7. STUDY AND EVALUATION SCHEME FOR DIPLOMA PROGRAMME IN ELECTRONICS & INSTRUMENTATION

FIRST SEMESTER

Sr. No	Subject	L	T	P	EVALUATION SCHEME						Total Marks
		Hrs/week			Internal Assessment		External Assessment (Examination)				
					Theory	Practical	Written Paper		Practical		
					Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
1.1*	Communication Skills -I	3	-	2	25	25	100	3	50	2	200
1.2*	Applied Mathematics-I	5	-	-	50	-	100	3	-	-	150
1.3*	Applied Physics – I	4	-	2	25	25	100	3	50	3	200
1.4*	Applied Chemistry – I	3	-	2	25	25	100	3	50	3	200
1.5*	Basics of Information Technology	-	-	4	-	50	-	-	100	3	150
1.6*	Engineering Drawing-I	-	-	6	-	50	100	3	25 (Viva)	2	175
1.7*	General Workshop Practice - I	-	-	6	-	50	-	-	+100	3	150
# Student Centred Activities		-	-	3	-	25	-	-	-	-	25
Total		15	-	25	125	250	500	-	375	-	1250

***** Common with other diploma programmes

\+ Includes 25 marks for Viva-voce

\# Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.

SECOND SEMESTER (ELECTRONICS AND INSTRUMENTATION)

Sr. No	Subject	L T P Hrs/week			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
					Theory	Practical	Written Paper		Practical		
					Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
2.1*	Communication Skills –II	3	-	2	25	25	100	3	50	2	200
2.2*	Applied Mathematics-II	5	-	-	50	-	100	3	-	-	150
2.3*	Applied Physics – II	4	-	2	25	25	100	3	50	3	200
2.4*	Applied Chemistry – II	3	-	2	25	25	100	3	50	3	200
2.5**	Basic Electrical Engineering	3	-	2	25	25	100	3	50	3	200
2.6**	Analog Electronics – I	4	-	2	25	25	100	3	50	3	200
2.7*	General Workshop Practice - II	-	-	6	-	50	-	-	+100	3	150
# Student Centred Activities		-	-	2	-	25	-	-	-	-	25
Total		22	-	18	175	200	600	-	350	-	1325

***** Common with other diploma programmes

** Common with Electronics and Communication Engineering, Computer Engineering, Medical Electronics and Instrumentation and Control

\+ Includes 25 marks for Viva-voce

\# Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.

THIRD SEMESTER (ELECTRONICS AND INSTRUMENTATION)

Sr. No	Subject	STUDY SCHEME Hrs/week			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
					Theory	Practical	Written Paper		Practical		
		L	T	P	Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
3.1*	Basics of Control Systems	4	-	3	25	25	100	3	50	3	200
3.2*	Electrical and Electronics Materials and Components	4	-	-	50	-	100	3	-	-	150
3.3**	Electronic Instruments and Measurements	3	-	3	25	25	100	3	50	3	200
3.4*	Principles of Instrumentation	3	-	3	25	25	100	3	50	3	200
3.5*	Electrical Machines	3	-	3	25	25	100	3	50	3	200
3.6*	Fundamentals of Digital Electronics	3	-	3	25	25	100	3	50	3	200
# Student Centred Activities		-	-	5	-	25	-	-	-	-	25
Total		20		20	175	150	600		250		1175

***** Common with diploma programme in Instrumentation and Control

** Common with diploma programme in Electronics and Communication Engineering

Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.

FOURTH SEMESTER (ELECTRONICS AND INSTRUMENTATION)

Sr. No	Subject	STUDY SCHEME Hrs/week			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
					Theory	Practical	Written Paper		Practical		
		L	T	P	Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
4.1**	Microprocessors, Microcontrollers and their Application	4	-	3	25	25	100	3	50	3	200
4.2**	Transducers and Signal conditioning	3	-	3	25	25	100	3	50	3	200
4.3	Linear and Digital Integrated Circuits	3	-	3	25	25	100	3	50	3	200
4.4**	Communication and Telemetry	3	-	3	25	25	100	3	50	3	200
4.5	Electronics and Instrumentation Workshop	-	-	4	-	50	-	-	50	3	100
4.6**	Computer Programming and Applications	2	-	4	25	25	100	3	50	3	200
	# Student Centred Activities	-	-	5	-	25	-	-	-	-	25
	Total	15		25	125	200	500		300		1125

** Common with diploma programme in Instrumentation and Control

Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.

Industrial Training - After examination of 4th Semester, the students shall go for training in a relevant industry/field organization for a minimum period of 4 weeks and shall prepare a diary. It shall be evaluated during 5th semester by his/her teacher for 50 marks. The students shall also prepare a report at the end of training and shall present it in a seminar, which will be evaluated for another 50 marks. This evaluation will be done by HOD and lecturer incharge – training in the presence of one representative from training organization.

FIFTH SEMESTER (ELECTRONICS AND INSTRUMENTATION)

Sr. No	Subject	STUDY SCHEME Hrs/week L	T	P	EVALUATION SCHEME Internal Assessment Theory Max. Marks	Internal Assessment Practical Max. Marks	External Assessment (Examination) Written Paper Max. Marks	Written Paper Hrs	Practical Max. Marks	Practical Hrs	Total Marks
	Industrial Training	**-**	**-**	**-**	**-**	**50**	**-**	**-**	**50**		**100**
5.1*	Employability Skills - I	-	-	2	-	25	-	-	50	3	75
5.2**	Power Electronics	3	-	3	25	25	100	3	50	3	200
5.3**	Analytical and Environmental Instruments	4	-	3	25	25	100	3	50	3	200
5.4**	Process Instrumentation	4	-	3	25	25	100	3	50	3	200
5.5**	Process Control	4	-	3	25	25	100	3	50	3	200
5.6*	Environmental Education	3	-	-	25	-	100	3	-	-	125
5.7	Minor Project Work	-	-	3		100	-	-	50	3	150
# Student Centred Activities including Personality Development Camp		-	-	5	-	25	-	-	-	-	25
Total		18	-	22	125	300	500	-	350	-	1275

***** Common with other diploma programmes

** Common with diploma programme in Instrumentation & Control

Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.

SIXTH SEMESTER (ELECTRONICS AND INSTRUMENTATION)

Sr. No	Subject	STUDY SCHEME Hrs/week			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
					Theory	Practical	Written Paper		Practical		
		L	T	P	Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
6.1 *	Employability Skills - II	-	-	2	-	25	-	-	50	3	75
6.2 **	PLC,DCS and SCADA	4	-	3	25	25	100	3	50	-	200
6.3	Elective	4	-	3	25	25	100	3	50	-	200
6.4**	Biomedical Instrumentation	4	-	3	25	25	100	3	50	-	200
6.5*	Entrepreneurship Development and Management	3	-	-	25	-	100	3	-	-	125
6.6	Major Project Work	-	-	9	-	100	-	-	100		200
	# Student Centred Activities	-	-	5	-	25	-	-	-	-	25
	Total	15		25	100	225	400		300		1025

***** Common with other diploma programmes

** Common with diploma programme in Instrumentation and Control

Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.

Elective - To choose one from the following:

1. Data Communication Networks 2. Optical Communication 3. Troubleshooting of Electronic Equipment