

ENGINEERING AND TECHNOLOGY GROUP

ELECTRONICS TECHNOLOGY

Scheme of Examination

Std. XII

Paper	Title of the Paper	Theory		Practical		Term work	Project work	I.V. *	OJT **	Total Marks
		Marks	Time (Hrs)	Marks	Time (Hrs)					
3	Computer Hardware & Networking	80	3	80	3	10	10	10	10	200

* IV = Industrial Visits

** OJT = On Job Training

Paper III: Computer Hardware and Networking

Sr. No.	Unit	Sub-unit	Periods
1.	Introduction to Microprocessor and Organization	1.1 Introduction and Evolution of microprocessor	15
		1.2 Basic Blocks of microprocessor	
		1.3 Architecture of 8085 microprocessor	
		1.4 Functional pin diagram of 8085	
		1.5 Introduction to advance microprocessor	
2.	Instruction Set and programming of 8085	2.1 Addressing modes of 8085	20
		2.2 Instruction set of 8085	
		2.3 Interrupts in 8085	
		2.4 Assembly language Programming	
3.	Microcontrollers	3.1 Introduction to Microcontroller	12
		3.2 Advantages over microprocessor	
		3.3 Architecture of 8051	
		3.4 Overview of other microcontrollers	
		3.5 Applications of microcontrollers	
4.	Networking Technology	4.1 Study of transmission Lines	12
		4.2 Network types and topologies	
		4.3 Protocols	
		4.4 Introduction to connectivity devices	
5.	Fundamentals of Computer	5.1 Basic blocks of computer	28
		5.2 Memories in Computers	
		5.3 Overview of motherboard	
		5.4 Specifications of Computer	
		5.5 Computer assembly and installation of peripheral devices.	
		5.6 Trouble shooting and AMC	
		5.7 Up gradation and security system.	
		5.8 Laptop	
6.	Operating Systems	6.1 Introduction to operating systems	15
		6.2 Services in OS	
		6.3 Types of OS such as windows-7, windows-8, Linux	
		6.4 Access and Security aspects of OS	
7.	C-Language	7.1 Introduction	12
		7.2 Constants, Variable and data types	
		7.3 Operators Loops, Array,	
		7.4 Character strings and user defined function, Simple programs.	
8.	PLC	8.1 Introduction to PLC	10
		8.2 Block diagram of PLC	
		8.3 Principle, Working of PLC	
Total Marks			120