof. A B Patil



Head

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,  
S.B. Arts and KCP 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 2016-17 Batch-I

Sl. No	Roll No.	Name of the student
1	1	Shweta
2	2	Vijayalaxmi. Wagnare.
3	3	Preeti. Patil
4	4	Shruthi. S. Managuti.
5	5	Vanishree. S. Daniband.
6	6	Praveen. Haramanti.
7	7	Suneta. Hosati.
8	8	Kani. Koli.
9	9	Pooja. T. Kambale
10	10	Sobhya. G. Bushetti.
11	11	Pramila. T. Athani
12	12	Shilpa. Y. Nagoli
13	13	Pavan Kumar. Kambale
14	14	Aishwarya. V. Mokashi.
15	15	Rashmi. Mupyanmath
16	16	Vinod. Tengale
17	17	Abhishek. Chavan
18	18	Srushti. S. Jiddagi
19	19	Basdal. Priyanka
20	20	Sarawati. Shivalashetti
21	21	Pradeep. V. Kourtekar
22	22	Savitri. S. Badiger.
23	23	Triveni. D. Pandit
24	24	Pallavi. Hisemath.
25	25	Sunil. S. Kulakarani
26	26	Kastis. S. Pawas
27	27	Shivangouda. S. Patil
28	28	Pruthvi. P. Hisemath
29	29	Archana. D. Sarawad



Sl. No	Roll No.	Name
30	31	Pooja. G. Gobbur
31	32	Yasmin. C. Bagawan
32	33	Megha. B. Dhanapal.
33	34	Mallikarjunayya. Mathapati.
34	35	Omkar.
35	30	Pooja. S. Sant
36	36	Salman. T. Makandas
37	37	Masidda. G. Nirvani
38	38	Vinayak. Lalage
39	39	Sanjeet. S. Attigida.
40	40	Santosh. S.B. Kamalagi.
41	41	Channabasava. M. Handral.
42	42	Ganesh. Police Patil.
43	42	Ashwini. A. Koli.
44	44	Pooja. R. Galagali
45	45	Priganka. B. Makund
46	46	Rashmi. A. Naikodi
47	47	Sujata. S. Kamanakesi
48	48	Shobha. M. Yalagi
49	49	Aishwarya. T. Naikandi
50	50	Akshayakumar. B. K

  
HOD

  
Head  
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,  
S.B. Arts and KCP Science College  
VIJAYAPUR

B.L.D.E. Association's  
S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR  
DEPARTMENT OF PHYSICS & ELECTRONICS

Date: 18-7-2016


**Value Added Course**

**Notice**

It is here by informed that the "Value added course" (Regulated Power Suppl) theory & practicals will commence from 22-7-2016 for the academic year 2016-17.

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

  
Head of the Department.

  
Head  
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,  
S.B. Arts and KCP 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*


Time Table 2016-17

Batch -I

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
5.00pm To 6.00 pm					Theory 1	Theory II	
9.00 am To 11.00 am							Practical

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

  
**Principal,**  
S.B. Arts and KCP Science College  
VIJAYAPUR

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









(3) Exam Conducted

Sl. No	Roll No.	Name of the student	22-7-16	23-7-16	29-7-16	30-7-16	5-8-16	6-8-16	12-8-16	13-8-16	19-8-16	20-8-16	26-8-16	27-8-16	2-9-16	3-9-16	9-9-16	10-9-16	16-9-16	17-9-16	23-9-16	15-10-16
36		Salman.T. Mankaradar	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut	Sut
37		Masidda.G.N.Pivaru	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
38		Vinayak Lalage	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
39		Sanjeer.S.Amige	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
40		Santosh.B.Kamatagi	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
41		CHANNABASAV.M.HANDRAL	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
42		Ganesh.P.Police Patti	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
43		Dheeraj.N.KOU	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
44		Pooja.R.Galagali	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
45		Priyanka.B.Mukund	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
46		Rashmi.A.Naikodi	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
47		Sujata.S.Kamanakori	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
48		Shobha.M.Yalagi	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
49		Aishwarya.I.Naikodi	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
50		Ashaykumar.B.K	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN

  
 Head  
 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,  
 S.B. Arts and KCP Science College  
 VIJAYAPUR







Exam conducted

2

Sl. No	Roll No.	Name	24-7-16	31-7-16	7-8-16	14-8-16	21-8-16	28-8-16	4-9-16	16-10-16
30		Pooja. S. Sank	P.S.S	P.S.S	P.S.S	P.S.S	P.S.S	P.S.S	P.S.S	P.S.S
31		Pooja P Gobbur	<del>P.S.S</del>	<del>P.S.S</del>	<del>P.S.S</del>	<del>P.S.S</del>	<del>P.S.S</del>	<del>P.S.S</del>	<del>P.S.S</del>	<del>P.S.S</del>
32		Yasmin.C. Bagawan	Y.C.B	Y.C.B	Y.C.B	Y.C.B	Y.C.B	Y.C.B	Y.C.B	Y.C.B
33		Megha B. Bhauapal	M.B.D	M.B.D	M.B.D	M.B.D	M.B.D	M.B.D	M.B.D	M.B.D
34		MALLIKARJUNAYYA.MATHAPATI	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>
35		Omkar	omkr	omkr	omkr	omkr	omkr	omkr	omkr	omkr
36		Salman.S. Makenadar	Suf	Suf	Suf	Suf	Suf	Suf	Suf	Suf
37		Masidda G. Nirvani	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>
38		Vinayak lalage	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>	<del>M.B.D</del>
39		Sanjeev. S. Alligida	Suf	Suf	Suf	Suf	Suf	Suf	Suf	Suf
40		Santosh B. Kamalaga	<del>Suf</del>	<del>Suf</del>	<del>Suf</del>	<del>Suf</del>	<del>Suf</del>	<del>Suf</del>	<del>Suf</del>	<del>Suf</del>
41		CHANNABASU-M.HANDRAL	<del>Om</del>	<del>Om</del>	<del>Om</del>	<del>Om</del>	<del>Om</del>	<del>Om</del>	<del>Om</del>	<del>Om</del>
42		Ganesh. P. Police Patil	<del>Om</del>	<del>Om</del>	<del>Om</del>	<del>Om</del>	<del>Om</del>	<del>Om</del>	<del>Om</del>	<del>Om</del>
43		Dshwini. N. Koli	AAK	AAK	AAK	AAK	AAK	AAK	AAK	AAK
44		Pooja. R. Galagali	<del>Patal</del>	<del>Patal</del>	<del>Patal</del>	<del>Patal</del>	<del>Patal</del>	<del>Patal</del>	<del>Patal</del>	<del>Patal</del>
45		Priyanka. B. Neekund	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>
46		Rashmi. A. Naikodi	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>	<del>Pul</del>
47		Sujata S kamanakeri	S.K	S.K	S.K	S.K	S.K	S.K	S.K	S.K
48		Shobha. m. Yalagi	<del>S</del>	<del>S</del>	<del>S</del>	<del>S</del>	<del>S</del>	<del>S</del>	<del>S</del>	<del>S</del>
49		Aishwarya. I. Naikodi	<del>Aish</del>	<del>Aish</del>	<del>Aish</del>	<del>Aish</del>	<del>Aish</del>	<del>Aish</del>	<del>Aish</del>	<del>Aish</del>
50		Ashaykumar. B. V	<del>Bi</del>	<del>Bi</del>	<del>Bi</del>	<del>Bi</del>	<del>Bi</del>	<del>Bi</del>	<del>Bi</del>	<del>Bi</del>

  
 Head  
 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,  
 S.B. Arts and KCP Science College  
 VIJAYAPUR



B.L.D.E. Association's  
S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR  
DEPARTMENT OF PHYSICS & ELECTRONICS  
Value Added Course Examination 2016-17


**Batch- I**

Date: 12-10-2016

**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	Time
Theory	15-10-2016	9am to 12 noon
Practical	16-10-2016	9am to 12 noon

  
Head of the Department.  
**Head**  
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,**  
S.B. Arts and KCP Science College  
VIJAYAPUR

B.L.D.E. Association's  
S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR  
DEPARTMENT OF PHYSICS & ELECTRONICS

Value Added Course Examination

Subject code: SBKCPPIY01

Time: 03 hour

Max. Marks: 60

Answer any six questions:

(10x6=60)

- 1a). Explain the identification of carbon resistor value by colour code.
- b). Give the principle of transformer. Explain its working.
  
