VASANTRAO NAIK MAHAVIDYALAYA

AIRPORT ROAD, CIDCO, AURANGABAD

Department of Computer Science & IT

Introduction to Bifocal Subject in 11ᵗʰ & 12ᵗʰ science

Bifocal Subjects

Electronics

Computer Science

Total Marks 200

100 for Theory
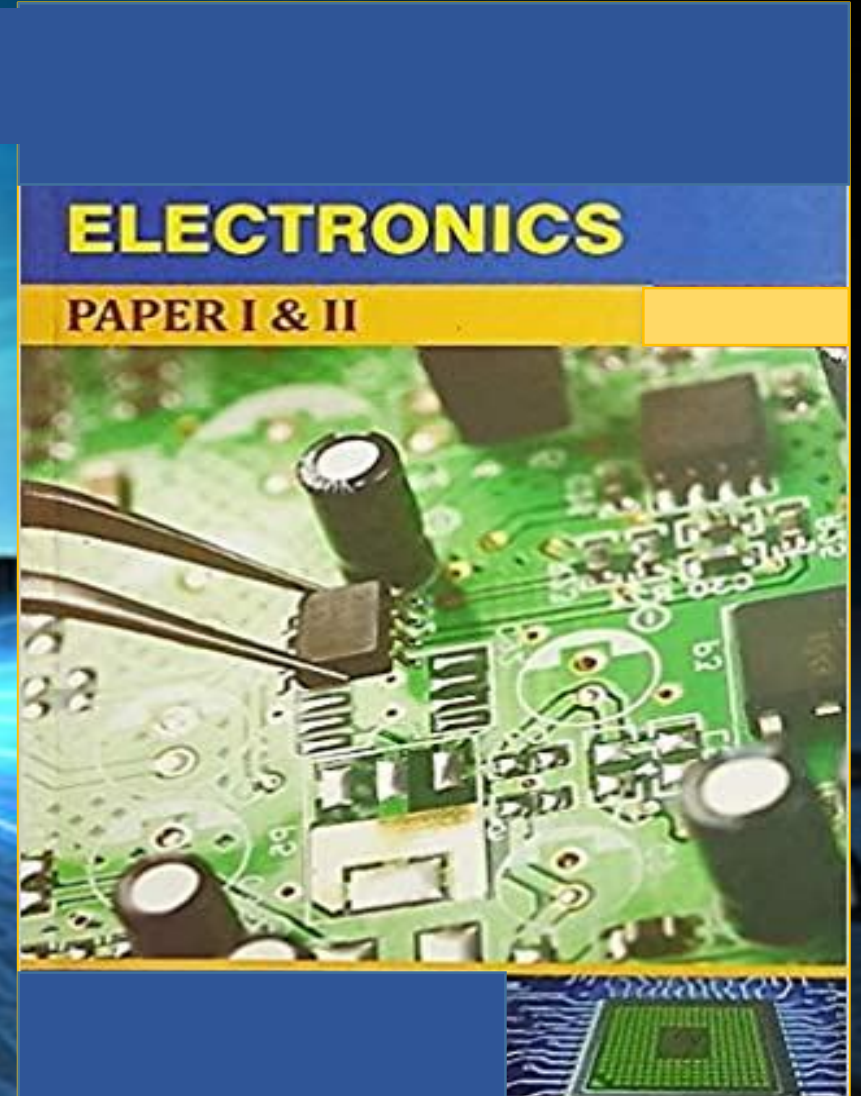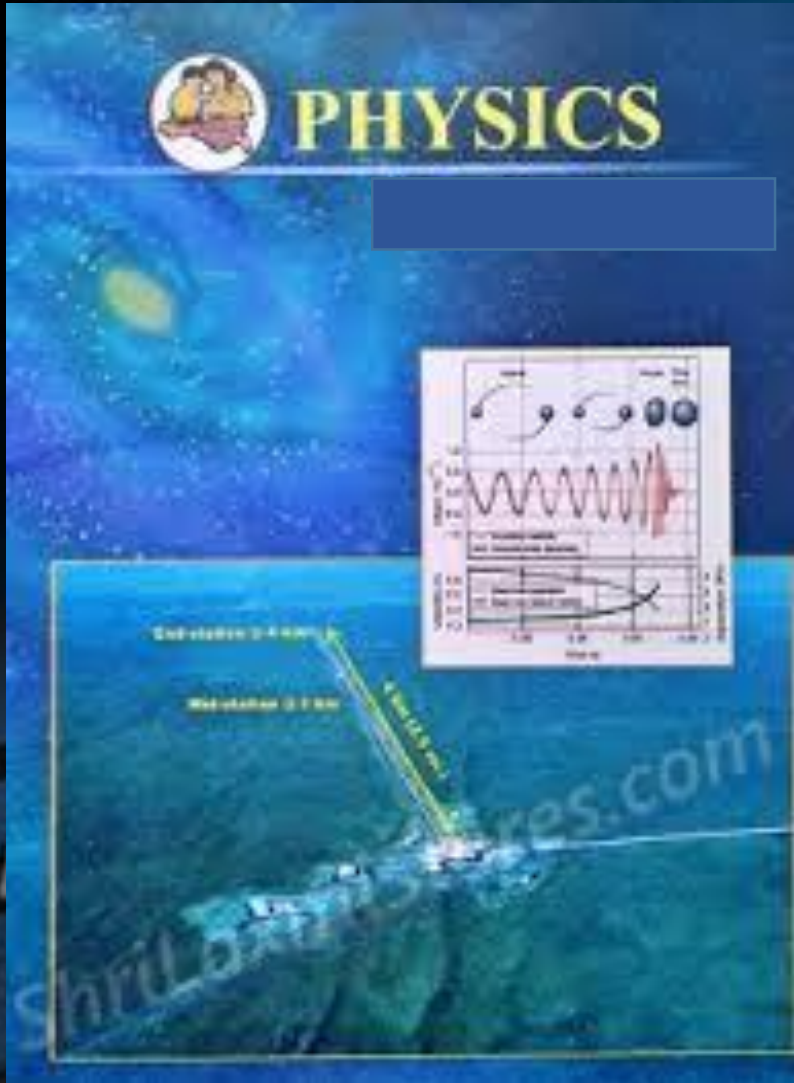
100 for Practical

