

Shri Shivaji Education Society Amravati's

Science College, Nagpur

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Department Of Physics

Session 2023-24

Free Certificate Course for College Students

Certificate Course - Fundamentals of Electronic D.C. Power Supply

Duration – 30 Hours (10 Weeks)

Course starts from 01 Aug 2023 to 07 Oct. 2023



Course Coordinator – Mr. Bhupendra T. Kumbhare

Shri Shivaji Education Society Amaravati's Science College Congress Nagar, Nagpur Department of Physics

Course Report on Add-on Course

"Fundamentals of Electronic D.C. Power Supply"

Undergraduate Course for Physics Students

Duration: 01/08/2023 to 07/10/2023

Total Students: 82

This 10-week add-on course provided B.Sc. Physics students with a comprehensive understanding of the fundamentals of electronic DC power supplies. The course was conducted by Mr. B.T. Kumbhare, Assistant Professor, Department of Physics SSES Amt's Science College Congress Nagar Nagpur. Total 82 Students of B.Sc. I, II and III, year Physics were enrolled for the course.

The course covered theoretical principles, design techniques, and practical applications, emphasizing hands-on experience and real-world applications. The students were evaluated through MCQ based final exam of 80 marks and practical lab sessions of 20 marks. All 82 students successfully completed the course, with a majority achieving high grades. Several students demonstrated exceptional skills in practical applications and innovative project designs. Students worked on individual and group projects that involved designing and building functional DC power supplies. Practical sessions included hands-on experience with circuit design and testing with oscilloscopes and multimeters.

The 10-week Fundamentals of Electronic DC Power Supply course was a valuable addition to the undergraduate physics curriculum, equipping students with essential knowledge and skills in electronics. The course successfully combined theoretical foundations with practical applications, preparing the students for further studies and careers in electronics and related fields.

Action Taken: To understand the fundamentals of D.C. power supply physics department conducted the add-on course. Total 82 students registered for this course. Students participated actively in this course and made D.C. power supply.

Mr. B. T. Kumbhare Course Coordinator

Shri Shivaji Education Society Amaravati's Science College Congress Nagar, Nagpur Department of Physics

Course Report on Add-on Course

"Fundamentals of Electronic D.C. Power Supply"

Undergraduate Course for Physics Students

Duration: 01/08/2023 to 07/10/2023

Name of Course Coordinator: Mr. B. T. Kumbhare

Course Feedback Form

Name : _____

1) How would you rate the overall quality of the course content?

□ Excellent

□Good

□Average

 \Box Poor

How relevant was the course content to your professional or academic goals?
 □Excellent

 \Box Good

□Average

□Poor

3) How would you rate the hands-on lab sessions and practical exercises?

□Excellent

 \Box Good

 \Box Average

 \Box Poor

4) How would you rate the availability and quality of resources (e.g., textbooks, online materials)?

 \Box Excellent

Good

□Average

□Poor



To, The Principal SSES Amt's Science College, Congress Nagar, Nagpur-12

Subject: For permission to conduct the add on courses in Physics during the session 2023-2024

Respected Sir,

This is to request you that, the teachers of Physics department have prepared the syllabus and modules of the 30 hours certificate courses for the session 2023-2024.

The details of the course module, syllabus and time table is submitted here with.

Hence please permit to run the add on courses and oblige me.

Thanking you

Yours sincerely

Dr. S. W. Anwane Professor and Head Department of Physics Shi Shivaji Education Society Amravati's SCIENCE COLLEGE Congress Nagar, Nagpur.

Permitted pohore



Last Date of Registration:25/07/2023 For Registration Contact: Mr. B. T. Kumbhare (Coordinator)



Science College

Congress Nagar, Nagpur

Department of Physics

Add-on Certificate Course (2023-2024)

Certificate Course: Fundamentals of Electronic D.C. Power Supply

Notice

Date : 15/07/2023

The Department of Physics is conducting Add-on **Certificate Course on Fundamentals of Electronic D.C. Power Supply** for the session 2023-24. Interesting students of B.Sc. Part I, Part II & Part III should register themself in early and contact to the Course Coordinator Mr. B. T. Kumbhare immediately.

