# **Post :- Assistant Electrical Engineer**

### General Knowledge (Xth Level):

- Current Affairs- National & International
- Indian History
- Indian Geography
- **Indian Polity**
- Science & Technology

#### 2. **Logical Reasoning (Xth Level):**

- Analogies.
- Similarities.
- Problem Solving.
- Relationship Concepts.
- Space Visualization.
- Arithmetical Number Series.
- Arithmetical Reasoning

#### 3. General English & Comprehension (Xth Level)-

- Synonyms
- Antonyms
- One word substitution
- Error detection
- Idioms & Phrases
- Passage Comprehension

#### 4. **General Hindi (Xth Level):**

- Grammar.
- Vocabulary.
- Comprehension.
- Fill in the Blanks.
- Error Detection.
- Antonyms.
- Synonyms.
- Phrases/Muhavare.

#### 5. **Basic knowledge of Computer**

- Fundamental of computers
  - CPU 0
  - Memory 0
  - Hard Disk
  - Input/ Output Devices 0
  - knowledge of Number
  - Basic concept of Computer (Hardware & Software)
    - Computer Software
    - Operating System 0
    - Computer language 0
  - Basic knowledge of MS Office
    - MS word 0
    - MS excel 0
    - MS Power point
  - Basic knowledge of Internet
    - Web browser 0
    - E-mail 0
    - Search Engines
    - 0 Web servers
  - Basic knowledge of computer network
    - LAN 0
    - WAN 0
    - MODEM 0
  - Basic knowledge of cyber security
    - Virus, Malware etc. 0
    - Warm
    - Internet security 0
    - Network security 0
    - Firewall

# Technical paper (Electrical/ Electrical & Electronics) = 1) Engineering Mathematics

Linear Algebra: Matrix Algebra, Systems of linear equations, Eigenvalues, Eigenvectors.

Calculus: Mean value theorems, Theorems of integral calculus, Evaluation of definite and improper integrals, Partial Derivatives, Maxima and minima, Multiple integrals, Fourier series, Vector identities, Directional derivatives, Line integral, Surface integral, Volume integral, Stokes's theorem, Gauss's theorem, Green's theorem.

Differential equations: First order equations (linear and nonlinear), Higher order linear differential equations with constant coefficients, Method of variation of parameters, Cauchy's equation, Euler's equation, Initial and boundary value problems, Partial Differential Equations, Method of separation of variables.

Complex variables: Analytic functions, Cauchy's integral theorem, Cauchy's integral formula, Taylor series, Laurent series, Residue theorem, Solution integrals.

Probability and Statistics: Sampling theorems, Conditional probability, Mean, Median, Mode, Standard Deviation, Random variables, Discrete distributions, Continuous distribution, Normal distribution, Binomial distribution, Correlation analysis, Regression analysis.

Numerical Methods: Solutions of nonlinear algebraic equations, Single and Multi-step methods for differential equations.

Transform Theory: Fourier Transform, Laplace Transform, z-Transform.

### **Electrical Engineering**

### 2) Electric Circuits

Network graph, KCL, KVL, Node and Mesh analysis, Transient response of dc and ac networks, Sinusoidal steady-state analysis, Resonance, Passive filters, Ideal current and voltage sources, Thevenin's theorem, Norton's theorem, Superposition theorem, Maximum power transfer theorem, Two-port networks, Three phase circuits, Power and power factor in ac circuits.

### 3) <u>Electromagnetic Fields</u>

Coulomb's Law, Electric Field Intensity, Electric Flux Density, Gauss's Law, Divergence, Electric field and potential due to point, line, plane and spherical charge distributions, Effect of dielectric medium, Capacitance of simple configurations, Biot-Savart's law, Ampere's law, Curl, Faraday's law, Lorentz force, Inductance, Magnetomotive force, Reluctance, Magnetic circuits, Self and Mutual inductance of simple configurations.

### Signals and Systems

Representation of continuous and discrete-time signals, Shifting and scaling operations, Linear Time Invariant and Causal systems, Fourier series representation of continuous periodic signals, Sampling theorem, Applications of Fourier Transform, Laplace Transform and z-Transform.

### **Electrical Machines**

Single phase transformer: equivalent circuit, phasor diagram, open circuit and short circuit tests, regulation and efficiency; Three phase transformers: connections, parallel operation; Auto-transformer, Electromechanical energy conversion principles, DC machines: separately excited, series and shunt, motoring and generating mode of operation and their characteristics, starting and speed control of dc motors; Three phase induction motors: principle of operation, types, performance, torque-speed characteristics, noload and blocked rotor tests, equivalent circuit, starting and speed control; Operating principle of single phase induction motors; Synchronous machines: cylindrical and salient pole machines, performance, regulation and parallel operation of generators, starting of synchronous motor, characteristics; Types of losses and efficiency calculations of electric machines.