2. Describe the testing of electronic components using multimeter.
  
3. Explain the terms  
Amplitude, Time period, Frequency, Wave length, Phase,
  
4. Explain the terms
  - a) RMS value of current, Power of an ac circuit, 2x2=4
  - b) Inductive reactance, capacitive reactance 3x2=6
  
- 5a). Explain the working of Half wave rectifier with neat diagram.
- b) Explain the working of capacitor filter with neat diagram.
  
- 6a). Explain the working of Full wave rectifier with neat diagram.
- b) Explain the working of Inductor filter with neat diagram.
  
7. Explain the working & characteristics of Zener diode with suitable diagram.
8. Explain the working of
  - a) 78xx IC
  - b) Dual power supply



Head

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,  
S.B. Arts and KCP Science College  
VIJAYAPUR

B.L.D.E. Association's  
S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR

DEPARTMENT OF PHYSICS & ELECTRONICS

Value Added Course Practical Examination

List of Question Slips

Subject code: SBKCPPHY01

Time: 03 hour

Max. Marks: 40

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



Head

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,  
S.B. Arts and KCP 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 2016-17

Batch-I

MARKS LIST

Roll No.	Name of the Students	Marks		
		Theory	Practical	Total
1	Shweta	28	29	57
2	Vijayalaxmi. Wagnmore	37	35	72
3	Preeti Pattar	42	33	75
4	Shruthi. S. Managuli	31	28	59
5	Vanishree. S. Dahigond	44	32	76
6	Praveen. Hosamani	51	35	86
7	Suareeta. Hosatti	30	29	59
8	Rani. Koli	33	33	66
9	Pooja. J. Kamble	43	37	80
10	Souma. G. Basetti	54	36	90
11	Pramila. T. Athani	48	34	82
12	Shilpa. Y. Nagoli	55	38	93
13	Pavankumar Kambale	32	33	55
14	Aishwarya. V. Mokashi	36	34	60
15	Rashmi. Muppayanmath	43	34	77
16	Vinod. Tengale	49	36	85
17	Abhishek Chavan	35	33	68
18	Shrushti. S. Jiddagi	52	36	88
19	Baradol. Priyanka	45	38	83
20	Saraswati. Shivalashetti	50	35	85
21	Pradeep. V. Kowarkar	56	39	95
22	Savitri. S. Badiger	33	32	65
23	Thiveni. D. Pandje	47	34	81
24	Pallavi. Hilemath	54	37	91
25	Sunil. S. Kulkarni	44	32	76
26	Kashik. S. Pawar	32	29	61
27	Shivanagouda. S. Patil	49	35	84



Roll No.	Name of the Students	Marks		
		Theory	Practical	Total
28	Pruthvi, Prabhudevayya. H. Proembath	55	39	94
29	Archana, D. Sarwad	48	35	83
30	Pooja, S. Sank	36	36	72
31	Pooja, P. Gobbur	49	36	85
32	Yasmin, C. Bagwan	54	38	92
33	Megha, B. Dhanapal	37	35	72
34	Malikarajjunayya, Malhapati	49	34	83
35	Omkar	56	39	95
36	Salman, I. Mankanadas	38	33	71
37	Hasidda, G. Nilvani	47	34	81
38	Vinayak, Lalage	54	40	94
39	Sanjeev, S. Alligida	47	34	81
40	Sontosh, B. Kamalagi	35	32	68
41	Channabasav, M. Handral	47	32	79
42	Genesh, P. Police Patil	53	36	89
43	Ashwini, A. Koli	36	30	66
44	Pooja, R. Galagali	46	34	80
45	Prityanka, B. Mukund	50	35	85
46	Rashmi, A. Naikodi	41	32	73
47	Sujata, S. Kamanakeri	45	35	80
48	Shobha, M. Yadagi	51	36	87
49	Aishwalya, I. Naikodi	44	34	78
50	Akshaykumar, B. K.	33	29	62



Head  
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,  
S.B. Arts and KCP Science College  
VIJAYAPUR

**B.L.D.E. Association's**  
**S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR**  
**DEPARTMENT 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 (Batch-I) on Regulated Power Supply for the academic year 2016-17. The duration of the certificate course is 30 hrs. Theory and practical classes were conducted for 50 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.