Course	Admission Fees
Fundamentals of Electronic D.C.	Free
Power Supply	

Mr. B. T. Kumbhare Course Coordinator



Congress Nagar, Nagpur

Department of Physics

Course Module and Syllabus

Certificate Course: Fundamentals of Electronic D.C. Power Supply

Course Coordinator: Mr. Bhupendra T. Kumbhare

Course description:

This certificate course provides a comprehensive introduction to the principles and concepts of electronic DC power supply systems. Students will gain a deep understanding of the fundamental principles, components, and circuit analysis techniques used in DC power supply design and development.

Course Objectives:

- To provide a comprehensive understanding of D.C. power supply design and operation.
- ✤ To develop practical skills in building and testing D.C. power supplies.
- ✤ To introduce students to various types of D.C. power supplies and their applications.
- ✤ To enable students to troubleshoot and maintain D.C. power supplies.
- To prepare students for advanced studies or careers in electronics and power supply engineering.

Instructional Strategies: Theory class, Practical, Video clips, Models etc.

Evaluation Strategies: Oral discussions and Final MCQ examination.

Course Outline:

- Introduction to DC Power Supply Systems
- Components and Circuit Analysis
- Design and Development of DC Power Supply Systems
- Safety Considerations and Troubleshooting Techniques

Course Outcomes:

By the end of the course, students will be able to:

♦ Understand the basic principles and components of D.C. power supplies.

- Design and construct different types of D.C. power supplies.
- Perform testing and troubleshooting on D.C. power supplies.
- Apply knowledge of D.C. power supplies in practical and industrial applications.

Present and document their design and testing process effectively.

Duration of course: Ten Weeks (30 hours)

The Structure of Syllabus and system of evaluation -

Course	Theory Papers and Practical	Total	Marks
		Theory	Practical
		80	20
	Theory paper- Fundamentals of Electronic		
Certificate Course in	D.C. Power Supply		
Fundamentals of	* Theory examination will be of MCQ pattern having 60 or 80 questions each with equal		
Electronic D.C.	marks.		
Power Supply	* Practical examination will be based on		
	performance evaluation in the laboratory	1	.00

Course Coordinator. (B.T. Kumbhare) Internal Quality Assurance Co (IQAC) S. S. E. S. A. Science Colleg Congress Nagar, Nagpur.

Denvelder Internal Quality Assurance Cell (IQAC) S. S. E. S. A. Science College

Principal S. S. E. S. Amravati's Science College, Nagpur.

SYLLABUS

Certificate course (10 weeks, 3 hours per week)

(Certificate Course: Fundamentals of Electronic D.C. Power Supply)

Theory –

Unit-I: Introduction to D.C. Power Supplies and Basic Components and Operation

- Overview of power supplies
- Types of power supplies (linear vs. switching)
- Applications of D.C. power supplies
- Transformers, rectifiers, filters
- Voltage regulation
- Load and line regulation

Unit-II: Linear Power Supplies and Switching Power Supplies

- Series and shunt regulators
- Design and operation of linear regulators
- Advantages and disadvantages
- Basic principles of switching regulators
- Buck, boost, and buck-boost converters
- Design and operation of switching regulators

Unit-III: Advanced Topics in Power Supply Design, and Maintenance and Applications of D.C. Power Supplies

- Thermal management
- EMI/EMC considerations
- Efficiency improvements
- D.C. power supplies in consumer electronics
- Industrial applications
- Renewable energy systems

Practical –

Power Supply Design and Simulation

- Design considerations
- Simulation tools and techniques

Hands-on simulation exercises

Practical Construction and Testing

- Building a basic D.C. power supply
- Testing procedures and equipment
- Safety considerations

Troubleshooting and Maintenance

- Common issues and diagnostics
- Troubleshooting techniques
- Preventive maintenance

Distribution of marks:-

Simulation tools and techniques	(05 Marks)
Building a basic D.C. power supply	(05 Marks)
Common issues and diagnostics	(05 Marks)
Preventive maintenance	(05 Marks)

