Name: **Enrolment No:**	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Term Examination – December 2023

Program: B. Tech APE (Gas) **Semester: V**
Course: Introduction to City Gas Distribution (CGD) **Time: 03 hrs.**
Code: CHGS 3024
Max Marks :100

SECTION A (4x5=20)

S. No.	**Short Notes**	**Marks**	**CO**
1	List applications of natural gas in electricity generation	**4**	**CO1**
2	Explain the selection criteria for materials used in city gas distribution	**4**	**CO3**
3	Provide classification of CNG stations with block diagram.	**4**	**CO2**
4	Enumerate the essential components incorporated within the emergency plan for CGD	**4**	**CO4**
5	Construct a flowchart illustrating the sequential procedural steps integral to the bidding process.	**4**	**CO5**
	SECTION B (10x4=40)		
6	Develop a comprehensive disaster management plan for CGD, outlining the key strategies, procedures, and resources required to mitigate, respond to, and recover from potential disasters or emergencies	**10**	**CO5**
7	Elaborate on the applications of natural gas in industrial sector, including the technology, efficiency, and environmental impacts.	**10**	**CO1**
8	Discuss and analyze the criteria and best practices for selection of entity by PNGRB for operating and maintaining CGD networks.	**10**	**CO4**
9	Provide a detailed explanation of the IT innovations and advancements utilized in City Gas Distribution (CGD).	**10**	**CO5**
	SECTION-C (20x2=40)		
10	Describe the PNG infrastructure, highlighting its key components and their interrelationships.	**20**	**CO2**
11	Illustrate meters employed in CGD including their types, functions, and technological aspects.	**20**	**CO3**