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.

  
**Head**  
**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,**  
**S.B. Arts and KCP Science College,**  
**VIJAYAPUR**





B. L. D. E. Association's

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

(Re-Accredited by NACC at 'A' Level in 3<sup>rd</sup> Cycle)

*Internal Quality Assurance Cell Initiative*

**VALUE ADDED COURSE**

*Certificate*



This is to certify that Mr./Ms. Santosh B Kamatagi


has Completed the Value Added Course on Regulated Power Supply

Conducted by the Department of Physics during the

Year 2016-17

  
-IQAC, Co-ordinator

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

  
Head of the Department

  
Co-Ordinator, IQAC

  
Principal,

S.B. Arts and KCP Science College  
VIJAYAPUR

  
Principal





B. L. D. E. Association's

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

(Re-Accredited by NACC at 'A' Level in 3<sup>rd</sup> Cycle)

*Internal Quality Assurance Cell Initiative*

**VALUE ADDED COURSE**

*Certificate*



This is to certify that Mr./Ms. Channabasava M. Handral


has Completed the Value Added Course on Regulated Power Supply

Conducted by the Department of Physics during the

Year 2016-17

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

Head of the Department

  
Co-Ordinator, IQAC

  
Principal,  
S.B. Arts and KCP Science College  
VIJAYAPUR

  
Principal



B. L. D. E. Association's

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

(Re-Accredited by NACC at 'A' Level in 3<sup>rd</sup> Cycle)

*Internal Quality Assurance Cell Initiative*

**VALUE ADDED COURSE**

*Certificate*



This is to certify that Mr./Ms. Ganesh Police Patil

has Completed the Value Added Course on Regulated Power Supply

Conducted by the Department of Physics during the

Year 2016-17

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

Head of the Department

  
Co-Ordinator, IQAC

  
Principal,  
S.B. Arts and KCP Science College  
VIJAYAPUR

  
Principal



B. L. D. E. Association's

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

(Re-Accredited by NACC at 'A' Level in 3<sup>rd</sup> Cycle)

Internal Quality Assurance Cell Initiative

**VALUE ADDED COURSE**

*Certificate*



This is to certify that Mr./Ms. Priyanka B Mukund

has Completed the Value Added Course on Regulated Power Supply.

Conducted by the Department of Physics. during the

Year 2016-17,

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

Head of the Department

  
Co-Ordinator, IQAC

  
Principal,  
S.B. Arts and KCP Science College  
VIJAYAPUR

  
Principal





B. L. D. E. Association's

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

(Re-Accredited by NACC at 'A' Level in 3<sup>rd</sup> Cycle)

*Internal Quality Assurance Cell Initiative*

**VALUE ADDED COURSE**

*Certificate*



This is to certify that Mr./Ms. Sujata S Kamanakeri

has Completed the Value Added Course on Regulated Power Supply

Conducted by the Department of Physics during the

Year 2016-17.

  
**IQAC, Co-ordinator**

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

**Head of the Department**



**Co-Ordinator, IQAC**



**Principal,**  
S.B. Arts and KCP Science College  
VIJAYAPUR

  
**Principal**

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



**Department of Physics & Electronics**

**VALUE ADDED COURSE ON  
REGULATED POWER SUPPLY**

**BATCH-II**

**2016-17**

**(For B.Sc Physics & Electronics)**

B.L.D.E. Association's  
S.B. ARTS AND K.C.P. SCIENCE COLLEGE, VIJAYAPUR

Department of Physics & Electronics

VALUE ADDED COURSE

CONTENTS

Sl.No	Title
1	Syllabus
2	Admission Notice
3	List of faculty
4	List of Students
5	Time table
6	Student Attendance
7	Exam. time table notice
8	Question paper -Theory
9	Question paper -Practical
10	Marks list
11	Report on Course Outcome