Week-wise teaching plan:

WEEK	HRS.	SYLLABUS
Week 1		Introduction to D.C. Power Supplies
	1	Overview of power supplies
	1	Types of power supplies (linear vs. switching)
	1	Applications of D.C. power supplies
Week 2		Basic Components and Operation
	1	Transformers, rectifiers, filters
	1	Voltage regulation
	1	Load and line regulation
Week 3		Linear Power Supplies
	1	Series and shunt regulators
	1	Design and operation of linear regulators
	1	Advantages and disadvantages
Week 4		Switching Power Supplies
	1	Basic principles of switching regulators
	1	Buck, boost, and buck-boost converters
	1	Design and operation of switching regulators
Week 5		Power Supply Design and Simulation
	1	Design considerations
	1	Simulation tools and techniques
	1	Hands-on simulation exercises
Week 6		Practical Construction and Testing
	1	Building a basic D.C. power supply
	1	Testing procedures and equipment
	1	Safety considerations
Week 7		Advanced Topics in Power Supply Design
	1	Thermal management
	1	EMI/EMC considerations
	1	Efficiency improvements
Week 8		Troubleshooting and Maintenance
	1	Common issues and diagnostics
	1	Troubleshooting techniques
	1	Preventive maintenance
Week 9		Applications of D.C. Power Supplies
	1	D.C. power supplies in consumer electronics
	1	Industrial applications
	1	Renewable energy systems
Week 10		Designing and building a D.C. power supply
	1	Individual or group projects on designing and building a D.C.
		power supply
	1	Testing and validation of projects
	1	Presentation of project work

Shri Shivaji Education Society Amravati's

Science College

Congress Nagar, Nagpur

Department of Physics

Add-on Certificate Course (2023-2024) Certificate Course: Fundamentals of Electronic D.C. Power Supply

TIME TABLE

	Tim	ne
Days	Theory Classes	Practical Classes
Friday	BTK (C6) 4.00 PM - 5.00 PM	
Saturday	BTK (C6) 4.00 PM - 5.00 PM	BTK (C6) 4.00 PM - 5.00 PM

Mr. B. T. Kumbhare Course Coordinator

Shri Shivaji Education Society Amravati's Science College, Congress Nagar Nagpur Department of Physics

Skill Based Certificate course

Title: "Certificate Course: Fundamentals of Electronic D.C. Power Supply"

Registration List of Students

2023-2024

Sr. No.	Name of Students
1	ARVIWALA HUZEFA KHUZEMA
2	BAGHEL SONAM SANTOSHKUMAR
3	BAIG TASMIYA HAMID
4	BARSAGADE KALASH SUDHAKAR
5	BAWANKULE LAXMI DEVIDAS
6	BHASMOTE ARADHANA RAJENDRA
7	CHANNE TANISHKA PRAVEEN
8	DATIR PRANJALI ANKALESH
9	DESHMUKH JANHAVI VIRENDRA
10	DHOK SOKSHAM NISHANT
11	FULKUWAR PRIYA SANTOSH
12	GAJBHIYE SWEJAL PRASHANT
13	GONNADE MADHURIMA SHAILESH
14	IRGURALA VIDYA CHANDRAIAH
15	JIBHEKAR SAMRUDDHI KISHOR
16	KALE AVANI PREMDAS
17	KHADSE CHETANA MORESHWAR
18	KUBADE TEJASWI MOTIRAM
19	LOKHANDE KASHISH SUHAS
20	LUTE SUHANI RAMESHWAR
21	MENDWADE AISHWARYA PRAKASH
22	NAMDEO ARYAN UMASHANKAR
23	PAIGAMI MANISH RAJENDRA

