



HINDUSTAN PETROLEUM CORPORATION LIMITED

Regd. Office: 17, Jamshedji Tata Road, Mumbai - 400020.

CIN NO: L23201MH1952GOI008858

SYLLABUS FOR COMPUTER BASED TEST **CITY GAS DISTRIBUTION (PROJECTS) POSITIONS**

UNIT I: Basics and Development of City Gas Distribution

- 1) Properties of Natural Gas; Unit conversion in NG, Calorific equivalence with other fuels like LPG/HSD
- 2) Demand assessment of PNG Domestic, Industrial, Commercial & CNG
- 3) Design and development of CGD: Design Basis of CGD network and its components, Network simulation, Development of P&ID/Line schematic, Detailed Engineering and Material Take-off
- 4) Components of Gas Value Chain: Sub-Transmission pipeline, City Gate, Station (CGS); Custody transfer Metering; Odorizing unit; District Regulation Station (DRS); Steel and PE Pipelines; CNG Mother/Online / Daughter Booster Station; PNG infrastructure for domestic, Industrial & commercial consumers, Virtual pipeline
- 5) Constructions Management: Procurement and management of project Inventory, Project Planning, Scheduling and Monitoring

UNIT II: Regulatory Framework and Standards for City Gas Distribution

- 1) PNGRB regulations/guidelines related to PNG, CNG and City Gas/Local Natural Gas pipelines, T4S standards, ERDMP/IMS regulations, Quality of Service regulations
- 2) Related standards- OISD 226/OISD-179, ANSI B31.8,
- 3) Petroleum Act, Gas Cylinder Rules, PESO approval process, Drawing and documentation for steel and CNG facilities.
- 4) Statutory permissions and Land / ROU procurement from authorities

Unit III: QHSE

Construction safety, Project procedures and Risk minimization, CNG Safety, PNG Safety, Resolution of Customer complaints on service, quality & quantity; Emergency Response Plan, Safety communications, Safety features such as SRV, Interlock, Creep, Active and monitor regulation, gas detection, MP & LP network, Markers, Audit and compliances

NOTE: The syllabus/topics mentioned are indicative in nature. Candidates are expected to possess significant knowledge/proficiency pertaining to the relevant subjects and their qualifying degree.