### 6) Power Systems

Power generation concepts, ac and dc transmission concepts, Models and performance of transmission lines and cables, Series and shunt compensation, Electric field distribution and insulators, Distribution systems, Per-unit quantities, Bus admittance matrix, GaussSeidel and Newton-Raphson load flow methods, Voltage and Frequency control, Power factor correction, Symmetrical components, Symmetrical and unsymmetrical fault analysis, Principles of over-current, differential and distance protection; Circuit breakers, System stability concepts, Equal area

### Control Systems

Mathematical modeling and representation of systems, Feedback principle, transfer function, Block diagrams and Signal flow graphs, Transient and Steady-state analysis of linear time invariant systems, Routh-Hurwitz and Nyquist criteria, Bode plots, Root loci, Stability analysis, Lag, Lead and Lead-Lag compensators; P, PI and PID controllers; State space model, State transition matrix.

### 8) Electrical and Electronic Measurements

Bridges and Potentiometers, Measurement of voltage, current, power, energy and power factor; Instrument transformers, Digital voltmeters and multimeters, Phase, Time and Frequency measurement; Oscilloscopes, Error analysis.

9) <u>Analog and Digital Electronics</u> Characteristics of diodes, BJT, MOSFET; Simple diode circuits: clipping, clamping, rectifiers; Amplifiers: Biasing, Equivalent circuit and Frequency response; Oscillators and Feedback amplifiers; Operational amplifiers: Characteristics applications; Simple active filters, VCOs and Timers, Combinational and Sequential logic circuits, Multiplexer, Demultiplexer, Schmitt trigger, Sample and hold circuits, A/D and D/A converters, 8085Microprocessor: Architecture, Programming and Interfacing.

### 10) Power Electronics

Characteristics of semiconductor power devices: Diode, Thyristor, Triac, GTO, MOSFET, IGBT; DC to DC conversion: Buck, Boost and Buck-Boost converters; Single and three phase configuration of uncontrolled rectifiers, Line commutated thyristor based converters, Bidirectional ac to dc voltage source converters, Issues of line current harmonics, Power factor, Distortion factor of ac to dc converters, Single phase and three phase inverters, Sinusoidal pulse width modulation

# **POST:- ASSISTANT ENGINEER (CIVIL)**

#### General Knowledge (Xth Level):

- Current Affairs- National & International
- Indian History Indian Geography
- Indian Polity
- Science & Technology

#### 2. Logical Reasoning (Xth Level):

- Analogies
- Similarities.
- Problem Solving.
- Relationship Concepts.
- Space Visualization.
- Arithmetical Number Series.
- Arithmetical Reasoning

### 3. General English Comprehension (Xth

- Synonyms
- Antonyms
- One word substitution
- Error detection
- Idioms & Phrases
- Passage Comprehension

#### 4. General Hindi (Xth Level):

- Grammar.
- Vocabulary.
- Comprehension.
- Fill in the Blanks.
- Error Detection.
- Antonyms.
- Synonyms. Phrases/Muhavare.
- 5.

#### Basic knowledge Computer

- of Fundamental computers 0 CPU
- Memory 0
- Hard Disk 0
- Input/ Output Devices knowledge of Number System
- Basic concept of Computer (Hardware & Software)
- Computer Software 0
- Operating System 0 Computer language 0
- Basic knowledge of MS Office
- 0 MS word
- MS excel
- 0 MS Power point
- Basic knowledge of Internet
- 0 Web browser
- E-mail 0
- Search Engines 0
- 0 Web servers
- Basic knowledge of computer network
- 0 LAN
- WAN
- MODEM 0
- Basic knowledge of cyber security
- Virus , Malware etc. 0
- Warm 0

0

- 0 Internet security Network security
  - Firewall

Technical paper (Civil Engineering/ Construction Engineering) -

# **Engineering Mathematics**

Linear Algebra: Matrix algebra; Systems of linear equations; Eigen values and Eigen vectors.

Calculus: Functions of single variable; Limit, continuity and differentiability; Mean value theorems, local maxima and minima, Taylor and Maclaurin series; Evaluation of definite and indefinite integrals, application of definite integral to obtain area and volume: Partial derivatives: Total derivative: Gradient, Divergence and Curl, Vector identities, Directional derivatives, Line, Surface and Volume integrals, Stokes, Gauss and Green's theorems.