24	PAL VAISHNAVI VINOD
25	SAHU APURVA TAPAN
26	SAPATE PORNIMA PRABHU
27	SONTAKKE RAJVEE SAROJ
28	THAKARE SUHANI SUKHADEO
29	THAKUR KRITI AINKATRAO
30	TOMAR TANU LXANDERKUMAR
31	TONGE SUHANI ANAND
32	VYAS HIMANSHU MUKESH
33	WAHANE PREMANSHU ANIL
34	WAHANE TEJASVI PRAVIN
35	WASNIK RUTIKA VINAYAK
36	BORKAR OM GAJANAN
	CHANIANA KIRANPREET KAUR SARVJEET
37	SINGH
38	DUBEY ISHA ROSHAN
39	FULZELE KASHISH GAJENDRA
40	GOWARDIPE KAJAL PURUSHOTTAM
41	HEDAOO DHIRAJ RAJENDRA
42	KAMBLE NAYAN ASHOK
43	KANGALE ACHAL RUSHI
44	KHOTELE MAYANK HEMANTKUMAR
45	MISHRA SHASHWAT RAMAKANT
46	MONDHE VISHAL VISHWANATH
47	NAGPURKAR GAGAN MAROTI
48	SINGH KASHISH NAGENDRA
49	ADHAU PURVA PRAMOD
50	CHAUDHARI DURGESHWARI RAMPRASAD
51	DHORE SADICHCHHA DILIP
52	GUPTA KSHITIJ ADITYASHEKHAR
53	HAJARE POOJA RAJU
54	INGLE NISHCHAL SHILPA

55	JANGLE VAISHANAVI ROSHAN
56	KUNDARPAWAR ARYA VIKAS
57	MASKHARE MAYUR PRASHANT
58	MESHRAM MASUM SUDHAKAR
59	PALANDURKAR ANUSHKA AMAR
60	PATIL ROHIT SACHIN
61	PAWAR SUMAN SHEMEKHIL
62	SHEIKH MANTESHA TABASSUM ALTAF
63	TUPAT MAYURI RAJESH
64	WUIKEY ARYA ARUN
65	AIDBAN ANUSHKA MANISH
66	BANAIT PRACHI BABURAO
67	CHAMALWAR PREET RAVINDRA
68	CHAUHAN KASHISH RAMVEER
69	DESHBHRATAR MANASVI MANOJ
70	DIGHORE KARTIK GANESH
71	GAVHADE DRUTI WAMAN
72	GAIDHANE MEGHANA KISHOR
73	KARANDE DHARINI SHYAM
74	KATARE ANJESH MUKESH
75	KHADSE PRANAY RAMESH
76	KHAIRKAR ANIMESH PAWAN
77	KHARAT KRUNALI SURESH
78	KUHIKE DARSHANA HIRALAL
79	MANKAR PRAJWAL VINOD
80	MASKE HIMANI DHARMENDRA
81	KHANDARE MANSI NIKESH
82	PANDEY ANCHAL KEDARNATH

45

Course Coordinator Mr. B. T. Kumbhare

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Shri Shivaji EducationSociety Amaravati's Science College, Congress Nagar, Nagpur Certificate Course: Fundamentals of Electronic D.C. Power Supply (10 Week) Theory Class Attendance Sheet

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Mr. B. T. Kumbhare Course Coordinator Department of Physics



Congress Nagar, Nagpur

Department of Physics

Add-on Certificate Course Examination (2023-2024)

Certificate Course: Fundamentals of Electronic D.C. Power Supply

NOTICE

Date: 10/10/2023

All the registered students of add-on Course on **Fundamentals of Electronic D.C. Power Supply** under Department of Physics for the session 2023-24 are hereby informed that the theory examination is to be scheduled on 16/10/2023 (Wednesday) at 10:30 am to 11:30 am in Physics Laboratory at our college centre. All Students should be present in the laboratory before 10 mins. of scheduled time of examination.

