

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	Bhawalge Mayuri Arun	B.Sc. SY
2	Sonawane Priti Nilkanath	B.Sc. SY
3	Patil Harshavardhan kishanro	B.Sc. SY
4	Manale Ashvini Deepak	B.Sc. SY
5	Panchal Rajendra Virbhadra	B.Sc. SY
6	Shindalkar Mahesh Sanjay	B.Sc. SY
7	Shindalkar Dinesh Umakant	B.Sc. SY
8	Shindalkar Ganesh Pandit	B.Sc. SY
9	Shinde Omkar Shivaji	B.Sc. SY
10	Shivnerkar Shubhangi Shyam	B.Sc. SY
11	Suryawanshi Sandesh Vaijanath	B.Sc. SY
12	Thombare Rupali Parmeshwar	B.Sc. SY
13	Mudale Prema Shivaji	B.Sc. SY
14	Suryawanshi Ajay Sudhakar	B.Sc. SY
15	Pathan Altfkhan Adamkhan	B.Sc. TY
16	Pawar Sumit Ganesh	B.Sc. TY
17	Shaikh Firoj Samdsab	B.Sc. TY
18	Shinde Srikrishna Bharat	B.Sc. TY

Shivneri Mahavidyalaya Shirur Anantpal Dist. Latur

Department of Physics

Certificate course in Introduction to Semiconductor Devices Attendance Sheet

July 2023

Sr. No.	Name of the Students	Dates																										
		1	4	5	6	8	11	12	13	15	18	19	20	22	25	26	27	Extra										
1	Bhawalge Mayuri Arun	P	P	P	A	P	P	P	A	P	P	P	A	P	P	P	P	P										
2	Sonawane Priti Nilakanth	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										
3	Patil Harshwardhan Kishanrao	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										
4	Mannale Ashvini Deepak	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										
5	Panchal Rajendra Virbhadra	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										
6	Shindalkar Mahesh Sanjay	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A										
7	Shindalkar Dinesh Umakant	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A										
8	Shindalkar Ganesh Pandit	P	P	P	A	P	P	P	A	P	P	A	P	P	P	P	P	P										
9	Shinde Omkar Shivaji	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P										
10	Shindalkar Shubhangi Shyam	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										
11	Suryawanshi Sandesh Vaijanath	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										
12	Thombare Rupali Parmeshwar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										
13	Mudale Preana Shivaji	P	P	P	P	P	P	P	A	P	P	A	P	P	P	P	P	P										
14	Suryawanshi Ajay Sudhakar	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A										
15	Pathan Altafkhun Adanckhan	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A										
16	Pawar Sumit Ganesh	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P										
17	Shaikh Firoj Samadsab	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P										
18	Shinde Shrikrushna Bharat	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										

(Signature)

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CERTIFICATE

This is to certify that, Miss. **Bhawalge Mayuri Arun** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

Hence Certified.

Date: 10.09.2023


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This is to certify that, Miss. **Sonawane Priti Nilknath** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Mr. **Patil Harshvadhan Kishanrao** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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CERTIFICATE

This is to certify that, Miss. **Manale Ashwini Deepak** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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CERTIFICATE

This is to certify that, Mr. **Panchal Rajendra Virbhadra** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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CERTIFICATE

This is to certify that, Mr. **Shindalkar Mahesh Sanjay** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Mr. **Shindalkar Dinesh Umakant** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Mr. **Shindalkar Ganesh Pandit** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Mr. **Shinde Omkar Shivaji** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Miss. **Shivnerkar Shubhangi Shyam** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Mr. **Suryawanshi Sandesh Vaijnath** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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CERTIFICATE

This is to certify that, Miss. **Thombare Rupali Parmeshwar** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Miss. **Mudale Prerana Shivaji** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Mr. **Suryawanshi Ajay Sudhakar** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Mr. **Pathan Altafkhani Adamkhan** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Mr. **Pawar Sumit Ganesh** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Mr. **Shaikh Firoj Samdsab** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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This is to certify that, Mr. **Shinde Shrikrisna Bharat** having successfully completed the Certificate Course in **Introduction to Semiconductor Devices**. Conducted by **Department of Physics**, during the academic year 2023-24.

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