GUJARAT TECHNOLOGICAL UNIVERSITY
Syllabus for Bachelor of Vocation(B.Voc), 5th Semester
Branch: Solar & Renewable Energy
Subject Name: Solar and Wind Policies
Subject Code: 1150704

Type of course: Under Graduate

Prerequisite: None

Rationale: The students can understand the basic energy policy of renewable energy like solar, wind etc. Also they can understand the concepts of carbon neutral and sustainability.

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P	C	Theory Marks		Practical Marks		
				ESE(E)	PA(M)	ESE(V)	PA(I)	
3	0	0	3	50	0	0	0	50

Sr. No.	Topic	No. of Hours	Module Weightage
01	**Introduction to Energy Policy:** Green energy policy initiatives for large-scale de-carbonization in India, Mapping India's energy policy towards net zero emissions, Draft Electricity Rules, 2021 to push green energy use in industries, Types of tariffs.	9	**20%**
02	**Solar Energy policy :** Basic concepts of solar power generation (ON Grid/OFF Grid), Unit generation and billing calculations. Net metering policy for domestic and industrial consumers. Solar roof top installation policy and subsidy declare by the government. Solar Mega park installation policy. Agricultural policy for installation of solar power plant.	12	**30%**
03	**Wind Energy policy :** Energy Laws, Power bidding process for wind energy, tariff policy in wind energy. System parameters and testing procedure for grid connectivity of wind farm. Power pricing and purchasing agreement Tariff policy framework.	12	**30%**
04	**Carbon neutral and sustainability :** Roll of solar and wind energy policy in sustainability of environment. Carbon neutral concept for green energy. Carbon neutral policy framework. Advantages of carbon neutral and sustainability.	9	**20%**
		42	**100%**

Distribution of marks Weightage for cognitive level:

Distribution of Theory Marks					
R Level	U Level	A Level	N Level	E Level	C Level
20	20	10	-	-	-

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze, E: Evaluate C: Create Above Levels (Revised Bloom's Taxonomy)

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Reference Books:

1. Wind Energy Policy: International Frameworks and Comparative Analysis" by David A. T. P. Murphy
2. Renewable Energy: Policies, Project Management and Economics: Wind and Solar Power (India) (Springer Tracts in Electrical and Electronics Engineering)

Course Outcome:

Sr.No.	Statement	Marks% weightage
CO1	Understand renewable energy policy.	20
CO2	Comprehend Solar energy policy.	30
CO3	Comprehend Wind energy policy.	30
CO4	Understand Carbon neutral and sustainability.	20