



**Maharashtra State Board of
Secondary & Higher Secondary School, Pune**

Department of Electronics

Bifocal

Subject: Electronics (C2)

Std: XI

Faculty: Science

Syllabus

XI Electronics- I(Theory & Practical)

XI Syllabus

Theory Index

Paper I			
Sr. No.	Units / Topics	Weightage	
		Compulsory	With option
1	Basic Electricity and Network theorem	12	25
2	AC Theory	08	15
3	Electrical Instruments	07	15
4	Electronics Components	23	45
	Total	50	100

Syllabus

Paper I

Sr. No.	Name of the Topic	Scope of Syllabus
1.	Basic Electricity and Network theorem	<ul style="list-style-type: none">• Review of Electricity• Sources of Electricity• Power• Kirchhoff's Law• Superposition Theorem• Thevenin's Theorem• Norton's Theorem• Maximum Power Transfer Theorem• Electromagnetism
2.	AC Theory	<ul style="list-style-type: none">• Comparison of AC with DC• Nature of AC• Generation of AC• Non-sinusoidal waveforms• Resistance in AC Circuits• Capacitor in AC Circuits• Inductor in AC Circuits• Concept of Impedance & Reactance• Series and Parallel Resonance
3.	Electrical Instruments	<ul style="list-style-type: none">• PMMC (Permanent Magnet Moving Coil)• DC milliammeter• DC Voltmeter• Multirange Ammeter & Voltmeter• Voltmeter Sensitivity (Loading effect)• Series & Shunt type Ohmmeter

4.	Electronics Components	<ul style="list-style-type: none">• Resistors• Capacitors• Inductors• Transformers• Relays• Switches• Batteries• Wires• PCB• Breadboard
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