  
Head  
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,  
S.B. Arts and KCP 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 transformer. 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 60 marks

Practical of 40 marks

Total 100 marks



Head  
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,  
S.B. Arts and KCP Science College  
VIJAYAPUR



**B.L.D.E. Association's**  
**S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR**  
**DEPARTMENT OF PHYSICS & ELECTRONICS**

Date: 25-12-16


## Value Added Course

### Notice


Our Department is conducting "Value added course" (30 hours duration) on "Regulated Power Supply" for B.Sc. Students in Physics & Electronics during the year 2016-17. Interested Students give their names to Head of the Department on or before 31-12-16.

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

  
Head of the Department.

  
Head  
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,  
S.B.Arts and KCP 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*

List of the faculty

2016-17

Batch - II

Sl.No	Name of the staff
1	Prof. S. B. Pattadkal
2	Prof.P.S.Koraddi
3	Prof. S Y Achakanalli
4	Prof. C N Chougulae
5	Prof. N D Adigonde
6	Prof. S S. Kori
7	Prof. M.S. Yadagiri
8	Prof. A B Patil

Head  
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,  
S.B.Arts and KCP 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 2016-17 Batch-II**

Sl. No	Roll No.	Name of the student
1	1	Atkar A. Tamboli
2	2	Vivek G. Kurle
3	3	Anand G. Kurle
4	4	Prashant A. Janavar
5	5	Mallikarjun B. Yankanchi
6	6	Rajakumar. Yalameli
7	7	Shweta Alur
8	8	Sushma M. Chikanalli
9	9	Shreedevi. S. Biradar
10	10	Poonima A. Patil
11	11	Basavarajeshwari S. Patil
12	12	Sudharani G. Aigali
13	13	Meenakshi. B.B.
14	14	Gurubai S. Biradar
15	15	Geeta. Desai
16	16	Supriya Rathod
17	17	Dagyaashree Biradar
18	18	Kaveri. B. Biradar
19	19	Shreeshaile R. Hebbal
20	20	Vinayak Sappali
21	21	Sheelavati C. Salotagi
22	22	Jyoti S. Naikodi
23	23	Bheemabai M. Vandal
24	24	Pooja N. Dasulkar
25	25	Vaishali S. Rajanavar
26	26	Hema I. Hubballi
27	27	Dhagyaashree K. Patil
28	28	Achalani B. Deyagond
29	29	AbdulRajak Chadchan



Sl. No	Roll No.	Name
30	30	Shruti M. Yadwad
31	31	Sushmita R. Mahodrao
32	32	Mahesh S. Walikar
33	33	Malingaraya, Dalawayi
34	34	Bheemalay, Naduvinamani
35	35	AbdulFazal, Choudhari
36	36	Manjunath. Belli
37	37	Shivakumar S. Kumbhar
38	38	Vikar S. Jamadade
39	39	Pouthiviraj V. Bisnal
40	40	Dhanajaya, Pujari
41	41	Bheemanagouda. Patil
42	42	Surekha J. Girigoudar
43	43	Shruti C. Mathapati
44	44	Shreeteja. Kulkarni
45	45	Sushmita S. Kulkarni
46	46	Meenal V. Basutkar
47	47	Bharati. Saranagond
48	48	Roopashree S. Byakod
49	49	Shilpa C. Bisadar
50	50	Deepa S. Bisadar

  
HOD

  
Head  
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,  
S.B. Arts and KCP Science College  
VIJAYAPUR

B.L.D.E. Association's  
S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR  
DEPARTMENT OF PHYSICS & ELECTRONICS

Date: 5-1-2017

## Value Added Course

### Notice

It is here by informed that the "Value added course" (Regulated Power Suppl) theory & practicals will commence from 13-1-2017 for the academic year 2016-17.

