TED (21) – 5023C
(REVISION-2021)

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Reg.No……
Signature…….

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER - 2025

POWER PLANT ENGINEERING

[Maximum Marks:75] [Time: 3 Hours]

PART - A

I. Answer all the following questions in one word or one sentence. Each question carries 'one' marks.

(9 x 1 = 9 Marks)

		Module Outcome	Cognitive level
1	Name any two modern steam turbines.	M1.03	R
2	Enumerate the methods used to find total installed capacity of a power plant.	M1.02	R
3	Identify the components in a hydroelectric power plant.	M2.01	U
4	List any two advantages of Gas turbine.	M2.05	U
5	Define fission.	M3.02	R
6	State the use of control rods in a Nuclear reactor.	M3.04	R
7	Define acid fog.	M4.02	U
8	Write any two safety precautions in oil handling.	M4.05	R
9	Define calorimeter.	M1.05	U

PART - B

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

(8 x 3 = 24 Marks)

		Module Outcome	Cognitive level
1	Write a short note on the Indian power scenario.	M1.01	R
2	Explain reheating.	M1.03	U
3	List the requirements of a good fuel.	M1.04	U
4	List the classification of power plant.	M1.02	R
5	Draw a neat sketch of a pumped storage type river plant and mark its parts.	M2.02	R
6	Explain chain reaction.	M3.04	R
7	Classify socio economic issues of power plant.	M4.01	R
8	Illustrate thermal pollution by power plants.	M4.03	A
9	Describe statutory provision related to boiler operation.	M4.06	U
10	Examine the measures to prevent greenhouse effect.	M4.02	A

PART - C

Answer all the questions from the following. Each question carries 'seven' marks.

(6 x 7 = 42 Marks)

		Module Outcome	Cognitive level
III.	Draw and explain a calorimeter used for measuring calorific value of gaseous fuel.	M1.05	U
	OR		
IV.	Define flash point, fire point, pour point and cetane number.	M1.04	U
V.	Draw a layout of Hydroelectric power plant, mark all parts and explain its working.	M2.03	R
	OR		
VI.	List the classification of combined cycle power plant. Draw flow diagram of any one.	M2.06	A
VII.	Explain the working of BWR power plant and list its advantages and disadvantages.	M3.05	R
	OR		
VIII.	Briefly describe the fuel materials used in nuclear reactor.	M3.05	U
IX.	Illustrate Green house effect and its reasons.	M4.03	A
	OR		
X.	List the safety practices to be observed in Oil handling system.	M4.03	A
XI.	Explain the working of PWR power plant.	M3.05	U
	OR		
XII.	Explain principal parts of a Nuclear reactor.	M3.03	U
XIII.	Draw a schematic diagram of diesel power plant and explain its systems.	M2.04	R
	OR		
XIV.	Prepare a short note on Plant run off river plant. List the advantages and limitations of Plant run off river plant.	M2.02	A

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