

**7. STUDY AND EVALUATION SCHEME FOR DIPLOMA PROGRAMME IN
CIVIL ENGINEERING (SPL. HIGHWAY ENGINEERING)**

FIRST SEMESTER

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Hrs/week			Theory	Practical	Written Paper		Practical		
		L	T	P	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 - CIVIL ENGINEERING (SPL. HIGHWAY ENGINEERING)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Hrs/week			Theory	Practical	Written Paper		Practical		
		L	T	P	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**	Applied Mechanics	3	-	2	25	25	100	3	50	3	200
2.6*	Engineering Drawing - II	-	-	6	-	50	100	3	25 (Viva)	2	175
2.7*	General Workshop Practice - II	-	-	6	-	50	-	-	+100	3	150
#	Student Centred Activities	-	-	2	-	25	-	-	-	-	25
Total		18	-	22	150	225	600	-	325	-	1300

* Common with other diploma programmes

** Common with diploma programme in Mechanical Engineering

+ 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 - CIVIL ENGINEERING (SPL. HIGHWAY ENGINEERING)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Hrs/week			Theory	Practical	Written Paper		Practical		
		L	T	P	Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
3.1	Fluid Mechanics	3	-	2	25	25	100	3	50	3	200
3.2	Structural Mechanics	4	-	2	25	25	100	3	50	3	200
3.3	Surveying – I	2	-	5	25	25	100	3	50	3	200
3.4	Construction Materials	4	-	2	25	25	100	3	50	3	200
3.5	Building Construction	5	-	2	25	25	100	3	50	3	200
3.6	Civil Engineering Drawing -I	-	-	4	-	50	-	-	100	3	150
# Student Centered Activities		-	-	5	-	25	-	-	-	-	25
Total		18	-	22	125	200	500	-	350	-	1175

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 - CIVIL ENGINEERING (SPL. HIGHWAY ENGINEERING)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Hrs/week			Theory	Practical	Written Paper		Practical		
		L	T	P	Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
4.1	Concrete Technology	3	-	2	25	25	100	3	50	3	200
4.2	Water Supply and Waste Water Engineering	5	-	2	25	25	100	3	50	3	200
4.3	Irrigation Engineering	4	-	-	50	-	100	3	-	-	150
4.4	Surveying – II	2	-	6	25	25	100	3	50	3	200
4.5	RCC Design	5	-	-	50	-	100	3	-	-	150
4.6	Civil Engineering Drawing-II	-	-	6	-	50	-	-	100	3	150
# Students Centered Activities including Entrepreneurial Awareness Camp		-	-	5	-	25	-	-	-	-	25
Total		19		21	175	150	500	-	250	-	1075

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.

Note: Survey camp will be held after 4th semester for minimum 15 days in a sub mountainous area away from polytechnic preferably in camp conditions. Details are given at Sr. No. 5.3 in 5th Semester.

FIFTH SEMESTER - CIVIL ENGINEERING (SPL. HIGHWAY ENGINEERING)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Hrs/week			Theory	Practical	Written Paper		Practical		
		L	T	P	Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
5.1	Steel Structure Design	5	-	-	50	-	100	3	-	-	150
5.2	Highway Engineering	5	-	2	25	25	100	3	50	3	200
5.3	Survey Camp	-	-	-	-	50	-	-	50	3	100
5.4	Computer Applications in Highway Engineering	-	-	3	-	50	-	-	100	3	150
5.5	Soil and Foundation Engineering	4	-	2	25	25	100	3	50	3	200
5.6 *	Environmental Education	3	-	-	25	-	100	3	-	-	125
5.7	Structural Drawing	-	-	6	-	50	-	-	100	3	150
5.8 *	Employability Skills – I	-	-	2	-	25	-	-	50	3	75
5.9	Traffic Engineering	3	-	-	25	-	100	3	-	-	125
#	Student Centered Activities including Personality Development Camp	-	-	5	-	25	-	-	-	-	25
Total		20	-	20	150	250	500	-	400	-	1300

* Common with other diploma programmes

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 - CIVIL ENGINEERING (SPL. HIGHWAY ENGINEERING)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Hrs/week			Theory	Practical	Written Paper		Practical		
		L	T	P	Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
6.1	Earthquake Resistant Building Construction	3	-	-	50	-	100	3	-	-	150
6.2	Railways, Bridges and Tunnels	5	-	-	50	-	100	3	-	-	150
6.3	Quantity Surveying & Valuation	5	-	-	50	-	100	3	-	-	150
6.4	Construction Management & Accounts	5	-	-	50	-	100	3	-	-	150
6.5	Highway Construction and Maintenance	3	-	-	50	-	100	3	-	-	150
6.6 *	Employability Skills - II	-	-	2	-	25	-	-	50	3	75
6.7	Major Project Work	-	-	12	-	100	-	-	100	3	200
# Student Centred Activities		-	-	5	-	25	-	-	-	-	25
Total		21	-	19	250	150	500	-	150	-	1050

* Common with other diploma programmes

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.