

# Syllabus

Paper - I	Practical	Paper - II	Practical
Operating System	No	8085 Micro-Processor	Yes
Data Structure	No	8086 Micro-Processor	No
C++ Programming	Yes	8051 Micro-Controller	No
HyperText Markup Language (HTML)	Yes	Computer Networking	No

## Paper - I

- **Operating System** - Study about how an operating system works. More about the technical understanding of how it works than the features of operating systems. *(Theory)*
- **Data Structure** - We keep storing data on to our computers, but how does the computer actually structures this data inside to store it. Study about various algorithms. *(Theory)*
- **C++** - Most packaged software is still written in C++. That means games, office applications, graphics and video editors, and operating systems. In fact, if you think of the software you use every day that isn't online, chances are it is written in C++ (or C or objective-C).

HSC Syllabus covers almost 90% concepts of another First Year engineering subject Structured Programming Approach. One can say C++ is the entry point to programming and it is still a primary criteria for jobs. *(Theory + Practical)*

- **HyperText Markup Language (HTML)** Basics of Web Development. HTML is a scripting language used to develop web pages and website. Whether its google or facebook or any other site, it has to use HTML. *(Theory + Practical)*

## Paper - II

- **8085 Micro-Processor (Introduction and Programming)** - 8085 is an early processor. HSC syllabus includes study about the architecture of 8085, its instructions (Commands), various components and programming on 8085 trainer kits. *(Theory + Practicals)*
- **8086 Micro-Processor** - Another processor that came after 8085, more powerful and more successful. Study about the features of 8086 and variations. *(Theory)*
- **8081 Micro-Controller** - A micro controller is also a chip. It has a processor inside of it. A device like a remote control is an application of a micro controller. Study of the features and its applications is covered in the HSC syllabus. *(Theory)*
- **Computer Networking** - Study of various types of networks whether cabled or wireless. Study of devices which make the internet happen. *(Theory)*

## Examination Pattern

Theory Examination		Practical Examination
Theory Questions	Programs	Program
Paper - I (40m)	Paper - I (2 x 5 = 10m)	Paper - I (50m)
Paper - II (40m)	Paper - II (2 x 5 = 10m)	Paper - II (50m)
<b>Total 200 Marks</b>		

**\*Please note:**

- The 120 marks of programming come from three chapters HTML, C++ & 8085 Microprocessors.
- Additional theory questions of 40 marks come from these three chapters.
- This makes computer science a very scoring subject with comparatively less time investment.

## Impact On H.S.C Score

$$\begin{aligned} &= (\text{Computer Science} / \text{Total HSC Marks}) \times 100 \\ &= (200 / 650) \times 100 \\ &= 31\% \end{aligned}$$