

THIRD SEMESTER SCHEME FOR LATERAL ENTRY AND ITI PASSED STUDENTS

DIPLOMA PROGRAMME IN RENEWABLE ENERGY

THIRD SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME			Credits	MARKS IN EVALUATION SCHEME								Total Marks of Internal & External
		Periods/Week				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT					
		L	T	P		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot	
3.1	Fundamentals of Renewable energy Resources	5	-	-	4	20	-	20	50	2 ½	-	-	50	70
3.2	Solar Photovoltaic	4	-	4	4	20	10	30	50	2 ½	20	3	70	100
3.3	Renewable Energy Instrumentation Applications	4	1	4	5	20	10	30	50	2 ½	20	3	70	100
3.4	Fundamental of Thermodynamics and Heat Transfer	5	1	3	6	20	10	30	50	2 ½	20	3	70	100
3.5	Renewable Energy Instrumentation Applications Laboratory	-	-	8	2	-	20	20	-	-	50	3	50	70
3.6	*CommunicationSkill II	4	-	2	4	20	10	30	50	2 ½	20	3	70	100
#Student Centred Activities (SCA)		-	-	3	1	-	30	30	-	-	-	-	-	30
Total		22	2	24	26	100	90	190	250	-	130	-	380	570

* Common with other diploma programmes

Student Centred Activities will comprise of co-curricular activities like extension lectures, self-study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc.

A. COMPULSORY SUBJECT OF I & II SEMESTER RENEWABLE ENERGY TO BE TAUGHT IN III & IV Sem. TO ITI PASSED STUDENTS OF TRADES ARE AS FOLLOWS :

Sr. No.	SUBJECTS	STUDY SCHEME			Credits	MARKS IN EVALUATION SCHEME					Total Marks of Internal & External			
		Periods/Week				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT					
		L	T	P		Th	Pr	Tot	Th	Hrs		Pr	Hrs	Tot
1.1	*Communication Skills-I	4	-	2	4	-	-	-	50	2 ½	20	3	70	70
1.2	*Applied Mathematics - I	5	-	-	4	-	-	-	50	2 ½	-	-	50	50
1.3	*Applied Physics – I	5	-	2	5	-	-	-	50	2 ½	20	3	70	70
1.4	*Applied Chemistry	5	-	2	5	-	-	-	50	2 ½	20	3	70	70
		19		6	18	-	-	-	200		60		260	260

* Common with other diploma programmes

Student Centred Activities will comprise of co-curricular activities like extension lectures, self study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc.

(*) It is compulsory to appear & to pass in examination From III Semester To VI Semester, But credit/marks will not be included for division and percentage of obtained marks.

(*) Four Semester (Two Years) of Extra Time will be given after diploma curriculum period (If Required) to pass the above paper (1.1 To 1.4 and 2.1 to 2.2) examination (As Per G. O. No. 2221/16-Pra. Shi.-3-2009 Dated 28-08-2009) & Revised G.O. No. 2704/16-Pra.Shi.-3-2013-46(8)/2002 Dated 09-01-2013 and B.T.E Order No. Pra.Shi.Pa/C.D.C./2022/872021 Dated 21.02.22

FOURTH SEMESTER

Sr.No.	SUBJECTS	STUDY SCHEME			Credits	MARKS IN EVALUATION SCHEME										Total Marks of Internal & External
		Periods/Week				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT							
		L	T	P		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot			
4.1	Solar Energy	4	-	2	4	20	10	30	50	2½	20	3	70	100		
4.2	Hydraulics and Pneumatics	5	1	2	6	20	10	30	50	2½	20	3	70	100		
4.3	Wind Energy	5	1	2	6	20	10	30	50	2½	20	3	70	100		
4.4	Bio-Energy	4	-	6	6	20	10	30	50	2½	20	3	70	100		
4.5	Environmental studies	3	-	2	3	20	10	30	50	2½	20	3	70	100		
4.6	Energy conservation	3	-	2	3	20	10	30	50	2½	20	3	70	100		
4.7	Constitution of India	2	-	-	1	-	20	20	-	-	30	3	30	50		
#Student Centred Activities (SCA)		-	-	3	1	-	30	30	-	-	-	-	-	30		
Total		26	2	20	30	120	110	230	300	-	150	-	450	680		

* Common with other diploma programmes # Student Centred Activities will comprise of co-curricular activities like extension lectures, self-study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc.