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



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



Principal,  
S.B. Arts and KCP Science College  
VIJAYAPUR



**IQAC, Co-ordinator**  
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*

Time Table 2016-17

Batch -II

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
5.00pm To 6.00 pm					Theory 1	Theory II	
9.00 am To 11.00 am							Practical



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



**Principal,**  
S.B. Arts and KCP Science College  
VIJAYAPUR



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










(3) Exam conducted

Sl. No	Roll No.	Name of the student	13-1-17	14-1-17	20-1-17	21-1-17	27-1-17	28-1-17	10-2-17	11-2-17	17-2-17	18-2-17	24-2-17	25-2-17	10-3-17	11-3-17	17-3-17	18-3-17	24-3-17	25-3-17	31-3-17	8-4-17	
36	36	Magunathu Belli	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
37	37	Shivakumari S. Kumbhar	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
38	38	Vika S. S. Jamadade	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
39	39	Pruthi. Jot. V. Biswal	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
40	40	Dhananjaya. pujari	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
41	41	Bheemanagouda. Patil	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
42	42	Suraksha J. Girigouda	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
43	43	Shruti. C. Mathapati	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
44	44	Shroeteja. Kulkarni	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
45	45	Sushnida S. Kulkarni	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
46	46	Meenal. V. Basutkas	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B	M.V.B
47	47	Bharati. Sanamagond	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
48	48	Roopashree. S. Byakod	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
49	49	Shilpa. C. B. Baidar	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
50	50	Deepa S. Baidar	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA

  
 Head  
 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,  
 S.B. Arts and KCP Science College  
 VIJAYAPUR.







Sl. No	Roll No.	Name	15-1-17	22-1-17	29-1-17	5-2-17	12-2-17	19-2-17	26-2-17	9-4-17
30	30	Shruti M. yadavpal	Suy	Suy	Suy	Suy	Suy	Suy	Suy	Suy
31	31	Sushmita K. Malincharakar	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
32	32	Mahesh C. Walikar	W2	W2	W2	W2	W2	W2	W2	W2
33	33	Malingaraya Dalawayi	Di	Di	Di	Di	Di	Di	Di	Di
34	34	Bheemaray. Naduvinamani	ABSP	ABSP	ABSP	ABSP	ABSP	ABSP	ABSP	ABSP
35	35	ABDULFARUQ. CHAUDHARI	Abosf	Abosf	Abosf	Abosf	Abosf	Abosf	Abosf	Abosf
36	36	Manjunath Belli	SP	SP	SP	SP	SP	SP	SP	SP
37	37	Shivakumar S. Kumbhar	SP	SP	SP	SP	SP	SP	SP	SP
38	38	Vikas S. S. Jamadade	Vy	Vy	Vy	Vy	Vy	Vy	Vy	Vy
39	39	Pruthi. J. V. Biswal	P	P	P	P	P	P	P	P
40	40	Dhananjaya. pufari	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
41	41	Bheemanaguda. Patil	BPP	BPP	BPP	BPP	BPP	BPP	BPP	BPP
42	42	Surekha. Girigoudar	Suy	Suy	Suy	Suy	Suy	Suy	Suy	Suy
43	43	Shruti C. Mathapati	Suy	Suy	Suy	Suy	Suy	Suy	Suy	Suy
44	44	Shreejaya. Kulkarni	SK	SK	SK	SK	SK	SK	SK	SK
45	45	Sushmita S. Kulkarni	SK	SK	SK	SK	SK	SK	SK	SK
46	46	Meenal V. Basotkar	MVB	MVB	MVB	MVB	MVB	MVB	MVB	MVB
47	47	Bharati. Sanamagond	B	B	B	B	B	B	B	B
48	48	Roopashree S. Byakod	RSE	RSE	RSE	RSE	RSE	RSE	RSE	RSE
49	49	Shilpa C. Binaradar	S	S	S	S	S	S	S	S
50	50	Deepa S. Binadar	DEPS	DEPS	DEPS	DEPS	DEPS	DEPS	DEPS	DEPS



Head  
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,  
S.B. Arts and KCP Science College  
VIJAYAPUR

**B.L.D.E. Association's**  
**S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR**  
**DEPARTMENT OF PHYSICS & ELECTRONICS**  
**Value Added Course Examination 2016-17**


**Batch- II**

Date: 05-04-2017


**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	Time
Theory	08-04-2017	9am to 12 noon
Practical	09-04-2017	9am to 12 noon

  
Head of the Department.  
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,**  
S.B. Arts and KCP Science College  
VIJAYAPUR



**B.L.D.E. Association's**  
**S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR**  
**DEPARTMENT OF PHYSICS & ELECTRONICS**

**Value Added Course Examination**

**Subject code: SBKCPPHY01**

**Time: 03 hour**

**Max. Marks: 60**


**Answer any six questions: (10x6=60)**

- 1a). Explain the identification of carbon resistor value by colour code.
- b). Give the principle of transformer. Explain its working.
  
2. Describe the testing of electronic components using multimeter.
  
3. Explain the terms  
Amplitude, Time period, Frequency, Wave length, Phase,
  
4. Explain the terms  
a) RMS value of current, Power of an ac circuit, **2x2=4**  
b) Inductive reactance, capacitive reactance **3x2=6**
  
- 5a). Explain the working of Half wave rectifier with neat diagram.
- b) Explain the working of capacitor filter with neat diagram.
  
- 6a). Explain the working of Full wave rectifier with neat diagram.
- b) Explain the working of Inductor filter with neat diagram.
  
7. Explain the working & characteristics of Zener diode with suitable diagram.
8. Explain the working of  
a) 78xx IC  
b) Dual power supply

  
**Head**

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,**  
S.B. Arts and KCP Science College  
VIJAYAPUR

B.L.D.E. Association's  
S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR

DEPARTMENT OF PHYSICS & ELECTRONICS

Value Added Course Practical Examination

List of Question Slips

Subject code: SBKCPPIY01

Time: 03 hour

Max. Marks: 40

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



Head

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,  
S.B. Arts and KCP 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 2016-17  
Batch-II

MARKS LIST


Roll No.	Name of the Students	Marks		
		Theory	Practical	Total
1	Aldaf. A. Tamboli	46	34	80
2	Vivek G. Kurle	37	32	69
3	Anand G. Kurle	29	31	60
4	Prashant A. Janavar	53	36	89
5	Mallikarjun B. Yankarshi	47	34	81
6	Rajakumar. Yalameli	50	33	83
7	Shweta. Alur	44	35	79
8	Sushma. M. Chikanalli	53	37	90
9	Shreedevi. S. Biradar	48	34	82
10	Poojima. A. Patil	30	34	64
11	Basavarajeshwari. S. Patil	44	31	75
12	Sudharani G. Aigali	47	35	82
13	Meenakshi. B. B.	54	37	91
14	Gurubai. S. Biradar	39	33	72
15	Geeta. Desai	46	36	82
16	Supriya. Rathod	56	38	94
17	Bagyashree Biradar	44	35	79
18	Kaveri. B. Biradar	48	37	85
19	Shreechait. R. Hebbal	54	38	92
20	Vinayak Sappali	43	34	77
21	Sheelarati. C. Salotagi	40	33	73
22	Jyothi. S. Naikodi	55	39	94
23	Bheemabai. M. Vandal	45	34	79
24	Pooja. N. Bisarkar	32	30	62
25	Vaishali. S. Rajanavar	54	36	90
26	Hema. T. Hubballi	49	35	84
27	Dhagyashree. K. Patil	56	38	94



Roll No.	Name of the Students	Marks		
		Theory	Practical	Total
28	Asharani B. Deygond	44	35	79
29	AbdulRajak. Chadchakm	48	37	85
30	Shouti M. Yadwamad	55	36	91
31	Sushmita R. Mahiodraker	37	33	70
32	Mahash S. Waliker	46	34	80
33	Malingaraya. Dalawayi	54	37	91
34	Bheemaray. Naduvinamasi	35	32	67
35	Abdul Faruq. Choudhari	38	34	72
36	Maj. Manjunath Belli	45	33	78
37	Shivakumar S. Kumbhar	56	38	94
38	Vikas S. Jamadade	41	30	71
39	Pouthviraj V. Bisanal	48	35	83
40	Dhanajaya Pujasi	39	33	72
41	Bheemanagouda. Patil	54	37	91
42	Susekha J. Girigoudar	48	36	84
43	Shouti C. Marthapati	45	34	79
44	Shree teja Kulkarni	54	35	89
45	Sushmita S. Kulkarni	49	34	83
46	Meenal V. Basurkar	45	33	78
47	Bhasati Sanamagond	56	38	94
48	Roopashree S. Byaked	38	34	72
49	Shilpa C. Bivadar	48	35	83
50	Deepa S. Bivadar	54	37	91