Ordinary Differential Equation (ODE): First order (linear and nonlinear) equations; higher order linear equations with constant coefficients: Euler-Cauchy equations; Laplace transform and its application in solving linear ODEs; initial and boundary value problems.

Differential Equation Partial (PDE): Fourier series; separation of variables: solutions of onedimensional diffusion equation; first and second order one-dimensional wave equation and two-dimensional Laplace equation. and

Probability Statistics: Definitions of probability

and sampling theorems; Conditional probability; Discrete Random variables: Poisson and Binomial distributions; Continuous random variables: normal and exponential distributions; Descriptive statistics -Mean, median, mode and standard deviation; Hypothesis testing.

Numerical Methods: Accuracy and precision; error analysis. Numerical solutions of linear and non-linear algebraic equations; Least square approximation, Newton's Lagrange polynomials, numerical differentiation, Integration trapezoidal and Simpson's rule, single and multi-step methods for first order differential equations.

### Structural Engineering

Engineering Mechanics: System of 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: Impulsemomentum; 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.

#### Materials Construction Management: Construction

Materials: Structural composition, material properties 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

Structures: Working Concrete stress, Limit state and Ultimate load design concepts; Design of beams, 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 beamcolumns, column bases: Connections - simple and eccentric, beam-column connections, plate girders and trusses; Plastic analysis of beams and frames.

# **Geotechnical Engineering**

Soil Mechanics: Origin of soils, soil structure and fabric; Threesystem and phase relationships, index properties; Unified and Indian standard soil classification system: Permeability - one dimensional flow, Darcy's law; Seepage through soils - twodimensional 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 rate of consolidation; Mohr's circle, stress paths, effective and total shear strength parameters, characteristics of clays and sand.

Engineering: Sub-Foundation 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 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.

#### Water 4) Resources Engineering

Mechanics: Properties of Fluid fluid statics: Continuity. fluids. momentum, energy 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 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

cycle, Hydrologic Hydrologic precipitation, evaporation, evapo-transpiration, watershed, infiltration, hydrographs, hydrograph unit 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 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.

**Environmental Engineering** 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, recovery, treatment energy disposal).

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

### Transportation Engineering 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.

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.

### **Geomatics Engineering**

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

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

# **SYLLABUS FOR PAPER BASED WRITTEN EXAM (OMR Based) POST:-IT Manager**

### General Knowledge / Studies

#### Paper as per syllabus of Engineering degree (Computer Science/IT) -2)

- Basic Concept In Electrical/ Electronics Engineering
- **Digital Electronics**
- 3. **Object Oriented Programming**
- Numerical Methods & Computational Techniques 4.
- **Analog Electronics**
- **Data Structures**
- Computer Architecture 7.
- Systems Programming 8.
- 9. Microprocessor And Its Applications
- 10. Design & Analysis Of Algorithms
- 11. Introduction To Java Programming Language
- 12. Data Base Management System13. Operating Systems14. Computer Networks

- 15. Object Oriented Analysis & Design
- 16. Principles Of Programming Languages
- 17. Formal Languages & Automata Theory
- 18. Web Applications Design Development
- 19. Distributed Computing
- 20. Personal Management & Industrial Relation
- 21. Information Security
- 22. Fundamentals Of Data Communication
- 23. Mobiles & Wireless Computing
- 24. Distributed Data Base
- 25. Performance Evaluation Of Computer System
- 26. Optimization Theory
- 27. Genetic Algorithm
- 28. Natural Language Processing
- 29. Neural Networks & Its Application
- 30. Speech Processing
- 31. Computer Aided Design & Manufacturing
- 32. Introduction To Communication System
- 33. Digital Image Processing34. Software Engineering
- 35. Visual Programming
- Multimedia Technology & Its Application

# SYLLABUS FOR PAPER BASED WRITTEN EXAM (OMR Based) POST:- Assistant IT Manager

### 1) General Knowledge (Xth Level):

- Current Affairs- National & International
- Indian History
- Indian Geography
- Indian Constitution
- Science & Technology
- Fundamental Knowledge of Computer

### 2) Logical Reasoning (Xth Level):

- Analogies.
- Similarities.
- Problem Solving.
- · Relationship Concepts.
- Space Visualization.
- Arithmetical Number Series.
- Arithmetical Reasoning

### 3) Quantitative Aptitude (Xth Level):

- Percentages.
- Time & Work.
- Time & Distance.
- Profit and Loss.
- Simplification.
- Averages.
- Problems on Ages.

