

ENGINEERING AND TECHNOLOGY GROUP

ELECTRONICS TECHNOLOGY

Scheme of Examination

Std. XI

Paper	Title of the Paper	Theory		Practical		Term work	Project work	I.V. *	Total Marks
		Marks	Time (Hrs)	Marks	Time (Hrs)				
2	Basic Electronics	80	3	80	3	20	10	10	200

* IV = Industrial Visits

Paper II : Basic Electronics

Practicals

Sr. No.	List of Practicals	Periods
1.	Identification of different types of diodes (LED, PHOTO, PN-junction, ZENER, etc)	9
2.	Testing of diode using analog and digital multimeter.	9
3.	Study of V-I characteristics of PN junction diode.	9
4.	Construct and test Halfwave rectifier.	9
5.	Construct and test Full wave center tapped/Bridge rectifier	9
6.	Study of LC filter and it's ripple factor.	9
7.	Study of LC filter and its ripple factor.	9
8.	Find Line and Load regulation of unregulated power supply.	9
9.	Construct and test Zener diode as voltage regulator.	9
10.	Study of Fixed voltage regulator (using IC-7805/7809/7912 etc)	9
11.	Construct adjustable voltage regulator using IC-LM317).	9
12.	Identification of different types of transistors (UJT, BJT, FET, Power)	9
13.	Study input characteristics of CE transistor configuration.	9
14.	Study output characteristics of CE transistor configuration.	9
15.	Construct Hartley oscillator using transistor.	9
16.	Construct Colpitt's oscillator using transistor.	9
17.	Construct phase shift oscillator using transistor.	9
18.	Study of crystal oscillator.	9
19.	Study of diac, triac, SCR.	9
20.	UPS Installation and identification of each part	9
21.	Construct and test simple inverter circuit used in emergency light	9
22.	Project, Industrial Visit	51
	Total	240