B. COMPULSORY SUBJECT OF I & II SEMESTER RENEWAL ENERGY TO BE TAUGHT IN III & IV Sem. TO ITI PASSED STUDENTS OF TRADES ARE AS FOLLOWS :

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week			Credits	MARKS IN EVALUATION SCHEME									Total Marks of Internal & External
						INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT						
		<i>L</i>	<i>T</i>	<i>P</i>		<i>Th</i>	<i>Pr</i>	<i>Tot</i>	<i>Th</i>	<i>Hrs</i>	<i>Pr</i>	<i>Hrs</i>	<i>Tot</i>		
2.1	*Applied Mathematics - II	5	-	-	4	-	-	-	50	2 ½	-	-	50	50	
2.2	*Applied Physics -II	5	-	2	5	-	-	-	50	2 ½	20	3	70	70	
Total		<i>10</i>	-	2	<i>9</i>	-	-	-	100	-	20	-	120	120	

* Common with other diploma programme

Student Centred Activities will comprise of co-curricular activities like extension lectures, self study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc.

Industrial training of 4 weeks duration to be organised after 4th semester exams

(*) It is compulsory to appear & to pass in examination From III Semester To VI Semester, But credit/marks will not be included for division and percentage of obtained marks.

(*) Four Semester (Two Years) of Extra Time will be given after diploma curriculum period (If Required) to pass the above paper (1.1 To 1.4 and 2.1 to 2.2) examination (As Per G. O. No. 2221/16-Pra. Shi.-3-2009 Dated 28-08-2009) & Revised G.O. No. 2704/16-Pra.Shi.-3- 2013-46(8)/2002 Dated 09-01-2013 and B.T.E Order No. Pra.Shi.Pa/C.D.C./2022/872021 Dated 21.02.22

FIFTH SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week			Cre dits	MARKS IN EVALUATION SCHEME								Total Marks of Internal & External
						INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT					
		L	T	P		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot	
	Industrial Training (4 Weeks)	-	-	-		-	-	-	-	-	50	3	50	50
5.1	Energy Efficiency, Economics and Audit	5	-		4	20	-	20	50	2 ½	-	-	50	70
5.2	Marine and Geothermal Energy	5	-	-	6	20	-	20	50	2 ½	-	-	50	70
5.3	Electric and Hybrid Vehicle	5	2	-	6	20	-	20	50	2 ½	-	-	50	70
5.4	Distributed Generation Systems	6	-	8	7	20	20	40	50	2 ½	50	4	100	140
5.5	Installation , Maintenance & Monitoring of Renewable Energy Power Plant	4	-	2	4	20	10	30	50	2 ½	20	3	70	100
5.6	Fuel cell & Hydrogen Energy	4	-	4	4	20	10	30	50	2 ½	20	3	70	100
	#Student Centred Activities (SCA)	-	-	3	1	-	30	30	-	-	-	-	-	30
	Total	29	2	17	32	120	70	190	300	-	140	-	440	630

* Common with other diploma programmes

Student Centred Activities will comprise of co-curricular activities like extension lectures, self-study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc.

SIXTH SEMESTER

Sr.No.	SUBJECTS	STUDY SCHEME Periods/Week			Credits	MARKS IN EVALUATION SCHEME									Total Marks of Internal & External
		L	T	P		INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT						
						Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot		
6.1	Renewable Energy Power Plant	6	-	2	6	20	10	30	50	2½	20	3	70	100	
6.2	Entrepreneurship & Startups	5	-	4	7	20	10	30	50	2½	20	3	70	100	
6.3	Electrical Machine and Measurement	4	-	4	5	20	10	30	50	2½	20	3	70	100	
6.4	(Elective) Internet of Things	5	-	-	6	20	-	20	50	2½	-	-	50	70	
	Operations Research														
	Engineering Economics and Accountancy														
	Heat Transfer														
6.5	Project Work	-	-	12	4	-	40	40	-	-	60	3	60	100	
	#Student Centred Activities (SCA)	-	-	6	1	-	30	30	-	-	-	-	-	30	
	Total	20		28	29	80	100	180	200	-	120	-	320	500	

* Common with other diploma programmes

#Student Centred Activities will comprise of co-curricular activities like extension lectures, self-study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc