7. STUDY AND EVALUATION SCHEME FOR DIPLOMA PROGRAMME IN MECHANICAL ENGINEERING (CNC)

FIRST SEMESTER

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
					Theory	Practical	Written Paper		Practical		
		Hrs/week			Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
		L	T	P							
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 MECHANICAL ENGINEERING (CNC)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
					Theory	Practical	Written Paper		Practical		
		Hrs/week			Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
		L	T	P							
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 Civil 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 MECHANICAL ENGINEERING (CNC)

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
3.1**	Strength of Materials	4	-	2	25	25	100	3	50	3	200
3.2**	Thermodynamics	4	-	2	25	25	100	3	50	3	200
3.3**	Basics of Electrical and Electronics Engineering	3	-	2	25	25	100	3	50	3	200
3.4**	Workshop Technology – I	3	-	-	50	-	100	3	-	-	150
3.5**	Machine Drawing	-	-	6	-	50	100	3	25 (Viva)	2	175
3.6**	Workshop Practice – I	-	-	9	-	100	-	-	100	3	200
Student Centred Activities#		-	-	5	-	25	-	-	-	-	25
Total		**14**	**-**	**26**	**125**	**250**	**500**	**-**	**275**	**-**	**1150**

** Common with diploma programmes in Mechanical Engineering/Production 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 MECHANICAL ENGINEERING (CNC)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
					Theory	Practical	Written Paper		Practical		
		Hrs/week			Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
		L	T	P							
4.1 **	Materials and Metallurgy	3	-	2	25	25	100	3	50	3	200
4.2 *	Hydraulics and Hydraulic Machines	3	-	2	25	25	100	3	50	3	200
4.3 *	I.C. Engines	3	-	2	25	25	100	3	50	3	200
4.4 **	Machine Design and Drawing	2	-	6	25	25	100	3	25 (Viva)	3	175
4.5 **	Workshop Technology – II	3	-	-	25	-	100	3	-	-	125
4.6 **	Workshop Practice – II	-	-	9	-	100	-	-	100	3	200
Student Centred Activities #		-	-	5	-	25	-	-	-	-	25
Total		**14**	**-**	**26**	**125**	**225**	**500**	**-**	**275**	**-**	**1125**

* Common with diploma programme in Mechanical Engineering

** Common with diploma programmes in Mechanical Engineering/Production 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.

Industrial Training - After examination of 4th Semester, the students shall go for training in a relevant industry/field organization for a minimum period of one month 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 MECHANICAL ENGINEERING (CNC)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
					Theory	Practical	Written Paper		Practical		
		Hrs/week			Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
		L	T	P							
Industrial Training		-	-	-	-	50	-	-	50	3	100
5.1 **	Theory of Machines	4	-	-	25	-	100	3	-	-	125
5.2	Basics of CNC Machines	4	-	2	25	25	100	3	50	3	200
5.3 *	Employability Skills – I	-	-	2	-	25	-	-	50	3	75
5.4 *	Environmental Education	3	-	-	25	-	100	3	-	-	125
5.5	Maintenance of CNC Machines	3	-	2	25	25	100	3	50	3	200
5.6 **	Workshop Technology – III	3	-	-	25	-	100	3	-	-	125
5.7 **	Workshop Practice – III	-	-	9	-	100	-	-	100	3	200
5.8 **	Computer Aided Drafting	-	-	2	-	50	-	-	50	3	100
Student Centred Activities#		-	-	6	-	25	-	-	-	-	25
Total		**17**	**-**	**23**	**125**	**300**	**500**	**-**	**350**	**-**	**1275**

***** Common with other diploma programmes

****** Common with diploma programmes in Mechanical Engineering/Production 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.

SIXTH SEMESTER MECHANICAL ENGINEERING (CNC)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
					Theory	Practical	Written Paper		Practical		
		Hrs/week			Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
		L	T	P							
6.1	CNC Part Programming	3	-	2	25	25	100	3	50	3	200
6.2 **	Inspection & Quality Control	4	-	2	25	25	100	3	50	3	200
6.3 **	Industrial Engineering	4	-	-	25	-	100	3	-	-	125
6.4 *	Entrepreneurship Development and management	3	-	-	25	-	100	3	-	-	125
6.5 *	Employability Skills – II	-	-	2	-	25	-	-	50	3	75
6.6	Project Work	-	-	15	-	100	-	-	100	3	200
Student Centred Activities #		-	-	5	-	25	-	-	-	-	25
Total		**14**	**-**	**26**	**100**	**200**	**400**	**-**	**250**	**-**	**950**

***** Common with other diploma programmes

****** Common with diploma programmes in Mechanical Engg./ Production 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.