

सर्व पदासाठी सामाईक अभ्यासक्रम (कर निरीक्षक व लिपीक पद वगळून)

गुण ६०

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४० गुणांसाठी
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पर्यावरण संवर्धन अधिकारी अभ्यासक्रम
Environment Conservation Officer Syllabus

- (i) **Ecology - Ecosystem** - classification/types and functions, energy sources - renewable, non renewable, natural resources
- (ii) **Environmental chemistry** - chemistry involved in water and wastewater treatment, water and wastewater parameters analysis procedures
- (iii) **Water Sources, water quality** - physical, chemical and biological water quality and their prescribed standards standards, water borne diseases, water treatment - physical and chemical treatment process
- (iv) **Wastewater**-characteristics and composition, sources, physical and chemical treatment operations and processes, biological treatment processes - anaerobic and anaerobic treatment system - their working principle and design
- (v) **Air pollution fundamentals** - sources, effects, standards, meteorology of air pollution, air quality managements, air quality monitoring,, air pollution control systems, their working principles and design
- (vi) **Solid waste**-characteristics and composition, functional units of solid waste managements, solid waste treatment techniques, ultimate disposal
- (vii) Environmental impact assessment (EIA), attributes of EIA, EIA procedure, environmental auditing, environmental clearance process, Environmental legislation – Salient features of The Air Act, 1981; Environment Act, 1986; Water Act, 1974; Wild Life Act, 1972 etc. and their salient features

सिस्टिम मॅनेजर ई-प्रशासन अभ्यासक्रम

System Manager e-Governance

Section 1: Digital Logic

Boolean algebra. Combinational and sequential circuits, minimization, number representations and computer arithmetic (fixed and floating point).

Section 2: Computer Organization and Architecture

Machine instructions and addressing modes. ALU, data-path and control unit. Instruction pipelining, Memory hierarchy, Cache, Main memory and secondary storage, I/O interface (interrupt and DMA mode).

Section 3: Programming and Data Structures

Programming in C. Recursion. Arrays, stacks, queues, linked lists, trees, binary search trees, binary heaps, graphs.

Section 4: Algorithms

Searching, sorting, hashing. Asymptotic worst-case time and space complexity, Algorithm design techniques: greedy, dynamic programming and divide-and-conquer. Graph Search, minimum spanning trees, shortest path.

Section 5: Theory of Computation

Regular expressions and finite automata. Context-free grammars and push-down automata. Regular and context-free languages, pumping lemma. Turing machines and undecidability.

Section 6: Compiler Design

Lexical analysis, parsing, syntax-directed translation. Runtime environments. Intermediate code generation.

Section 7: Operating System

Processes, threads, inter-process communication, concurrency and synchronization. Deadlock, CPU, Scheduling, Memory Management and virtual memory, File Systems

Section 9: Databases

ER-model. Relational model: relational algebra, tuple calculus, SQL. Integrity constraints, normal forms. File organization, indexing (e.g., B and B+ trees). Transactions and concurrency control.

Section 10: Computer Networks

Concept of layering. LAN technologies (Ethernet). Flow and error control techniques, switching. IPv4/IPv6, routers and routing algorithms (distance vector, link state). TCP/UDP and sockets, congestion control. Application layer protocols (DNS, SMTP, POP, FTP, HTTP). Basics of Wi-Fi. Network security: authentication, basics of public key and private key cryptography, digital signatures and certificates, firewalls.

वैद्यकीय अधीक्षक अभ्यासक्रम

Syllabus : MBBS Post : Sr.Medical Officer :

1. General Medicine including the following:

- (i) Cardiology
- (ii) Respiratory diseases
- (iii) Gastro-intestinal
- (iv) Genito-Urinary
- (v) Neurology
- (vi) Hematology
- (vii) Endocrinology
- (viii) Metabolic disorders
- (ix) Infections/Communicable Diseases
 - a) Virus b) Ricketts c) Bacterial d) Spirochetal e) Protozoan f) Metazoan g) Fungus (x) Nutrition/Growth
- (xi) Diseases of the skin (Dermatology)
- (xii) Musculoskeletal System
- (xiii) Psychiatry
- (xiv) General
- (xv) Emergency Medicine
- (xvi) Common Poisoning
- (xvii) Snake bite
- (xviii) Tropical Medicine
- (xix) Critical Care Medicine
- (xx) Emphasis on medical procedures
- (xxi) Patho physiological basis of diseases
- (xxii) Vaccines preventable diseases and Non vaccines preventable diseases
- (xxiii) Vitamin deficiency diseases
- (xxiv) In psychiatry include – Depression, psychosis, anxiety, bipolar diseases and Schizophrenia.

2. Pediatrics including the following –

- (i) Common childhood emergencies,
- (ii) Basic newborn care,
- (iii) Normal developmental milestones,
- (iv) Accidents and poisonings in children,
- (v) Birth defects and counseling including autism,
- (vi) Immunization in children,
- (vii) Recognizing children with special needs and management, and
- (viii) National programmes related to child health.

3. Surgery (Surgery including ENT, Ophthalmology, Traumatology and Orthopaedics)

A. General Surgery

- i) Wounds
- ii) Infections

- iii) Tumours
- iv) Lymphatic
- v) Blood vessels
- vi) Cysts/sinuses
- vii) Head and neck
- viii) Breast
- ix) Alimentary tract
- a) Oesophagus
- b) Stomach
- c) Intestines
- d) Anus
- e) Developmental
- x) Liver, Bile, Pancreas
- xi) Spleen
- xii) Peritoneum
- xiii) Abdominal wall
- xiv) Abdominal injuries
- B. Urological Surgery
- C. Neuro Surgery
- D. Otorhinolaryngology E.N.T.
- E. Thoracic surgery
- F. Orthopedic surgery
- G. Ophthalmology
- H. Anesthesiology
- I. Traumatology
- J. Diagnosis and management of common surgical ailments
- K. Pre-operative and post operative care of surgical patients
- L. Medicolegal and ethical issues of surgery
- M. Wound healing
- N. Fluid and electrolyte management in surgery
- O. Shock patho-physiology and management.

4. GYNAECOLOGY & OBSTETRICS

A. OBSTETRICS

- i) Ante-natal conditions
- ii) Intra-natal conditions
- iii) Post-natal conditions
- iv) Management of normal labours or complicated labour

B. GYNAECOLOGY

- i) Questions on applied anatomy
- ii) Questions on applied physiology of menstruation and fertilization
- iii) Questions on infections in genital tract
- iv) Questions on neoplasma in the genital tract
- v) Questions on displacement of the uterus

- vi) Normal delivery and safe delivery practices
- vii) High risk pregnancy and management
- viii) Abortions ix) Intra Uterine growth retardation
- x) Medicolegal examination in obgy and Gynae including Rape.

C. FAMILY PLANNING

- i) Conventional contraceptives 15
- ii) U.D. and oral pills
- iii) Operative procedure, sterilization and organization of programmes in the urban and rural surroundings
- iv) Medical Termination of Pregnancy

5. PREVENTIVE SOCIAL AND COMMUNITY MEDICINE

- i) Social and Community Medicine
 - ii) Concept of Health, Disease and Preventive Medicine
 - iii) Health Administration and Planning
 - iv) General Epidemiology
 - v) Demography and Health Statistics
 - vi) Communicable Diseases
 - vii) Environmental Health
 - viii) Nutrition and Health
 - ix) Non-communicable diseases
 - x) Occupational Health xi) Genetics and Health
 - xii) International Health
 - xiii) Medical Sociology and Health Education
 - xiv) Maternal and Child Health
 - xv) National Programmes
 - xvi) Management of common health problems
 - xvii) Ability to monitor national health programmes
 - xviii) Knowledge of maternal and child wellness
 - xix) Ability to recognize, investigate, report, plan and manage community health problems including malnutrition and emergencies.

शाखा अभियंता (स्थापत्य) अभ्यासक्रम

Civil Engineering (Graduate level)

Engineering Mechanics: System of forces, free-body diagrams, equilibrium equations; Internal forces in structures; Friction and its applications; Kinematics of point mass and rigid body; Centre of mass; Euler's equations of motion; Impulse-momentum; Energy methods; Principles of virtual work.

Solid Mechanics: Bending moment and shear force in statically determinate beams; Simple stress and strain relationships; Theories of failures; Simple bending theory, flexural and shear stresses, shear centre; Uniform torsion, buckling of column, combined and direct bending stresses.

Structural Analysis: Statically determinate and indeterminate structures by force/energy methods; Method of superposition; Analysis of trusses, arches, beams, cables and frames; Displacement methods: Slope deflection and moment distribution methods; Influence lines; Stiffness and flexibility methods of structural analysis.

Construction Materials and Management: Construction Materials: Structural steel - composition, material properties and behaviour; Concrete - constituents, mix design, short-term and long-term properties; Bricks and mortar; Timber; Bitumen. Construction Management: Types of construction projects; Tendering and construction contracts; Rate analysis and standard specifications; Cost estimation; Project planning and network analysis - PERT and CPM.

Concrete Structures: Working stress, Limit state and Ultimate load design concepts; Design of beams, slabs, columns; Bond and development length; Prestressed concrete; Analysis of beam sections at transfer and service loads.

Steel Structures: Working stress and Limit state design concepts; Design of tension and compression members, beams and beam-columns, column bases; Connections - simple and eccentric, beam-column connections, plate girders and trusses; Plastic analysis of beams and frames.

Soil Mechanics: Origin of soils, soil structure and fabric; Three-phase system and phase relationships, index properties; Unified and Indian standard soil classification system; Permeability - one dimensional flow, Darcy's law; Seepage through soils - two-dimensional flow, flow nets, uplift pressure, piping; Principle of effective stress, capillarity, seepage force and quicksand condition; Compaction in laboratory and field conditions; One-dimensional consolidation, time rate of consolidation; Mohr's circle, stress paths, effective and total shear strength parameters, characteristics of clays and sand.

Foundation Engineering: Sub-surface investigations - scope, drilling bore holes, sampling, plate load test, standard penetration and cone penetration tests; Earth pressure theories - Rankine and Coulomb; Stability of slopes - finite and infinite slopes, method of slices and Bishop's method; Stress distribution in soils - Boussinesq's and Westergaard's theories, pressure bulbs; Shallow foundations - Terzaghi's and Meyerhoff's bearing capacity theories, effect of water table; Combined footing and raft foundation; Contact pressure; Settlement analysis in

sands and clays; Deep foundations - types of piles, dynamic and static formulae, load capacity of piles in sands and clays, pile load test, negative skin friction.

Fluid Mechanics: Properties of fluids, fluid statics; Continuity, momentum, energy and corresponding equations; Potential flow, applications of momentum and energy equations; Laminar and turbulent flow; Flow in pipes, pipe networks; Concept of boundary layer and its growth.

Hydraulics: Forces on immersed bodies; Flow measurement in channels and pipes; Dimensional analysis and hydraulic similitude; Kinematics of flow, velocity triangles; Basics of hydraulic machines, specific speed of pumps and turbines; Channel Hydraulics - Energy-depth relationships, specific energy, critical flow, slope profile, hydraulic jump, uniform flow and gradually varied flow

Hydrology: Hydrologic cycle, precipitation, evaporation, evapo-transpiration, watershed, infiltration, unit hydrographs, hydrograph analysis, flood estimation and routing, reservoir capacity, reservoir and channel routing, surface run-off models, ground water hydrology - steady state well hydraulics and aquifers; Application of Darcy's law.

Irrigation: Duty, delta, estimation of evapo-transpiration; Crop water requirements; Design of lined and unlined canals, head works, gravity dams and spillways; Design of weirs on permeable foundation; Types of irrigation systems, irrigation methods; Water logging and drainage; Canal regulatory works, cross-drainage structures, outlets and escapes.

Water and Waste Water: Quality standards, basic unit processes and operations for water treatment. Drinking water standards, water requirements, basic unit operations and unit processes for surface water treatment, distribution of water. Sewage and sewerage treatment, quantity and characteristics of wastewater. Primary, secondary and tertiary treatment of wastewater, effluent discharge standards. Domestic wastewater treatment, quantity of characteristics of domestic wastewater, primary and secondary treatment. Unit operations and unit processes of domestic wastewater, sludge disposal.

Air Pollution: Types of pollutants, their sources and impacts, air pollution meteorology, air pollution control, air quality standards and limits.

Municipal Solid Wastes: Characteristics, generation, collection and transportation of solid wastes, engineered systems for solid waste management (reuse/ recycle, energy recovery, treatment and disposal).

Noise Pollution: Impacts of noise, permissible limits of noise pollution, measurement of noise and control of noise pollution.

Transportation Infrastructure: Highway alignment and engineering surveys; Geometric design of highways - cross-sectional elements, sight distances, horizontal and vertical alignments; Geometric design of railway track; Airport runway length, taxiway and exit taxiway design.

Highway Pavements: Highway materials - desirable properties and quality control tests; Design of bituminous paving mixes; Design factors for flexible and

rigid pavements; Design of flexible pavement using IRC: 37-2012; Design of rigid pavements using IRC: 58-2011; Distresses in concrete pavements.

Traffic Engineering: Traffic studies on flow, speed, travel time - delay and O-D study, PCU, peak hour factor, parking study, accident study and analysis, statistical analysis of traffic

data; Microscopic and macroscopic parameters of traffic flow, fundamental

relationships; Control devices, signal design by Webster's method; Types of intersections and channelization; Highway capacity and level of service of rural highways and urban roads.

Surveying: Principles of surveying; Errors and their adjustment; Maps - scale, coordinate system; Distance and angle measurement - Levelling and trigonometric levelling; Traversing and triangulation survey; Total station; Horizontal and vertical curves.

Photogrammetry - scale, flying height; Remote sensing - basics, platform and sensors, visual image interpretation; Basics of Geographical information system (GIS) and Geographical Positioning system (GPS).

विधी अधिकारी अभ्यासक्रम

1.	Indian constitution	
2.	Indian penal code	
3.	Civil Procedure Code	
4.	Law Of Contract	
5.	Information Technology Act	
6.	Indian Evidence Act	
7.	Consumer Protection Act	
8.	The Maharashtra Muncipal Corporation Act and Rules	
9.	Transfer and Property Laws	
10.	Maharashtra Regional and Town Planning Act 1969	
11.	Tenancy Laws	
12.	Right To Information Act 2005	
13.	Right To Service Act 2015	
14.	Bombay Govt Premises (Eviction) Act 1955	

अग्निशमन केंद्र अधिकारी अभ्यासक्रम
Syllabus : Fire Station Officer

Minimum Qualification- B.Tech.

1. **Fire Engineering Fundamentals:** Chemistry of Fire, Combustion process, Limits of Flammability, Flame Spread, Effects of Heat, Fire Resistance, Fire Load etc.
2. **Fire Fighting Chemicals:** Water, Foam, DCP, Clean agents etc.
3. **Fire Detection & Control:** Fire Detection principles, classification of detectors, Fire Extinction methods, water based, chemical based, clean agent systems, operation and maintenance of detection / alarm systems
4. **Fire Protection – I (Special hazards: Industrial Fires):** Fire Suppression Systems, Fire Water systems, sprinkler systems, Fire resistant construction, Emergency exits
5. **Fire Protection – II (Special hazards: Flammable Liquid Storages):** Plant siting considerations, Ignition source control, Hazards of Bulk storages, Fire Protection for Flammable storages, Passive barriers
6. **Fire Services Hydraulics:** Sprinkler system demand, hydraulics of sprinkler systems etc.
7. **Fire Safety Laws:** Doctrine of Sovereign immunity; Factories Act, Explosives act, Petroleum act etc.
8. **Fire Codes and Standards:** Standards for Fire Equipment, Personal Safety equipment etc.
9. **Paramedics / First Aid:** Management of Burns, Fractures, wounds, trauma handling etc.
10. **Inspection & Testing of Fire Fighting Systems:** Fire Sprinkler testing, OISD/NFPA standards for testing & Inspection, Fire Pumps testing etc.
11. **Safety Management:** Goals & Need of Safety, Accident Prevention, Accident Investigation, Personal Protection equipment etc.
12. **Safety in Construction:** Safety in welding & gas cutting, excavations, work at height, electrical, material handling, lifting/hoisting etc.
13. **Safety Engineering:** Accident trends in Industry, Safety Indices, Frequency & Severity Rates, Job Safety Analysis, work permit administration etc

कनिष्ठ अभियंता (स्थापत्य) अभ्यासक्रम

Civil Engineering (Graduate level)

Engineering Mechanics: System of forces, free-body diagrams, equilibrium equations; Internal forces in structures; Friction and its applications; Kinematics of point mass and rigid body; Centre of mass; Euler's equations of motion; Impulse-momentum; Energy methods; Principles of virtual work.

Solid Mechanics: Bending moment and shear force in statically determinate beams; Simple stress and strain relationships; Theories of failures; Simple bending theory, flexural and shear stresses, shear centre; Uniform torsion, buckling of column, combined and direct bending stresses.

Structural Analysis: Statically determinate and indeterminate structures by force/energy methods; Method of superposition; Analysis of trusses, arches, beams, cables and frames; Displacement methods: Slope deflection and moment distribution methods; Influence lines; Stiffness and flexibility methods of structural analysis.

Construction Materials and Management: Construction Materials: Structural steel - composition, material properties and behaviour; Concrete - constituents, mix design, short-term and long-term properties; Bricks and mortar; Timber; Bitumen. Construction Management: Types of construction projects; Tendering and construction contracts; Rate analysis and standard specifications; Cost estimation; Project planning and network analysis - PERT and CPM.

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Foundation Engineering: Sub-surface investigations - scope, drilling bore holes, sampling, plate load test, standard penetration and cone penetration tests; Earth pressure theories - Rankine and Coulomb; Stability of slopes - finite and infinite slopes, method of slices and Bishop's method; Stress distribution in soils - Boussinesq's and Westergaard's theories, pressure bulbs; Shallow foundations - Terzaghi's and Meyerhoff's bearing capacity theories, effect of water table;

Combined footing and raft foundation; Contact pressure; Settlement analysis in sands and clays; Deep foundations - types of piles, dynamic and static formulae, load capacity of piles in sands and clays, pile load test, negative skin friction.

Fluid Mechanics: Properties of fluids, fluid statics; Continuity, momentum, energy and corresponding equations; Potential flow, applications of momentum and energy equations; Laminar and turbulent flow; Flow in pipes, pipe networks; Concept of boundary layer and its growth.

Hydraulics: Forces on immersed bodies; Flow measurement in channels and pipes; Dimensional analysis and hydraulic similitude; Kinematics of flow, velocity triangles; Basics of hydraulic machines, specific speed of pumps and turbines; Channel Hydraulics - Energy-depth relationships, specific energy, critical flow, slope profile, hydraulic jump, uniform flow and gradually varied flow

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Irrigation: Duty, delta, estimation of evapo-transpiration; Crop water requirements; Design of lined and unlined canals, head works, gravity dams and spillways; Design of weirs on permeable foundation; Types of irrigation systems, irrigation methods; Water logging and drainage; Canal regulatory works, cross-drainage structures, outlets and escapes.

Water and Waste Water: Quality standards, basic unit processes and operations for water treatment. Drinking water standards, water requirements, basic unit operations and unit processes for surface water treatment, distribution of water. Sewage and sewerage treatment, quantity and characteristics of wastewater. Primary, secondary and tertiary treatment of wastewater, effluent discharge standards. Domestic wastewater treatment, quantity and characteristics of domestic wastewater, primary and secondary treatment. Unit operations and unit processes of domestic wastewater, sludge disposal.

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control tests; Design of bituminous paving mixes; Design factors for flexible and rigid pavements; Design of flexible pavement using IRC: 37-2012; Design of rigid pavements using IRC: 58-2011; Distresses in concrete pavements.

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relationships; Control devices, signal design by Webster's method; Types of intersections and channelization; Highway capacity and level of service of rural highways and urban roads.

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Photogrammetry - scale, flying height; Remote sensing - basics, platform and sensors, visual image interpretation; Basics of Geographical information system (GIS) and Geographical Positioning system (GPS).

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Photogrammetry - scale, flying height; Remote sensing - basics, platform and sensors, visual image interpretation; Basics of Geographical information system (GIS) and Geographical Positioning system (GPS).

कनिष्ठ अभियंता (स्थापत्य) स्थापत्य

Mechanical Engineering (Graduate level)

Engineering Mechanics: Free-body diagrams and equilibrium; trusses and frames; virtual work; kinematics and dynamics of particles and of rigid bodies in plane motion; impulse and momentum (linear and angular) and energy formulations, collisions.

Mechanics of Materials: Stress and strain, elastic constants, Poisson's ratio; Mohr's circle for plane stress and plane strain; thin cylinders; shear force and bending moment diagrams; bending and shear stresses; deflection of beams; torsion of circular shafts; Euler's theory of columns; energy methods; thermal stresses; strain gauges and rosettes; testing of materials with universal testing machine; testing of hardness and impact strength.

Theory of Machines: Displacement, velocity and acceleration analysis of plane mechanisms; dynamic analysis of linkages; cams; gears and gear trains; flywheels and governors; balancing of reciprocating and rotating masses; gyroscope.

Vibrations: Free and forced vibration of single degree of freedom systems, effect of damping; vibration isolation; resonance; critical speeds of shafts.

Machine Design: Design for static and dynamic loading; failure theories; fatigue strength and the S-N diagram; principles of the design of machine elements such as bolted, riveted and welded joints; shafts, gears, rolling and sliding contact bearings, brakes and clutches, springs.

Fluid Mechanics: Fluid properties; fluid statics, manometry, buoyancy, forces on submerged bodies, stability of floating bodies; control-volume analysis of mass, momentum and energy; fluid acceleration; differential equations of continuity and momentum; Bernoulli's equation; dimensional analysis; viscous flow of incompressible fluids, boundary layer, elementary turbulent flow, flow through pipes, head losses in pipes, bends and fittings.

Heat-Transfer: Modes of heat transfer; one dimensional heat conduction, resistance concept and electrical analogy, heat transfer through fins; unsteady heat conduction, lumped parameter system, Heisler's charts; thermal boundary layer, dimensionless parameters in free and forced convective heat transfer, heat transfer correlations for flow over flat plates and through pipes, effect of turbulence; heat exchanger performance, LMTD and NTU methods; radiative heat transfer, Stefan- Boltzmann law, Wien's displacement law, black and grey surfaces, view factors, radiation network analysis.

Thermodynamics: Thermodynamic systems and processes; properties of pure substances, behaviour of ideal and real gases; zeroth and first laws of thermodynamics, calculation of work and heat in various processes; second law of

thermodynamics; thermodynamic property charts and tables, availability and irreversibility; thermodynamic relations.

Applications: Power Engineering: Air and gas compressors; vapour and gas power cycles, concepts of regeneration and reheat. I.C. Engines: Air-standard Otto, Diesel and dual cycles. Refrigeration and air-conditioning: Vapour and gas refrigeration and heat pump cycles; properties of moist air, psychrometric chart, basic psychrometric processes. Turbomachinery: Impulse and reaction principles, velocity diagrams, Pelton-wheel, Francis and Kaplan turbines.

Engineering Materials: Structure and properties of engineering materials, phase diagrams, heat treatment, stress-strain diagrams for engineering materials.

Casting, Forming and Joining Processes: Different types of castings, design of patterns, moulds and cores; solidification and cooling; riser and gating design. Plastic deformation and yield criteria; fundamentals of hot and cold working processes; load estimation for bulk (forging, rolling, extrusion, drawing) and sheet (shearing, deep drawing, bending) metal forming processes; principles of powder metallurgy. Principles of welding, brazing, soldering and adhesive bonding.

Machining and Machine Tool Operations: Mechanics of machining; basic machine tools; single and multi-point cutting tools, tool geometry and materials, tool life and wear; economics of machining; principles of non-traditional machining processes; principles of work holding, design of jigs and fixtures.

Metrology and Inspection: Limits, fits and tolerances; linear and angular measurements; comparators; gauge design; interferometry; form and finish measurement; alignment and testing methods; tolerance analysis in manufacturing and assembly.

Computer Integrated Manufacturing: Basic concepts of CAD/CAM and their integration tools.

Production Planning and Control: Forecasting models, aggregate production planning, scheduling, materials requirement planning.

Inventory Control: Deterministic models; safety stock inventory control systems.

Operations Research: Linear programming, simplex method, transportation, assignment, network flow models, simple queuing models, PERT and CPM.

कर अधीक्षक अभ्यासक्रम

- महाराष्ट्र महानगरपालिका अधिनियम
- माहिती अधिकार अधिनियम – २००५
- महाराष्ट्र लोकसेवा हक्क अधिनियम – २०१५

औषध निर्माता अभ्यासक्रम
PHARMACIST

1. Pharmaceutical Chemistry
2. Pharmacognosy
3. Biochemistry
4. Clinical Pathology
5. Human Anatomy & Physiology
6. Health Education & Community Pharmacy
7. Pharmacology & Toxicology
8. Pharmaceutical Jurisprudence
9. Drug Store and Business Management
10. Hospital & Clinical Pharmacy

सहाय्यक कर अधीक्षक अभ्यासक्रम

- महाराष्ट्र महानगरपालिका अधिनियम
- माहिती अधिकार अधिनियम – २००५
- महाराष्ट्र लोकसेवा हक्क अधिनियम – २०१५

कर निरीक्षक

मराठी	घटक	गुण २०
	सर्वसामान्य शब्द संग्रह	
	वाक्यरचना	
	म्हणी आणि वाक्यप्रचार यांचा अर्थ आणि उपयोग	
	उता-यावरील प्रश्नांची उत्तरे	
	वाक्य पृथःकरण व त्याचे प्रकार	
इंग्रजी	Grammar	गुण २०
	Common Vocabulary	
	Sentences Structure	
	Idioms and phrases and their meaning	
	Comprehension of passage	
	Sentence Arrangement and Error Correction	
सामान्य ज्ञान	चालू घडामोडी	गुण २०
	महाराष्ट्राचा इतिहास	
	महाराष्ट्राचा भूगोल	
	राज्यघटना	
	महाराष्ट्राचे व भारताचे नागरीकरण	
	आद्यावत तंत्रज्ञान	
	पर्यावरण समस्या	
	वारसा स्थळे	
	पर्यटन	
	ऊर्जा व हरित बांधकाम	
	घनकचरा व्यवस्थापन	
	बौद्धिक चाचणी	
Directions		
Arithmetical Reasoning		
Statements and Arguments		
Decision Making		
Statements and Conclusions		
Analogy		
Number Series		

२० गुणांसाठी

- माहिती अधिकार अधिनियम – २००५
- महाराष्ट्र लोकसेवा हक्क अधिनियम – २०१५

चालक यंत्रचालक अभ्यासक्रम
Driver cum Pump Operator

- General fire causes and extinguishing methods,
- Media,
- Fire triangle,
- Class of fire,
- Tetrahedron of fire,
- Fire extinguishers,
- Maintenance and test general description of firefighting equipment,
- Fire tenders,
- Coal and gas fires,
- Electrical fires,
- Special rescue methods etc.

फायरमन

Fireman

- General fire causes and extinguishing methods,
- Media,
- Fire triangle,
- Class of fire,
- Tetrahedron of fire,
- Fire extinguishers,
- Maintenance and test general description of firefighting equipment,
- Fire tenders,
- Coal and gas fires,
- Electrical fires,
- Special rescue methods etc.

वॉलमन अभ्यासक्रम
Walvemen Syllabus

अ.क्र	Subjects (विषय)
1.	Gasket (गॅसकेट)
2.	Basic Electricity (बेसीक इलेक्ट्रीसिटी)
3.	Pump (पंप)
4.	Cassfication of pump (पंपाचे वर्गीकरण)
5.	Reciprocating pump (रेसिप्रोकिटींग पंप)
6.	Rotary pump (रोटरी पंप)
7.	Valves (वॉल्व्हज)
8.	Gaskets & seals (सिल्स व गॅसकेट)
9.	Pump foundation, errection, maintenance (पंपाची उभारणी, मांडणी व मॅटनन्स)
10.	Centrifugal pump, submersible.pump,jet pump (सेंट्रीफ्युगल पंप, सबमर्सीबल पंप,जेट पंप)

लिपीक पदासाठी अभ्यासक्रम

मराठी	घटक	गुण २५
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	वाक्यरचना	
	म्हणी आणि वाक्यप्रचार यांचा अर्थ आणि उपयोग	
	उता-यावरील प्रश्नांची उत्तरे	
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सामान्य ज्ञान	चालू घडामोडी	गुण २५
	महाराष्ट्राचा इतिहास	
	महाराष्ट्राचा भुगोल	
	राज्यघटना	
	महाराष्ट्राचे व भारताचे नागरीकरण	
	आधावत तंत्रज्ञान	
	पर्यावरण समस्या	
	वारसा स्थळे	
	पर्यटन	
	उर्जा व हरित बांधकाम	
	घनकचरा व्यवस्थापन	
	बौध्दीक चाचणी	
Directions		
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