### 4) General English & Comprehension :-

- Synonyms
- Antonyms
- One word substitution
- Error detection
- Idioms & Phrases
- Passage Comprehension

# 5) Paper as per syllabus of Engineering degree (Computer Science/ IT) -

- Basic Concept In Electrical/ Electronics Engineering
- 2. Digital Electronics
- 3. Object Oriented Programming
- 4. Numerical Methods & Computational Techniques
- 5. Analog Electronics
- 6. Data Structures
- 7. Computer Architecture
- 8. Systems Programming
- 9. Microprocessor And Its Applications
- 10. Design & Analysis Of Algorithms
- 11. Introduction To Java Programming Language
- 12. Data Base Management System
- 13. Operating Systems
- 14. Computer Networks
- 15. Object Oriented Analysis & Design
- 16. Principles Of Programming Languages
- 17. Formal Languages & Automata Theory
- 18. Web Applications Design Development
- 19. Distributed Computing
- 20. Personal Management & Industrial Relation
- 21. Information Security
- 22. Fundamentals Of Data Communication
- 23. Mobiles & Wireless Computing
- 24. Distributed Data Base
- 25. Performance Evaluation Of Computer System
- 26. Optimization Theory
- 27. Genetic Algorithm
- 28. Natural Language Processing
- 29. Neural Networks & Its Application
- 30. Speech Processing
- 31. Computer Aided Design & Manufacturing
- 32. Introduction To Communication System
- 33. Digital Image Processing
- 34. Software Engineering
- 35. Visual Programming
- 36. Multimedia Technology & Its Application

## **POST :- Assistant Personnel Officer**

### 1) General Knowledge (Xth Level):

- Current Affairs- National & International
- Indian History
- Indian Geography
- Indian Polity
- Science & Technology

### 2) Logical Reasoning (Xth Level):

- Analogies.
- Similarities.
- Problem Solving.
- Relationship Concepts.
- Space Visualization.
- Arithmetical Number Series.
- Arithmetical Reasoning

### 3) General English & Comprehension (Xth Level) :-

- Synonyms
- Antonyms
- One word substitution
- Error detection
- Idioms & Phrases
- Passage Comprehension

### 4) General Hindi (Xth Level):

- Grammar.
- Vocabulary.
- Comprehension.
- Fill in the Blanks.
- Error Detection.
- Antonyms.
- Synonyms.
- Phrases/Muhavare.

### 5) Basic knowledge of Computer

- Fundamental of computers
  - o CPU
  - Memory
  - Hard Disk
  - Input/ Output Devices
  - knowledge of Number System
  - Basic concept of Computer (Hardware & Software)
    - o Computer Software
    - Operating System
    - Computer language
  - Basic knowledge of MS Office
    - o MS word
    - o MS excel
    - o MS Power point
  - Basic knowledge of Internet
    - Web browser
    - o E-mail
    - Search Engines
    - Web servers
  - Basic knowledge of computer network
    - $\circ \quad LAN$
    - o WAN
    - MODEM
  - Basic knowledge of cyber security
    - Virus , Malware etc.
    - o Warm
    - o Internet security
    - Network security
    - Firewall

- 6) Common syllabus defined for the Degree/
  Diploma in Labour and Social Welfare /
  Personnel management and Industrial
  Relation/ MBA with Specialization in
  Personnel Management –
- 1. HRM:

### Acquisition of Human Resources -

- i. Human Resource Planning
- ii. Human Resource Information System
- iii. Recruitment and Selection Strategies

### Developing Human Resources -

- i. Training and Developing Employees
- ii. Concept of Human Resource Development
- iii. Performance Management & Appraisal System
- iv. Motivation
- v. Participative Management
- vi. Career Development
- vii. Role of HR towards society CSR

### · Maintenance of Human Resources -

i. Industrial Relation / Labour Relations and

### Collective Bargaining

- ii. Compensation Management
- iii. Strategic Human Resource Management
- iv. Employee Safety and Health

### 2. Labour Laws:

### 3. Specific Laws related to Women Employees-

- i. Sexual Harassment at work place
- ii. Domestic Violence Act
- iii. Maternity Benefit Act
- iv. Equal Remuneration Act

# **POST:- Assistant**

### 1) General Knowledge (Xth Level):

- Current Affairs- National & International
- Indian History
- Indian Geography
- Indian Constitution
- Science & Technology

### 2) Logical Reasoning (Xth Level):

- Analogies.
- Similarities.
- Problem Solving.
- Relationship Concepts.
- Space Visualization.
- Arithmetical Number Series.
- Arithmetical Reasoning

### 3) Quantitative Aptitude (Xth Level):

- · Percentages.
- · Time & Work.
- Time & Distance.
- Profit and Loss.
- Simplification.
- Averages.
- Problems on Ages.

