



Maharashtra State Board of Secondary & Higher Secondary School, Pune

Department of Computer Science

Subject: Computer Science (D9)

Std: Twelve

Faculty: Science

*** Syllabus***

XII Computer Science Paper-II (Theory & Practical)

Theory Index

Sr. No.	Unit/Topic	Weightage
1	Introduction to Microprocessors and Organization of 8085	21
2	Instruction Set of and Programming of 8085	43
3	Instruction to INTEL X-86 Family	04
4	Introduction to Microcontroller	08
5	Networking Technology	18

Syllabus

Sr. No.	Name of the Topic	Scope of Syllabus
1	Introduction to Microprocessors and Organization of 8085	Evolution of Microprocessors. What is Microprocessor? 1.3. Block Diagram of generic microprocessor, 8085 and study of various blocks in it. 1.4 Study of various blocks and functions of various pins in 8085 microprocessor.
2	Instruction Set and Programming of 8085	2.1 Addressing modes in 8085. 2.2 Programming model of 8085. 2.3 Study of Instruction set:- Data Transfer, Arithmetic, Logic, Branching, Stack, I/O and Machine Control Instructions. 2.4 Assembly language programming based on Instructions.
3	Instruction to INTEL X-86 Family	Introduction to advanced microprocessors Introduction to X-86 family and study of major attributes of the X-86 family Processor. Programming model of X-86 family of microprocessors.
4	Introduction to Microcontroller	Introduction to Microcontroller. Study of 8051 architecture and programming model. Overview of other microcontrollers in 8051. Applications of microcontrollers.
5	Networking Technology	Study Of Transmission Media Network Topologies. Protocols. Introduction to Connectivity Devices. Modem, Hubs, Repeaters, Routers.
	Paper-II Practicals	Assembly Language Program
	Appendix	8085 Instruction Set and Opcode Chart Html Tags
	Question Papers	HSC Board Papers for Paper-I and Paper -II

Practical Index

Sr. No.	Practical's Name
1	Introduction to Microprocessor 8085
2	Addition of Two 8 bit Numbers
3	Substraction of Two 8 bit numbers
4	Multiplication of Two 8 bit numbers
5	Division of Two 8 bit numbers
6	Find the First Occurrence of number
7	Find the count of the number of times data 0A is found
8	Exchange the contetns between two memory location
9	Copy the contents from one memory location to another
10	Transfer the contents in Reverse order from one memory location to another
11	Find Odd and Even numbers from memory location
12	Add 2- BCD number

References:-

1. TPS Computer Science-II. (Prof. Preyas Chinchure, Prof.Shweta Jawale, Prof.Jagdish Vyas)
2. XII Computer Science
Computer Software (P-1),Computer Hardware (P-2), A Text Book on Theory and Practical.
F.Y.J.C Bifocal Computer Science JEE Based Text Book (Paperback, R.D.Supekar)