#### Marathi

- व्याकरण
- सर्वेसामान्य शब्दसंग्रह
- म्हणी आणि वाक्यप्रचार यांचा अर्थ आणि उपयोग
- उता-यावरील प्रश्नांची उत्तरे
- वाक्य पृथःकरण व त्याचे प्रकार

## English

- Grammar
- Common Vocabulary
- Sentences Structure
- Idioms and phrases and their meaning
- Comprehension of passage
- Sentence Arrangement and Error Correction

### General Knowledge

- चालू घडामोडी
- महाराष्ट्रचा इतिहास
- राज्यघटना
- महाराष्ट्राचे व भारताचे नागरीकरण
- अद्ययावत तंञज्ञान
- पर्यावरण समस्या
- वारसा स्थळे
- पर्यटन
- ऊर्जा संवर्धन व हरीत बांधकाम
- घनकचरा व्यवस्थापन

## Reasoning

- Interpretation of Data and Graphs
- Directions
- Arithmetical reasoning
- Statements and Arguments
- Decision Making
- Statements and Conclusions
- Analogy
- Number Series

# कल्याण डोंबिवली महानगरपालिका, कल्याण लेखी परिक्षेसाठी पदनिहाय अभ्यासक्रम

### १) फिजिओथेरेपिस्ट (Physiotherapists)

- · General Knowledge.
- Maharashtra Municipal Corporation Act.
- · Human Anatomy, Physiology, Biochemistry.
- Psychiatry including Psychology.
- Fundamentals of Kinesiology & Kinesiotherapy.
- Fundamental of Electrotherapy.
- Functional Diagnosis & Physiotherapeutic skills.
- Musculoskeletal Physiotherapy.
- Neuro Physiotherapy.
- Cardiovascular Respiratory Physiotherapy.
- · Community Physiotherapy.
- Principles of Bio-engineering.

### २) औषधनिर्माता (Pharmacist)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- General Pharmacology 1 Type of Drugs, General Classifications of Drugs, Drug Doses forms, & Bioavailability, Indications, Contraindications, Adverse Drug Reaction, Roll of antibiotics, Clinical Pharmacology, Neuro Pharmacology.
- Psycho Pharmacology, Cardiovascular Pharmacology, Pharmacy epidemiology,
  Dental Pharmacology, Indian Pharmacopeia, British Pharmacopeia, Pharmacy Act
  1948, Drugs & cosmetic Act 1940 & amendments, Food & Drug Administration,
  Drug Storage, Logistics & inventory management, Roll of Hospital Pharmacist,
  Community Pharmacy, Good Manufacturing Practices (GMP), Disinfectants & their
  concentrations used in pharmaceuticals & hospitals, EDL & ECL list (Standard list of
  Drugs & Consumables required to run hospital), Biomedical Waste management rules.

### ३) कुछरोग तंत्रज्ञ (Leprosy Technician)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- Historical Background of Leprosy.
- Bacteriology related to Leprosy.
- Epidemiology.
- Evolution of LeprosyLesions.
- Clinical Features.
- Eye Involvement in Leprosy.
- Differential Diagnosis.
- Diagnosis.
- Treatment.
- Stigma.
- Heath education for leprosy pateints.
- Reactions in Leprosy.
- Deformities and their Management.
- Planter Ulcers.
- Physical Therapy, Aids and Appliances.
- Reconstructive surgery in Leprosy.
- Rehabilitation in Leprosy.
- Prevention and control of Leprosy.
- Elimination of Leprosy as a Public Health Problem.
- New Initiative of Leprosy Division.

### ४) स्टाफ नर्स (Staff Nurse)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- RCH programme, nursing art, anatomy physiology, microbiology, Sociology medical surgical nursing Part I and Part II, fundamentals of nursing, first aid and personal hygeine, mental health midwifery & gynacology, peadatric nursing, community health nursing Part I and Part II, biomedical waste management rules, immunisation, administrative work.
- Communicable Diseases, Ear, Nose and Throat, Oncology/Skin

## ५) क्ष-किरण तंत्रज्ञ (X-Ray Technician)

- · General Knowledge
- Maharashtra Municipal Corporation Act.
- Radiophysics (history/principle, etc.) related to x-ray machine c-arm /, c.t.scan, /m.r.i./mamography, types of machine and their principle with detailed knowledge about machine.
- Anatomy and related physiology knowledge with different position used to take x-ray//c.arm/ m.r.i./mamography.
- Different types of films and solutions their chemical nature and clinical importance.
- Different type of dyes (contrast) detailed knowledge to use/related hazards and emergency management.
- Radiation hazards and precaution measures (radiation protection).
- Mammography / c.arm/ digital radiography/pacs, handling knowledge about working principle.
- C.t/ m.r.i./radiotherapy/lithotripsy detailed knowledge of machine for eg. history / procedure /position /complication management.
- Biomedical waste management.
- Maintenance of equipment and responsibilities to handle it / record keeping.

# ६) हेल्थ व्हिजीटर ॲण्ड लेप्रसी टेक्निशियन (Health Visitor and Leprosy Technician)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- Historical Background of Leprosy.
- Bacteriology related to Leprosy.
- Epidemiology.
- Evolution of LeprosyLesions.
- Clinical Features.
- Eye Involvement in Leprosy.
- Differential Diagnosis.
- Diagnosis.
- Treatment.
- Stigma.
- Heath education for leprosy pateints.
- Reactions in Leprosy.
- Deformities and their Management.
- Planter Ulcers.
- Physical Therapy, Aids and Appliances.
- Reconstructive surgery in Leprosy.
- Rehabilitation in Leprosy.
- Prevention and control of Leprosy.
- Elimination of Leprosy as a Public Health Problem.
- New Initiative of Leprosy Division.

### ७) मानस उपचार समुपदेशक (Phychiatric Counseller)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- Preliminary concepts.
- Biological domain and cognitive-behavioral domain.
- Dispositional domain: trait approach.
- Social-cultural and adjustment domain.
- Philosophy and ethics of psychological research.
- Research settings and applied research.
- Experimental and quasi-experimental methods.
- Qualitative Research.
- Inferential statistics: inference about location.
- Association, prediction and other methods.
- Factor Analysis and Software Packages.
- Foundation of evolutionary psychology.
- Major aspects of evolutionary theory: survival and mating.
- Parenting and social behavior.
- Social behavior and specific topics.
- Intervention systems emphasizing background.
- Intervention systems emphasizing humanistic, cognitive and behavioural approaches.
- Techniques in group.
- Intervention emphasizing integrated, eclectic systems, multicultural perspectives.
- Anxiety and mood spectrum disorders.
- Psychotic spectrum disorders.
- Disorders of the brain and pervasive Conditions.
- Personality disorders, LD and other conditions
- Children and adolescents.
- Counselling adults & elderly.
- Introduction: concepts, nature and principles of organizational behaviour.
- Motivations in organization: concepts to applications and foundations of group behavior.
- Leadership: approaches and contemporary issues.
- Organizational culture.
- Assessment of development and ability.
- Assessment of personality.
- Assessment of ability and aptitude.
- Assessment of Personality.
- Definition, steps, methods and application of competency.
- Assessment of social problems and action planning.
- Assessment methods using qualitative approach.
- Assessment in following areas of social relevance.
- Positive emotional states and processes.
- Nature and scope of environmental psychology.
- Bases of criminal behavior.
- Criminal forensic procedures.
- Psychological interventions and reporting.
- Rehabilitation psychology: overview and concepts.
- Therapeutic assessment, contracting and initiating therapy.
- Process of counseling and psychotherapy.

### ८) लेखापाल / वरिष्ठ लेखा परिक्षक (Accountant / Senior Auditor)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- National Municipal Accounts Manual.
- Financing Accounting.
- Cost Accounting.
- Taxation.
- Auditing
- Financial Management.
- Double Entry System & Single Entry System of Accounting.
- Bank Reconciliation Statement preparation.
- Depreciation Accounting.
- Preparation of Accounting Documents.
- Goods and Service Tax Act 2017.
- Business Ethics and communication principles of business ethics, corporate governance and corporate social responsibility, essentials of communication, group dynamics.
- Financial Markets and Institutions.
- Organization Theory.

#### ९) कनिष्ठ अभियंता (स्थापत्य) (Junior Engineer (Civil)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- Theory of structures.
- Strength of materials.
- Computer aided analysis and design of structures.
- Steel structures.
- · Structural Analysis.
- Construction Planning and Management.
- Design of Reinforced concrete Strucutures (WSM and Limit state).
- Bridge Engineering.
- Concerete Technology.
- Prestressed concrete.
- Geotechnical Engineering.
- Surveying.
- Engineering Materials.
- Building Planning and Construction.
- Fluid mechanics.
- Fluid Machines.
- Irrigation Engineering.
- Highway Engineering.
- Tunnel Engineering.
- Estimating, Costing and valuation.
- Engineering Hydrology.
- Environmental Engineering.

# १०) कनिष्ठ अभियंता (विद्युत) (Junior Engineer (Electrical)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- Energy Scenario.
- Electric Circuits.
- Electrical Machines.
- Power Systems and Power Conditioning.

- Electrical Measurements.
- L.T. Distribution System.
- HVAC and Refrigeration System.
- Fans and Blower.
- Pumps and Pumping System.
- Lighting System.
- Lifts.
- Power Back up.

### ११) कनिष्ठ अभियंता (यांत्रिकी) (Junior Engineer (Mechanical)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- Engineering Materials.
- Fundamentals.
- Strength of Materials.
- Theory of Machines.
- Design of Elements.
- Design of Gears.
- System Design.
- Dynamics of machines.
- Manufacturing Science.
- Manufacturing Processes.
- Manufacturing Management.
- Operation Research.
- CAD, CAM, Product Development.
- Thermodynamics.
- Heat and mass transfer.
- Fluid Mechanic, Fluid Machinery.
- Pneumatics and Hydraulics.
- Power Plant Engineering, Energy Engineering.
- I.C. Engines, Automobile Engineering, Refrigeration and Air Conditioning.
- Measurement and Metrology, Numerical Analysis and Computer Programming, Numerical Control of Machine Tools, Automatic Control.

### १२) चालक-यंत्रचालक (Driver-Operator)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- The Maharashtra Fire Prevention and Life Safety Measures Act, 2006.
- Maharashtra Fire Prevention & Life Safety Measures Act, 2023.
- National Building Code of India 2016 Part 4 Fire & Life Safety.
- Maharashtra Fire Prevention and Life Safety Rules.
- Fixed Fire Fighting Installation.
- Building Construction.
- Means of Escape.
- Air Craft Fire.
- Ship Fire.
- Rural & Forest Fire.
- Hose.
- Hose Fittings.
- Foam & Foam Making Equipments.
- Ladder.
- Small Gear.
- Pumps & Pump Operation.

- Water Tender & Special Appliances.
- Basic Physics & Chemistry.
- Hydrants & Fittings.
- Water Relay.
- Breathing Apparatus Set.
- · Hydraulics.
- Electricity.
- Portable Extinguisher.
- Discipline.
- Practical Firemanship.
- Fire Service Administration.
- Watch room Procedure.
- Salvage.
- · Special Service.
- First Aid Ambulance.
- Resuscitation / Artificial Respiration.

### १३) अग्निशामक (फायरमन) (Fireman)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- The Maharashtra Fire Prevention and Life Safety Measures Act, 2006.
- Maharashtra Fire Prevention & Life Safety Measures Act, 2023.
- National Building Code of India 2016 Part 4 Fire & Life Safety.
- Maharashtra Fire Prevention and Life Safety Rules.
- Fixed Fire Fighting Installation.
- Building Construction.
- Means of Escape.
- Air Craft Fire.
- Ship Fire.
- Rural & Forest Fire.
- Hose.
- Hose Fittings.
- Foam & Foam Making Equipments.
- Ladder.
- Small Gear.
- Pumps & Pump Operation.
- Water Tender & Special Appliances.
- Basic Physics & Chemistry.
- Hydrants & Fittings.
- Water Relay.
- Breathing Apparatus Set.
- Hydraulics.
- Electricity.
- Portable Extinguisher.
- Discipline.
- Practical Firemanship.
- Fire Service Administration.
- Watch room Procedure.
- Salvage.
- Special Service.
- First Aid Ambulance.
- Resuscitation / Artificial Respiration.

### १४) कनिष्ठ विधी अधिकारी (Junior Law Officer)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- · Constitution of India.
- Bharatiya Nyaya Sanhita 2023.
- Bharatiya Nagarik Suraksha Sanhita 2023.
- Bharatiya Sakshya Adhiniyam 2023.
- Interpretation of Statute.
- Transfer of Property Act, 1882 and Sale of Goods Act, 1930.
- Indian Contract Act, 1872.
- Legislative Drafting.
- The basic of legislative Drafting.
- Maharashtra Official Language Act, 1964.
- Maharashtra General Clauses Act.
- Maharashtra Civil Services (Discipline and Appeal) Rules, 1979.

# १५) क्रिडा पर्यवेक्षक (Sports Supervisor)

- · General Knowledge.
- Maharashtra Municipal Corporation Act.
- Foundations of Physical Education and Sports.
- · Yoga Education and Environmental Studies.
- Methodology of Teaching.
- Physical Education Activities.
- Anatomy, Physiology and Health Education.
- Officiating, Coaching and Sports Training.
- Organization, Administration and Management in Physical Education.
- Physical Education Activities.
- Psychology of Education, Physical Education and Sports.
- Fitness, Wellness, Nutrition and Weight Management
- Methodology of Teaching Physical Education.
- Physical Education Activities.
- Measurement, Evaluation and Statistics in Physical Education
- Sports Medicine, Physiotherapy and Rehabilitation
- Kinesiology and Biomechanics.
- Theory of Sports Training.
- Management of Physical Education and Sports.
- Medical Problem and Rehabilitation.

# १६) उद्यान अधिक्षक (Garden Superintendent)

- General Knowledge.
- Maharashtra Municipal Corporation Act.
- Horticulture, Styles of Gardening, Lawn Development, Roadside\ plantation of trees/shrubs. Flowering shrubs, Hedges.
- Bonsai and its maintenance, Annual flowers, Topiary, Indoor and outdoor potted plants, Propagation of roses, Chrysanthemum, Dahlia, Bougainvillea, Hanging Basket, Cultivation of Cut flowers i.e. Roses, Gladiolus, Orchids, Tuberose, Lilium and Anthurium, Ground Covers, Medicinal Plants, Scented Shrubs / Trees, Propagation, Plant Protection, Nursery management, Routine Garden operations, Features of the garden, Flower shows and Garden Competitions, Floral ornaments and Flower Arrangements.

## १७) उद्यान निरिक्षक (Garden Inspector)

- General Knowledge
- Maharashtra Municipal Corporation Act.
- Horticulture, Styles of Gardening, Lawn Development, Roadside\ plantation of trees/shrubs. Flowering shrubs, Hedges.
- Bonsai and its maintenance, Annual flowers, Topiary, Indoor and outdoor potted plants, Propagation of roses, Chrysanthemum, Dahlia, Bougainvillea, Hanging Basket, Cultivation of Cut flowers i.e. Roses, Gladiolus, Orchids, Tuberose, Lilium and Anthurium, Ground Covers, Medicinal Plants, Scented Shrubs / Trees, Propagation, Plant Protection, Nursery management, Routine Garden operations, Features of the garden, Flower shows and Garden Competitions, Floral ornaments and Flower Arrangements.

# १८) लिपिक टंकलेखक (Clerk Typist)

- General Knowledge, Current Affairs.
- Maharashtra Municipal Corporation Act.
- Right to Inforantion Act-2005.
- Right to Services Act-2015 Maharashtra State.

## १९) लेखा लिपिक (Account Clerk)

- General Knowledge, Current Affairs.
- Maharashtra Municipal Corporation Act.
- Right to Inforantion Act-2005.
- Right to Services Act-2015 Maharashtra State.
- Trading and profit & Loss Accounts & Balance Sheet, Self Balancing, Ledgers and sectional Balancing, Bills of Exchange, Deprecitation Reserve & Provisions, Capital & Revenue, Receipts & Payments, Income & Expenditure Account, Double Account System, Branch and Departmental Accounts, Rectification of Errors, Bank Reconcilation statement, Blanace sheet Formats & Classification, Accounts Financial Management, Company Laws, Auditing, Taxation Direct / Indirect, Comercial Laws, Cost Accounting, Ind AS.

## २०) प्रयोगशाळा तंत्रज्ञ(Laboratory Technician)

- Marathi Grammer, English Grammer, Arithmetic.
- General Knowledge, Current affairs (National / International)
- Mahrashtra Municipal Corporations Act
- Right To Information Act-२००५
- Right To Services Act-२০१५ Maharashtra State.
- Types of test done in a medical Laboatory
- Name of the equipment used in a medical Lab
- Housekeeping and cleanliness in laboratory
- Method of Chemical disinfection
- Method of sterilization of lab euipment
- How is the blood sample was taken(Veinpuncture)
- How is the labelling of sample done
- Quality control, Inventory control
- Bio-Medical Waste management

#### २१) आया

- Marathi Grammer, English Grammer, Arithmetic.
- General Knowledge, Current affairs (National)
- Mahrashtra Municipal Corporations Act
- Right To Information Act-२००५ Right To Services Act-२०१५ Maharashtra State.
- Basic principles of patient care, comfort, and safety.
- Importance of personal and environmental hygiene, infection control.
- hospital procedures, record-keeping, and communication.
- Basic first aid knowledge and techniques
- Patient Movement and Handling
- Bed Making and Linen Care
- Understanding of common medical terms.