

Study & Evaluation Scheme for Diploma Programme in Instrumentation and Control

(For the State of Haryana)

First Semester (I & C)

Sr. No.	Subject	Study Scheme 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	Hr	
1.1*	Communication Skill – I	3	-	2	25	25	100	3	50	2	200
1.2*	Applied Mathematics –I	4	1	-	50	-	100	3	-	-	150
1.3*	Applied Physics-I	4	-	2	25	25	100	3	50	3	200
1.4*	Applied Chemistry-I	2	-	2	25	25	100	3	50	3	200
1.5*	Basic 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		-	-	4	-	25	-	-	-	-	25
Total		13	1	25	125	250	500		375		1250

* Common with that of other Diploma Programmes

**Including 25 marks for Viva-voce

#Student Centred Activities will comprise of various co-curricular activities like game, hobby club, seminars, declamation contest, extension lectures, field visits, NCC, NSS and cultural activities etc.

Study & Evaluation Scheme

Second Semester (I & C)

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	Hr	
2.1*	Communication Skill – II	3	-	2	25	25	100	3	50	2	200
2.2*	Applied Mathematics – II	4	1	-	50	-	100	3	-	-	150
2.3*	Applied Physics-II	3	-	2	25	25	100	3	50	3	200
2.4*	Applied Chemistry-II	2	-	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	2	200
2.7*	General Workshop Practice-II	-	-	6	-	50	-	-	**100	3	150
# Student Centered Activities		-	-	4	-	25	-	-	-	-	25
Total		19	1	20	175	200	600		350		1325

* Common with that of other Diploma Programmes

**Including 25 marks for Viva-voce

+Common with that of Diploma Programmes in ECE, Comp Engg., IT

#Student Centred Activities will comprise of various co-curricular activities like game, hobby club, seminars, declamation contest, extension lectures, field visits, NCC, NSS and cultural activities etc.

Study & Evaluation Scheme

Third Semester (I & C)

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	Hr	
3.1	Control System	5	-	2	25	25	100	3	50	2	200
3.2+	Electronic Components and Materials (ECM)	4	-	-	25	25	100	3	50	3	200
3.3	Test and Measuring Instruments	4	-	2	25	25	100	3	50	2	200
3.4	Principal of Instrumentation	4	-	2	25	25	100	3	50	2	200
3.5+	Electrical Machines	3	-	-	25	25	100	3	50	2	200
3.6	Fundamentals of Digital Electronics	4	-	3	25	25	100	3	50	2	200
# Student Centered Activities		-	-	4	-	25	-	-	-	-	25
Total		24	-	16	150	175	600	-	300	-	1225

+Common with ECE

#Student Centred Activities will comprise of various co-curricular activities like game, hobby club, seminars, declamation contest, extension lectures, field visits, NCC, NSS and cultural activities etc.

Study & Evaluation Scheme

Fourth Semester (I&C)

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	Hr	
4.1	Microprocessors and Applications	4	-	2	25	25	100	3	50	2	200
4.2	Transducers and Signal Conditioning	4	-	2	25	25	100	3	50	2	200
4.3	Computer Programming and Application	2	-	4	25	25	100	3	50	2	200
4.4	Advanced Control System	4	-	2	25	25	100	3	50	2	200
4.5	Principles of Telemetry	4	-	2	25	25	100	3	50	2	200
4.6	Instrumentation Workshop	-	-	6	-	50	-	-	50	2	100
# Student Centered Activities		-	-	4	-	25	-	-	-	-	25
Total		18	-	22	125	200	500	-	300	-	1125

#Student Centred Activities will comprise of various co-curricular activities like game, hobby club, seminars, declamation contest, extension lectures, field visits, NCC, NSS and cultural activities etc.

Study & Evaluation Scheme

Fifth Semester (I&C)

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	Hr	
5.1	Bio-Medical Instrumentation	5	-	-	50	-	100	3	50	2	200
5.2+	Power Electronics	4	-	2	25	25	100	3	50	2	200
5.3	Elective-I	5	-	-	50	-	100	3	50	2	200
5.4	Process Control	5	-	3	25	25	100	3	50	2	200
5.5	Process Instrumentation	5	-	2	25	25	100	3	50	2	200
5.6	Minor Project Work	-	-	5	-	100	-	-	100	2	200
# Student Centered Activities		-	-	4	-	25	-	-	-	-	25
Total		24	-	16	175	200	500	-	350	-	1225

Elective-I a) Intelligent Instrumentation (Virtual Instrumentation)

b) Advanced Microprocessors

c) Opto Electronic Devices and Applications

d) Advanced Measurement Techniques

* Common with ECE

#Student Centred Activities will comprise of various co-curricular activities like game, hobby club, seminars, declamation contest, extension lectures, field visits, NCC, NSS and cultural activities etc.

Study & Evaluation Scheme

Sixth Semester (I&C)

Sr. No.	Subject	L T P			Evaluation Scheme						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Theory	Practical	Written Paper	Practical						
		Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hr				
6.1	Computer Aided Instrumentation	4	-	3	25	25	100	3	50	2	200
6.2	Micro-Controller and PLC Based Instrumentation	4	-	2	25	25	100	3	50	2	200
6.3	Elective II	4	-	-	50	-	100	3	-	-	150
6.4	Analytical and Environmental Instrumentation	4	-	-	-	50	100	3	-	-	150
6.5	Entrepreneurship Development and Management	3	-	-	-	50	100	3	-	-	150
6.6	Major Project Work	-	-	12	-	100	-	-	100	2	200
# Student Centered Activities		-	-	4	-	25	-	-	-	-	25
Total		19	-	21	100	275	500	-	200	-	1075

Elective-II a) Advanced Biomedical Instrumentation b) DCS/SCADA c) Quality and Reliability

*Common with other Diploma Programmes

#Student Centred Activities will comprise of various co-curricular activities like game, hobby club, seminars, declamation contest, extension lectures, field visits, NCC, NSS and cultural activities etc.