- *get exposure to Engineering.*
- *Bifocal allow to skip second language and Biology subject during class 11th and 12th ,*
- *It is 200 marks elective subject like – Electronics or Computer science*

SYALLBUS

30% SAME

Courses structure

General science

Bifocal science

Compulsory Subjects	• English • Physics • Chemistry • Maths

Second Language (Any one)	• Marathi • Hindi • Sanskrit • *Information Technology*

Optional Subjects	• Biology • psychology

Compulsory Subjects	• English • Physics • Chemistry • Maths

Optional Subjects	• Electronics • Computer Science

Advantages of Bifocal Subjects

- preparing for competitive exams like JEE & MHT-CET.
- students gets good HSC score
- Bifocal subjects are Scoring subject.
- It helps you in getting direct admission to second year of diploma in the selected branch.

Syllabus

Electronics

➢ 11 th Syllabus

Paper I

1. Source of Power
2. AC Fundamentals
3. Instruments
4. Study of Components

Paper II

1. Semiconductors
2. Study of Transistors
3. Study of Semiconductor components
4. Amplifiers
5. Oscillators

➢ 12 th Syllabus

Paper I

1. Electronic Instruments
2. DC Power supplies
3. Operational Amplifiers
4. Electronic communication
5. Study of Integrated ICs

Paper II

1. Number System
2. Logic Gates
3. Logic Families & IC
4. Multiplexer , Encoder & Decoders
5. Flip- Flop, Counters
6. A/D and D/A Converters
7. Computer Fundamental

Syllabus
Computer Science

❖ **11th Syllabus**

Paper I

1. Number System
2. Program Analysis
3. Introduction to C++
4. Visual Basic
5. Introduction to Networking & Internet

Paper II

1. Study of Components & Circuits
2. Logic gates & Sequential Circuits
3. Fundamental Hardware Parts of PC
4. Peripheral Devices

❖ **12th Syllabus**

Paper I

1. Operating System
2. Data structurs
3. C++ Programming
4. HTML

Paper II

1. Introduction in Microprocessors & Organization of 8085
2. Instruction Set and Programming of 8085
3. Introduction to Intel X-86 Family
4. Introduction to Microcontroller
5. Networking Technology

For More details Contact to : Department of Computer Science Vasantrao Naik Mahavidyalaya, Aurangabad.