Mr. B. T. Kumbhare Course Coordinator Department of Physics

Shri Shivaji Education Society Amravati's Science College, Congress Nagar Nagpur Department of Physics

Skill Based Certificate course

Title: "Certificate Course: Fundamentals of Electronic D.C. Power Supply"

Theory Exam Attendance Sheet-2023-2024

Course Coordinator: Mr. Bhupendra T. Kumbhare

Sr. No.	Name of Students	Sign
1	ARVIWALA HUZEFA KHUZEMA	Must
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6	BHASMOTE ARADHANA RAJENDRA	Aradham
7	CHANNE TANISHKA PRAVEEN	Tanishko
8	DATIR PRANJALI ANKALESH	Dara P.
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10	DHOK SOKSHAM NISHANT	Belestrum
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14	IRGURALA VIDYA CHANDRAIAH	VIDa buse
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16	KALE AVANI PREMDAS	Kaly dury.
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18	KUBADE TEJASWI MOTIRAM	Cerd
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50	CHAUDHARI DURGESHWARI RAMPRASAD	Prime
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Sign of Invigilator (

Shri Shivaji Education Society Amaravati's Science College Congress Nagar, Nagpur Department of Physics

Add-on Certificate Corse on Fundamentals of Electronic D.C. Power Supply

THEORY EXAM

Date: 16/10/2023	Max. Time: 1 Hour
Max. Marks: 80	Marks Obtained:

Student Name: -----

Note: i) All questions are compulsory and carry equal marks

ii) Tick the correct option

Sign. of Invigilator

- 1. What is the primary function of a DC power supply?
- a) To convert AC to AC
- b) To convert DC to DC
- c) To convert AC to DC
- d) To regulate voltage

2. Which type of power supply is commonly used in electronic devices?

- a) AC power supply
- b) DC power supply
- c) Both AC and DC
- d) None of the above
- 3. What is the output of a DC power supply?
- a) Alternating Current (AC)
- b) Direct Current (DC)
- c) Both AC and DC

- d) None of the above
- 4. Which component is used to rectify AC voltage in a DC power supply?
- a) Transformer
- b) Rectifier
- c) Filter
- d) Regulator
- 5. What is the purpose of a filter in a DC power supply?
- a) To regulate voltage
- b) To limit current
- c) To remove ripples and noise
- d) To convert AC to DC
- 6. Which type of DC power supply uses a transformer to step down the voltage?
- a) Linear power supply
- b) Switching power supply
- c) SMPS
- d) Step-down power supply

7. What is the advantage of a switching power supply over a linear power supply?

- a) Higher efficiency
- b) Lower cost
- c) Smaller size
- d) All of the above
- 8. Which safety feature is essential in a DC power supply?
- a) Grounding
- b) Insulation
- c) Shielding
- d) All of the above

- 9. What is the purpose of a voltage regulator in a DC power supply?
- a) To regulate current
- b) To regulate voltage
- c) To filter noise
- d) To store energy
- 10. Which type of DC power supply is commonly used in computers?
- a) Linear power supply
- b) Switching power supply
- c) SMPS
- d) DC-DC converter
- 11. What is the input of a DC power supply?
- a) AC voltage
- b) DC voltage
- c) Both AC and DC
- d) None of the above

12. Which component is used to store energy in a DC power supply?

- a) Capacitor
- b) Inductor
- c) Resistor
- d) Transformer

13. What is the purpose of a surge protector in a DC power supply?

- a) To regulate voltage
- b) To limit current
- c) To protect against surges
- d) To filter noise

14. Which type of DC power supply uses a high-frequency transformer?

- a) Linear power supply
- b) Switching power supply
- c) SMPS
- d) DC-DC converter
- 15. What is the advantage of a DC power supply over an AC power supply?
- a) Higher efficiency
- b) Lower cost
- c) Smaller size
- d) Constant voltage output
- 16. Which component is used to regulate voltage in a DC power supply?
- a) Transformer
- b) Rectifier
- c) Filter
- d) Regulator
- 17. What is the purpose of a short-circuit protector in a DC power supply?
- a) To regulate voltage
- b) To limit current
- c) To protect against short circuits
- d) To filter noise
- 18. Which type of DC power supply is commonly used in electronic devices?
- a) Linear power supply
- b) Switching power supply
- c) SMPS
- d) DC-DC converter

- 19. What is the output voltage of a DC power supply?
- a) AC voltage
- b) DC voltage
- c) Both AC and DC
- d) None of the above
- 20. Which safety feature is used to prevent electrical shock in a DC power supply?
- a) Grounding
- b) Insulation
- c) Shielding
- d) All of the above
- 21. What is the primary function of a rectifier in a DC power supply?
- a) To regulate voltage
- b) To limit current
- c) To convert AC to DC
- d) To filter noise

