

GSECL Instrument Mechanic, Lab Tester, Nurse ExamPattern

Section	Name of Subject	Percentage of Marks	Total Questions	Total Marks
I	Gujarati Language and Grammar	10%	100	100
II	General Knowledge	10%		
III	English Knowledge	10%		
IV	Computer Knowledge	10%		
V	Concerned Subjects	60%		

GSECL Instrument Mechanic, Lab Tester, Nurse Syllabus

GSECL Gujarati Language and Grammar Syllabus

- Synonyms
- Vocabulary
- Fill in the Blanks
- Grammar
- Phrases/Muhavare
- Plural Forms
- Translation of Sentences
- Antonyms
- Comprehension
- Error Detection

GSECL General Knowledge Syllabus

• Science – Inventions & Discoveries.



- Sports.
- Abbreviations.
- Indian Economy.
- Books and Authors.
- Important Days.
- Indian History.
- Science & Technology.
- General Policy.
- Indian National Movement.
- Budget and Five Year Plans.
- General Science.
- Countries & Capitals
- https://www.freshersnow.com/
- Current Affairs National & International.
- Awards and Honors.
- International & National Organizations.

GSECL English Knowledge Syllabus

- Synonyms
- Passage Completion
- Sentence Arrangement
- Transformation
- Prepositions
- Sentence
- CompletionActive and Passive Voice
- Error Correction (Phrase in Bold)
- Spotting Errors
- General English
- Error Correction (Underlined Part)
- Substitution
- Spelling Test
- Para Completion
- Joining Sentences
- Sentence Improvement
- Fill in the blanks
- Antonyms
- Idioms and Phrases



GSECL Computer Knowledge Syllabus

- MS Word
- Database
- Programming Languages
- MS-Office application
- Keyboard Shortcuts
- Windows Operating System

GSECL Instrument Mechanic Syllabus

- PID Controller and turning
- Pneumatic control / Pneumatic drives
- Type of sensors & Transducers
- Basic of Circuits and Measurement System
- Basic Electronics/Analog & Digital Electronics
- Basic Data Acquisition System
- Power Electronics and Types of Drivers (Control Valves, ON/OFF Valves etc.)
- Measurement and Instrumentation
- Field Instrumentation System
- Cabling
- https://www.freshersnow.com/
- Analytical Instruments
- Control System and Process Control
- Open / Close / Cascade loop control
- PLC/DCS/SCADA
- Networking / Computer networks

GSECL Lab Tester Syllabus

- Inorganic Chemistry-I
- Atomic Structure
- Chemical Bonding & Molecular Structure
- Ionic Bonding
- Covalent Bonding VB Approach, MO Approach
- Organic Chemistry I
- Fundamentals of Organic Chemistry
- Physical effects, Electronics Displacements
- Structure, Shape and reactivity of Organic molecules.



- Stereochemistry
- Aliphatic Hydrocarbons
- Physical Chemistry –I
- Chemical Energetics
- Chemical Equilibrium
- Ionic Equilibria
- Organic Chemistry II
- Alkyl and Aryl Halides
- Alcohols, Phenols and Ethers
- Physical Chemistry –II
- Solutions
- Phase Equilibrium
- Conductance
- Electrochemistry
- Amines & Diazonium Salts
- Amino Acids, Peptides and Proteins
- Carbohydrates
- General Principles of Metallurgy
- s-and p-Block Elements
- Compounds of s-and p-Block Elements
- Physical Chemistry III
- Kinetic Theory of Gases
- Liquids
- Solids
- Chemicals Kinetics
- Introduction & History of Polymeric Materials
- Functionality and its importance
- Kinetics of Polymerization
- Crystallization and Crystallinity
- Nature and Structure of Polymers
- Determination of molecular weight of polymers
- Glass transition temperature (Tg) and determination of Tg.
- Polymer solution
- Properties of polymers
- Industrial Gases and Inorganic Chemicals
- Environment and its Segments.
- Energy and Environment
- Bio-catalysis
- https://www.freshersnow.com/



- Carbohydrates
- Amino Acids, Peptides and Proteins
- Enzymes and Correlation with drug action
- Nucleic Acids
- Lipids
- Concept of Energy in biosystems

GSECL Nurse Syllabus

- Basic Fundamental of
- Nursing
- First Aid
- Ward Nursing & Community
- Health Nursing
- Midwifery Nursing
- Medical, Surgical &
- Paediatric Nursing

GSECL Radiology-Cum-Pathology Technician Syllabus

- Basic Clinical Pathology
- Basic Hematology
- Basic Bio-Chemistry
- General Microbiology
- Immunology & Serology
- Basic knowledge of Radiology
- Basic Introduction of
- Radiography
- https://www.freshersnow.com/
- Imaging Techniques and
- Radiographic Procedures
- Basic Human Anatomy
- Physics-related to X-ray