  
**Head**  
 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,**  
 S.B. Arts and KCP Science College  
 VIJAYAPUR

B.L.D.E. Association's  
S.B. ARTS AND K.C.P. SCIENCE COLLEGE, BIJAPUR  
DEPARTMENT 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 (Batch-II) on Regulated Power Supply for the academic year 2016-17. The duration of the certificate course is 30 hrs. Theory and practical classes were conducted for 50 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.

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

  
**Head**  
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,**  
S.B. Arts and KCP Science College  
VIJAYAPUR





B. L. D. E. Association's  
**S.B. ARTS & K.C.P. SCIENCE COLLEGE, VIJAYAPUR**

(Re-Accredited by NACC at 'A' Level in 3<sup>rd</sup> Cycle)

*Internal Quality Assurance Cell Initiative*

**VALUE ADDED COURSE**

*Certificate*



This is to certify that Mr./Ms. Shreedevi S. Biradar

has Completed the Value Added Course on Regulated Power Supply

Conducted by the Department of Physics during the

Year 2016-17.

  
**Head of the Department**  
IQAC, Co-ordinator  
S.B.Arts & K.C.P.Science College,  
Vijayapur.

  
**Co-Ordinator, IQAC**  
Principal,  
S.B. Arts and KCP Science College  
VIJAYAPUR

  
**Principal**





B. L. D. E. Association's

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

(Re-Accredited by NACC at 'A' Level in 3<sup>rd</sup> Cycle)

*Internal Quality Assurance Cell Initiative*

**VALUE ADDED COURSE**

*Certificate*





This is to certify that Mr./Ms. Poornima A. Patil

has Completed the Value Added Course on Regulated Power Supply

Conducted by the Department of Physics during the

Year 2016-17.

  
**Head of the Department**  
S.B.Arts & K.C.P.Science College,  
Vijayapur.

  
**IQAC, Co-ordinator**

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

**Co-Ordinator, IQAC**



**Principal,**  
S.B. Arts and KCP Science College  
VIJAYAPUR



**Principal**



B. L. D. E. Association's

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

(Re-Accredited by NACC at 'A' Level in 3<sup>rd</sup> Cycle)

*Internal Quality Assurance Cell Initiative*

**VALUE ADDED COURSE**

*Certificate*



This is to certify that Mr./Ms. Basavarajeshwari S. Patil


has Completed the Value Added Course on Regulated Power Supply

Conducted by the Department of Physics during the

Year 2016-17

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

Head of the Department

  
**Co-Ordinator, IQAC**

  
**Principal,**  
S.B. Arts and KCP Science College,  
VIJAYAPUR

  
**Principal**



B. L. D. E. Association's

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

(Re-Accredited by NACC at 'A' Level in 3<sup>rd</sup> Cycle)

*Internal Quality Assurance Cell Initiative*

**VALUE ADDED COURSE**

*Certificate*



This is to certify that Mr./Ms. Sudharani G. Aigali

has Completed the Value Added Course on Regulated Power Supply

Conducted by the Department of Physics during the

Year 2016-17.

  
**IQAC, Co-ordinator**

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

**Head of the Department**



**Co-Ordinator, IQAC**



S.B. Arts and KCP Science College  
VIJAYAPUR



**Principal**





B. L. D. E. Association's

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

(Re-Accredited by NACC at 'A' Level in 3<sup>rd</sup> Cycle)

Internal Quality Assurance Cell Initiative

## VALUE ADDED COURSE

### Certificate




This is to certify that Mr./Ms. Meenakshi B. B.

has Completed the Value Added Course on Regulated Power Supply

Conducted by the Department of Physics during the

Year 2016-17.

  
**Head of the Department**  
S.B. Arts & K.C.P. Science College,  
Vijayapur.

  
**Co-Ordinator, IQAC**

  
**Principal,**  
S.B. Arts and KCP Science College,  
VIJAYAPUR

  
**Principal**