22. Which type of rectifier is commonly used in DC power supplies?

- a) Half-wave rectifier
- b) Full-wave rectifier
- c) Bridge rectifier
- d) Center-tapped rectifier
- 23. What is the purpose of a transformer in a DC power supply?
- a) To regulate voltage
- b) To limit current
- c) To step up or step-down voltage
- d) To filter noise

24. Which component is used to filter out ripples and noise in a DC power supply?

- a) Capacitor
- b) Inductor
- c) Resistor
- d) Diode
- 25. What is the purpose of a voltage regulator in a DC power supply?
- a) To regulate current
- b) To regulate voltage
- c) To filter noise
- d) To store energy
- 26. Which type of voltage regulator is commonly used in DC power supplies?
- a) Linear voltage regulator
- b) Switching voltage regulator
- c) SCR voltage regulator
- d) Triac voltage regulator
- 27. What is the purpose of a capacitor in a DC power supply?
- a) To regulate voltage
- b) To limit current
- c) To filter noise
- d) To store energy
- 28. Which component is used to limit current in a DC power supply?
- a) Resistor
- b) Capacitor
- c) Inductor
- d) Fuse

- 29. What is the purpose of a diode in a DC power supply?
- a) To regulate voltage
- b) To limit current
- c) To rectify AC voltage
- d) To filter noise
- 30. Which type of diode is commonly used in DC power supplies?
- a) Zener diode
- b) Schottky diode
- c) LED diode
- d) Rectifier diode
- 31. What is the purpose of a resistor in a DC power supply?
- a) To regulate voltage
- b) To limit current
- c) To filter noise
- d) To divide voltage

32. Which component is used to store energy in a DC power supply?

- a) Capacitor
- b) Inductor
- c) Resistor
- d) Transformer
- 33. What is the purpose of an inductor in a DC power supply?
- a) To regulate voltage
- b) To limit current
- c) To filter noise
- d) To store energy

34. Which type of inductor is commonly used in DC power supplies?

- a) Choke inductor
- b) Toroidal inductor
- c) Ferrite inductor
- d) Air-core inductor

35. What is the purpose of a fuse in a DC power supply?

- a) To regulate voltage
- b) To limit current
- c) To protect against overvoltage
- d) To protect against overcurrent

36. Which component is used to protect against electrical shock in a DC power supply?

- a) Grounding
- b) Insulation
- c) Shielding
- d) All of the above

37. What is the purpose of a heat sink in a DC power supply?

- a) To regulate voltage
- b) To limit current
- c) To dissipate heat
- d) To filter noise

38. Which type of heat sink is commonly used in DC power supplies?

- a) Active heat sink
- b) Passive heat sink
- c) Liquid heat sink
- d) Air heat sink

39. What is the purpose of a transformer in a DC power supply?

- a) To step up or step-down voltage
- b) To regulate voltage
- c) To limit current
- d) To isolate input and output
- 40. Which type of DC power supply is commonly used in electronic devices?
- a) Series regulator
- b) Shunt regulator
- c) Switching regulator
- d) Linear regulator
- Answer: d) Linear regulator

Answer Key

- 1. Answer: c) To convert AC to DC
- 2. Answer: b) DC power supply
- 3. Answer: b) Direct Current (DC)
- 4. Answer: b) Rectifier
- 5. Answer: c) To remove ripples and noise
- 6. Answer: a) Linear power supply
- 7. Answer: d) All of the above
- 8. Answer: d) All of the above
- 9. Answer: b) To regulate voltage
- 10. Answer: c) SMPS
- 11. Answer: a) AC voltage
- 12. Answer: a) Capacitor
- 13. Answer: c) To protect against surges
- 14. Answer: c) SMPS
- 15. Answer: d) Constant voltage output
- 16. Answer: d) Regulator
- 17. Answer: c) To protect against short circuits
- 18. Answer: b) Switching power supply
- 19. Answer: b) DC voltage
- 20. Answer: d) All of the above
- 21. Answer: c) To convert AC to DC
- 22. Answer: c) Bridge rectifier
- 23. Answer: c) To step up or step down voltage
- 24. Answer: a) Capacitor
- 25. Answer: b) To regulate voltage
- 26. Answer: a) Linear voltage regulator
- 27. Answer: d) To store energy
- 28. Answer: d) Fuse
- 29. Answer: c) To rectify AC voltage
- 30. Answer: d) Rectifier diode
- 31. Answer: d) To divide voltage
- 32. Answer: a) Capacitor
- 33. Answer: c) To filter noise
- 34. Answer: a) Choke inductor
- 35. Answer: d) To protect against overcurrent
- 36. Answer: d) All of the above
- 37. Answer: c) To dissipate heat
- 38. Answer: b) Passive heat sink
- 39. Answer: a) To step up or step-down voltage
- 40. Answer: d) Linear regulator



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<u>Add-on Course</u> Course Exam Name: Certificate Course in Fundamentals of electronics D. C. Power Supply							
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Shri Shivaji Education Society Amravati's Science College, Congress Nagar Nagpur Department of Physics 2023-2024

Add-on course Examination

Title: "Certificate Course: Fundamentals of Electronic D.C. Power Supply"

Course Coordinator: Mr. Bhupendra T. Kumbhare

DATE: 18/10/23

Total Marks: 100

STATEMENT OF MARKS

Sr.	Name of Students	Theory Marks (80M)	Practical Marks (20M)	Total (100M)	Grade
1	Arviwala Huzefa Khuzema	60	20	80	А
2	Baghel Sonam Santoshkumar	64	20	84	А
3	Baig Tasmiya Hamid	70	20	90	A+
4	Barsagade Kalash Sudhakar	64	18	82	А
5	Bawankule Laxmi Devidas	66	20	86	A+
6	Bhasmote Aradhana Rajendra	74	20	94	A+
7	Channe Tanishka Praveen	58	20	78	А
8	Datir Pranjali Ankalesh	62	18	80	А
9	Deshmukh Janhavi Virendra	64	20	84	A
10	Dhok Soksham Nishant	74	20	94	A+
11	Fulkuwar Priya Santosh	72	20	92	A+
12	Gajbhiye Swejal Prashant	76	18	94	A+
13	Gonnade Madhurima Shailesh	78	16	94	A+
14	Irgurala Vidya Chandraiah	66	18	84	А
15	Jibhekar Samruddhi Kishor	64	20	84	А

16	Kale Avani Premdas	58	20	78	А
17	Khadse Chetana Moreshwar	54	20	74	B+
18	Kubade Tejaswi Motiram	74	18	92	A+
19	Lokhande Kashish Suhas	64	16	80	А
20	Lute Suhani Rameshwar	72	18	90	A+
21	Mendwade Aishwarya Prakash	78	16	94	A+
22	Namdeo Aryan Umashankar	62	20	82	А
23	Paigami Manish Rajendra	58	20	78	А
24	Pal Vaishnavi Vinod	60	18	78	А
25	Sahu Apurva Tapan	70	16	86	A+
26	Sapate Pornima Prabhu	74	20	94	A+
27	Sontakke Rajvee Saroj	72	18	90	A+
28	Thakare Suhani Sukhadeo	64	16	80	А
29	Thakur Kriti Ainkatrao	58	20	78	А
30	Tomar Tanu Lxanderkumar	60	20	80	А
31	Tonge Suhani Anand	70	20	90	A+
32	Vyas Himanshu Mukesh	76	20	96	A+
33	Wahane Premanshu Anil	78	20	98	A+
34	Wahane Tejasvi Pravin	66	16	82	А
35	Wasnik Rutika Vinayak	54	18	72	B+
36	Borkar Om Gajanan	66	20	86	A+
37	Chaniana Kiranpreet Kaur Sarvjeet Singh	68	16	84	А
38	Dubey Isha Roshan	74	18	92	A+
39	Fulzele Kashish Gajendra	70	16	86	A+
40	Gowardipe Kajal Purushottam	60	18	78	А
41	Hedaoo Dhiraj Rajendra	62	20	82	А
42	Kamble Nayan Ashok	72	20	92	A+
43	Kangale Achal Rushi	74	20	94	A+
44	Khotele Mayank Hemantkumar	60	20	80	А
45	Mishra Shashwat Ramakant	68	20	88	A+
46	Mondhe Vishal Vishwanath	70	20	90	A+
47	Nagpurkar Gagan Maroti	74	20	94	A+

