TED(21) 6022C
(Revision–2021)

Reg.No……
Signature…….

DIPLOMAEXAMINATIONINENGINEERING/TECHNOLOGY /MANAGEMENT/COMMERCIALPRACTICE, NOVEMBER– 2024

CIVIL EENGINEERING
Renewable Energy Technologies

[MaximumMarks:**75**] [Time:**3**Hours]

PART-A

I. Answer *all* the following questions in one word or one sentence. Each question carries *'one'* mark. (9x1=9Marks)

		ModuleOutcome	Cognitivelevel
1.	List two sources of energy	M1.01	U
2.	Write any two types of fuel used in CHP	M1.02	U
3.	Write any two Solar Radiation Geometry	M2.01	U
4.	Write any two applications of solar energy	M2.03	U
5.	Define gasification	M3.02	U
6.	Define horizontal axis turbine	M3.01	U
7.	Two types of Geothermal Power Plant technologies	M4.01	U
8.	What is fuel cell	M4.03	U
9.	Define energy education	M1.03	U

PART-B

II. Answer any *eight* questions from the following. Each question carries *'three'* marks.

(8x3=24Marks)

		ModuleOutcome	Cognitivelevel
1.	Explain solar radiation at earth's surface	M2.01	U
2.	Write the sources of renewable energy	M1.01	U
3.	Write the advantages and disadvantages of Solar green house	M2.03	U
4.	Write the application of CHP	M1.02	U
5.	Applications of Biodiesel	M3.02	U
6.	What is wind conversion	M3.01	U
7.	List the sources of bio fuel	M3.02	U
8.	Write any two energy management techniques	M1.03	U
9.	Disadvantages of H2-O2 fuel cell	M4.03	U
10.	Advantages of H2-O2 fuel cell	M4.02	U

PART-C

III. Answer all questions. Each question carries *'seven'* marks

(6x7=42Marks)

		ModuleOutcome	Cognitivelevel
III.	Explain energy Audit **OR**	M1.02	U
IV.	Explain Energy management	M1.03	U
V.	Explain Solar Radiation Geometry **OR**	M2.01	U
VI.	Explain solar collectors	M2.02	U
VII.	Explain the methods to obtain energy from Biomass **OR**	M3.02	U
VIII.	Explain the vertical axis wind turbine and draw the types of vertical wind turbine	M3.01	U
IX.	Explain **MHD** **OR**	M4.02	U
X.	Working of H2-O2 fuel cell	M4.03	U
XI.	Explain dry rock system **OR**	M4.01	U
XII.	Explain photovoltaic cell	M2.02	U
XIII.	Explain the Environmental Aspects of Energy Utilisation **OR**	M1.01	U
XIV.	List the applications of Gasifier	M3.02	U