

**7. STUDY AND EVALUATION SCHEME FOR DIPLOMA PROGRAMME IN
MECHANICAL ENGINEERING (TOOL AND DIE)**

FIRST SEMESTER

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Theory		Practical		Written Paper		Practical			
		Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs				
Periods/week		L	T	P							
1.1	*Communication Skills - I				3	-	2	25	25	100	3
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 (TOOL AND DIE)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Theory	Practical	Written Paper		Practical					
		Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs				
Periods/week		L	T	P							
2.1	*Communication Skills – II				3	-	2	25	25	100	3
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 (TOOL AND DIE)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Periods/week			Theory	Practical	Written Paper		Practical		
		L	T	P	Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	
		3.1	**Strength of Materials	4	-	2	25	25	100	3	
3.2	+ Press Tool-Design and Drawing	2	-	4	-	50	100	3	-	-	150
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		12	-	28	100	275	500	-	225	-	1100

+ The Question Paper will consist of 2 parts: Section A and Section B. Section A will contain theory contents to the extent of 50%. Section B will contain design and Drawing to the extent of 50%.

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

Student Centered 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 (TOOL AND DIE)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Theory	Practical	Written Paper		Practical					
		Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs				
Periods/week		L	T	P	Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs	Total Marks
4.1	**Materials and Metallurgy										
4.2	***Hydraulic and Pneumatic Systems	4	-	2	25	25	100	3	50	3	200
4.3	+ Jigs, Fixtures and Gauges – Design and Drawing	3	-	2	-	50	100	3	-	-	150
4.4	Basics of Mechanical Engineering	3	-	2	25	25	100	3	50	3	200
4.5	**Workshop Technology – II	3	-	-	25	-	100	3	-	-	125
4.6	**Workshop Practice – II	-	-	9	-	100	-	-	100	3	200
4.7	**Computer Aided Drafting	-	-	3	-	50	-	-	50	3	100
# Student Centered Activities		-	-	4	-	25	-	-	-	-	25
Total		16	-	24	100	300	500	-	300	-	1200

** Common with diploma programme in Mechanical Engineering and Production Engineering

*** Common with diploma programme in Production Engineering

+ The Question Paper will consist of 2 parts: Section A and Section B. Section A will contain theory contents to the extent of 50%. Section B will contain design and Drawing to the extent of 50%.

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.

FIFTH SEMESTER - MECHANICAL ENGINEERING (TOOL AND DIE)

Sr. No	Subject	L T P Periods/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	
-	Industrial Training for 4 weeks during vacations	-	-	-	-	50	-	-	50	3	100
5.1	Heat Treatment	2	-	2	25	25	100	3	50	3	200
5.2	+Plastic Mould-Design and Drawing	2	-	4	-	50	100	3	-	-	150
5.3	*Employability Skills – I	-	-	2	-	25	-	-	50	3	75
5.4	*Environmental Education	3	-	-	25	-	100	3	-	-	125
5.5	** CNC Machines and Automation	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	Estimating & Costing	3	-	-	25	-	100	3	-	-	125
# Student Centred Activities		-	-	5	-	25	-	-	-	-	25
Total		16	-	24	125	300	600	-	300	-	1325

* Common with Other Diploma Programmes

** Common with diploma programme in Mechanical Engineering and Production Engineering

+ The Question Paper will consist of 2 parts: Section A and Section B. Section A will contain theory contents to the extent of 50%. Section B will contain design and Drawing to the extent of 50%.

Student Centered 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 (TOOL AND DIE)

Sr. No	Subject	STUDY SCHEME			EVALUATION SCHEME						Total Marks
					Internal Assessment		External Assessment (Examination)				
		Theory	Practical	Written Paper		Practical					
		Max. Marks	Max. Marks	Max. Marks	Hrs	Max. Marks	Hrs				
Periods/week		L	T	P							
6.1	+Forging & Casting dies- Design and Drawing				3	-	4	-	50	100	3
6.2	**Inspection and 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	Tool Room Practice	-	-	4	-	50	-	-	50	3	100
6.7	Project Work	-	-	8	-	100	-	-	100	3	200
# Student Centred Activities		-	-	6	-	25	-	-	-	-	25
Total		14	-	26	75	275	400	-	250	-	1000

* Common with other diploma programmes

** Common with diploma programme in Mechanical Engineering and Production Engineering

+ The Question Paper will consist of 2 parts: Section A and Section B. Section A will contain theory contents to the extent of 50%. Section B will contain design and Drawing to the extent of 50%.

Student Centered 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.