48	Singh Kashish Nagendra	70	20	90	A+
49	Adhau Purva Pramod	62	20	82	А
50	Chaudhari Durgeshwari Ramprasad	60	20	80	А
51	Dhore Sadichchha Dilip	72	18	90	A+
52	Gupta Kshitij Aditvashekhar	70	18	88	A+
53	Hajare Pooja Raju	64	18	82	А
54	Ingle Nishchal Shilpa	78	18	96	A+
55	Jangle Vaishanavi Roshan	66	18	84	А
56	Kundarpawar Arya Vikas	64	17	81	А
57	Maskhare Mayur Prashant	60	17	77	А
58	Meshram Masum Sudhakar	78	20	98	A+
59	Palandurkar Anushka Amar	70	20	90	A+
60	Patil Rohit Sachin	62	17	79	А
61	Pawar Suman Shemekhil	74	19	93	A+
62	Sheikh Mantesha Tabassum Altaf	66	20	86	A+
63	Tupat Mayuri Rajesh	74	20	94	A+
64	Wuikey Arya Arun	72	20	92	A+
65	Aidban Anushka Manish	64	20	84	А
66	Banait Prachi Baburao	66	20	86	A+
67	Chamalwar Preet Ravindra	62	20	82	А
68	Chauhan Kashish Ramveer	72	20	92	A+
69	Deshbhratar Manasvi Manoi	74	20	94	A+
70	Dighore Kartik Ganesh	66	18	84	А
71	Gavhade Druti Waman	68	19	87	A+
72	Gaidhane Meghana Kishor	70	19	89	A+
73	Karande Dharini Shyam	60	20	80	А
74	Katare Anjesh Mukesh	62	20	82	А
75	Khadse Pranay Ramesh	74	20	94	A+
76	Khairkar Animesh Pawan	68	20	88	A+
77	Kharat Krunali Suresh	58	20	78	А
78	Kuhike Darshana Hiralal	54	20	74	B+
79	Mankar Prajwal Vinod	78	20	98	A+

80	Maske Himani Dharmendra	60	18	78	А
81	Khandare Mansi Nikesh	58	20	78	А
82	Pandey Anchal Kedarnath	54	20	74	B+

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Mr. B. T. Kumbhare Course Coordinator Department of Physics



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<u>Add-on Course</u> Course Exam Name: Certificate Course in Fundamentals of electronics D. C. Power Supply								
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CERTIFICATE

Mr./Ku. Arviwala Huzefa Khuzema is awarded with certificate on successful completion of the course entitled, Certificate course in "Fundamentals of Electronic D. C. Power Supply". Session 2023-24 under Add-on course conducted for 30 hours from 01/08/2023 to 07/10/2023 by Department of Physics, SSESA's, Science College, congress Nagar, Nagpur 440012.

He/She has passed the Examination with 'A' Grade.

Coordinator, Department of Physics Mr. B. T. Kumbhare

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Principal, Science Colleor Prof. M. P. Dhore





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CERTIFICATE

Mr./Ku. Dhok Soksham Nishant is awarded with certificate on successful completion of the course entitled, Certificate course in "Fundamentals of Electronic D. C. Power Supply". Session 2023-24 under Add-on course conducted for 30 hours from 01/08/2023 to 07/10/2023 by Department of Physics,

SSESA's, Science College, congress Nagar, Nagpur 440012.

He/She has passed the Examination with 'A+' Grade.

Mr. B. T. Kumbhare Coordinator, Department of Physics

