

Periods: 30	Examination : 40	Internal : 10	Total Marks: 50
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Syllabus

1. Semiconductor Basics (8 Periods)

Atomic Structure and Bonding

Intrinsic and Extrinsic Semiconductors

Energy Bands and Bandgap

2. Semiconductor Devices (6 Periods)

Diodes: Types and Characteristics

Transistors: Bipolar Junction Transistor (BJT) and Field Effect Transistor (FET)

Optoelectronic Devices: LEDs and Photodiodes

3. Semiconductor Applications (8 Periods)

Amplifiers and Signal Processing

Semiconductor Memory Devices

Power Electronics

4. Semiconductor Fabrication (8 Periods)

Overview of Semiconductor Manufacturing

Cleanroom Technology

Photolithography and Etching

Reference Books:

1. Principles of electronics: V K Mehta
2. Digital Electronics: Malvino and Leech
3. Electronic devices: Milman and Halkias
4. Electronic devices: Thomas Flyod
5. Introduction to microprocessors: Gaonkar
6. Microprocessors: B.Ram
7. Digital and Microprocessor: Flyod

Introduction to Semiconductor Devices

Students Enrollment List

Academic Year 2022-23

Sr. No.	Name of the Students	Class
1	Gobade Shushant Ravindra	B.Sc. SY
2	Gumme Rupesh Ramesh	B.Sc. SY
3	Jadhav Dharti Shivraj	B.Sc. SY
4	Sabane Avinash Vitthal	B.Sc. SY
5	Sarule Yogesh Satish	B.Sc. SY
6	Suryawanshi Nilesh Santosh	B.Sc. SY
7	Suryawanshi Shirishkumar Laxman	B.Sc. SY
8	Kokate Nagarjun Ashok	B.Sc. TY
9	Londhe Datta Ram	B.Sc. TY
10	Pathan Avejkan Adamkhan	B.Sc. TY
11	Shinde Shubhangi Shrikant	B.Sc. TY
12	Shinde Vaishnavi Shrikant	B.Sc. TY
13	Suryawanshi Balaji Madhukar	B.Sc. TY

Shivneri Mahavidyalaya Shirur Anantpal Dist. Latur

Department of Physics

Certificate course in Introduction to Semiconductor Devices Attendance Sheet

August 2022

Sr. No.	Name of the Students	Dates																Extra
		2	3	4	5	6	9	10	11	13	16	17	18	20	21	24	25	
1	Gobade Shushant Ravindra	P	P	P	A	P	P	P	A	P	P	P	P	P	P	P	P	P
2	Gumme Rupesh Ramesh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3	Jadhav Dharti Shivraj	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4	Sabane Avinash Vitthal	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
5	Sarale Yogesh Satish	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6	Suryawanshi Nilesh Santosh	A	P	A	P	A	A	P	A	P	A	P	A	P	A	P	A	A
7	Suryawanshi Shirishkumar Laxman	A	P	A	P	A	A	P	A	P	A	P	A	P	A	P	A	A
8	Kokate Nagarjun Ashok	P	P	P	A	P	P	P	A	P	P	P	A	P	P	P	P	P
9	Londhe Datta Ram	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P
10	Parhan Avyikhan Adambhan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
11	Shinde Shubhangi Srikant	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
12	Shinde Vaishnavi Shrikant	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
13	Suryawanshi Balaji Madhukar	P	P	P	P	P	A	P	A	P	A	P	A	P	A	P	A	P


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Department of Physics

Certificate course in Introduction to Semiconductor Devices Attendance Sheet September 2022

Sr. No.	Name of the Students	Dates																
		1	3	6	7	8	10	13	14	15	17	20	21	22	24	Extra		
1	Gobade Shreshant Ravindra	P	P	P	A	P	P	P	A	P	P	P	A	P	P	P		
2	Gurume Rupesh Ramesh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
3	Jadhav Dharti Shivraj	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
4	Sahane Avirash Vitthal	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
5	Saurale Yogesh Satish	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
6	Suryawanshi Nilesh Santosh	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A		
7	Suryawanshi Shirishkumar Lavaman	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A		
8	Kokate Nagarjun Ashok	P	P	P	A	P	P	P	A	P	P	A	P	P	P	P		
9	Londhe Datta Ram	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P		
10	Pathan Azeekhan Adanikhan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
11	Shinde Shaubhaji Shrikant	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
12	Shinde Vaishnavi Shrikant	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
13	Suryawanshi Balaji Madhukar	P	P	P	P	P	A	P	A	P	A	P	A	P	A	A		



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CERTIFICATE

This is to certify that, Mr. **Gobade Sushant Ravindra** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

Hence Certified.

Date: 10.12.2022


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This is to certify that, Mr. **Gumme Rupesh Ramesh** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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This is to certify that, Mr. **Sarule Yogesh Satish** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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This is to certify that, Miss. **Jadhav Dharathi Shivraj** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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This is to certify that, Mr. **Sabane Avinash Vitthal** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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This is to certify that, Mr. **Suryawanshi Nilesh Santosh** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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This is to certify that, Mr. **Suryawanshi ShirishKumar Laxman** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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This is to certify that, Mr. **Kokate Nagarjun Ashok** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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This is to certify that, Mr. **Londhe Datta Ram** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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This is to certify that, Mr. **Pathan Avejkhan Adamkhan** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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This is to certify that, Mr. **Shinde Shubhangi Shrikant** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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This is to certify that, Mr. **Shinde Vaishnavi Shrikant** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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This is to certify that, Mr. **Suryawanshi Balaji Madhukar** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2022-23.

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