# 4) <u>General English & Comprehension (Xth Level):-</u>

- Synonyms
- Antonyms
- One word substitution
- Error detection
- Idioms & Phrases
- Passage Comprehension

### 5) General Hindi (Xth Level):

- Grammar.
- Vocabulary.
- Comprehension.
- Fill in the Blanks.
- Error Detection.
- Antonyms.
- Synonyms.
- Phrases/Muhavare.

### 6) Basic knowledge of Computer

- Fundamental of computers
- o CPU
- Memory
- Hard Disk
- Input/ Output Devices
- o knowledge of Number System
- Basic concept of Computer (Hardware & Software)
- o Computer Software
- o Operating System
- Computer language
- Basic knowledge of MS Office
- MS word
- o MS excel
- MS Power point
- · Basic knowledge of Internet
- Web browser
- o E-mail
- Search Engines
- Web servers
- Basic knowledge of computer network
- o LAN
- o WAN
- MODEM
- Basic knowledge of cyber security
- Virus , Malware etc.
- > Warm
- Internet security
- Network security
- Firewall

# SYLLABUS FOR PAPER BASED WRITTEN EXAM (OMR Based) POST :- Junior Accounts Clerk

### 1) General Knowledge (Xth Level):

- Current Affairs- National & International
- Indian History
- Indian Geography
- Indian Constitution
- Indian Culture & Heritage
- Indian Polity
- Science & Technology

### 2) Logical Reasoning (Xth Level):

- Analogies.
- Similarities.
- Problem Solving.
- · Differences.
- Analysis.
- Relationship Concepts.
- Observation.
- Verbal and Figure Classification.
- Space Visualization.
- · Decision Making.
- Arithmetical Number Series.
- Arithmetical Reasoning.
- Judgement.
- Visual Memory.
- Discrimination.

### 3) General English & Comprehension (Xth Level):-

- Synonyms
- Antonyms
- One word substitution
- Error detection
- Idioms & Phrases
- Passage Comprehension

### 4) General Hindi (Xth Level):

- Grammar.
- Vocabulary.
- Comprehension.
- Fill in the Blanks.
- Error Detection.
- · Antonyms.
- Synonyms.
- Phrases/Muhavare.

### 5) Basic knowledge of Computer

- Fundamental of computers
  - o CPU
  - Memory
  - Hard Disk
  - Input/ Output Devices
  - knowledge of Number System
  - Basic concept of Computer (Hardware & Software)
    - Computer Software
    - Operating System
    - Computer language
  - Basic knowledge of MS Office
    - MS word
    - MS excel
    - o MS Power point
  - Basic knowledge of Internet
    - Web browser
    - o E-mail
    - Search Engines
    - Web servers
  - Basic knowledge of computer network
    - o LAN
    - o WAN
    - o MODEM
  - Basic knowledge of cyber security
    - Virus , Malware etc.
    - o Warm
    - Internet security
    - Network security
    - Firewall

### 6) Commerce:

- Company Accounts Introduction
- Company's Act 1956 (with amendments)
- Audit & Financial Management
- Taxation Direct/ Indirect
- Balance Sheet
- Profit and Loss Accounts
- Costing & cost analysis
- Accounting concept
- Single entry system and rectification of error
- Bank reconciliation statement

# **POST**:- Stenographer

## General Knowledge (Xth Level):

- Current Affairs- National & International
- Indian History
- Indian Geography
- Indian Polity
- Science & Technology

### Logical Reasoning (Xth Level):

- Analogies.
- Similarities.
- Problem Solving.
- · Relationship Concepts.
- Space Visualization.
- Arithmetical Number Series.
- Arithmetical Reasoning

### **Quantitative Aptitude (Xth Level):**

- · Percentages.
- Time & Work.
- Time & Distance.
- Profit and Loss.
- Simplification.
- Averages.
- Problems on Ages.

### General English & Comprehension (Xth Level) :-

- Synonyms
- Antonyms
- One word substitution
- Error detection
- Idioms & Phrases
- Passage Comprehension

### General Hindi (Xth Level):

- Grammar.
- Vocabulary.
- Comprehension.
- Fill in the Blanks.
- Error Detection.
- Antonyms.
- Synonyms.
- Phrases/Muhavare.

## Basic knowledge of Computer

- Fundamental of computers
  - o CPU
  - Memory
  - Hard Disk
  - o Input/ Output Devices
  - knowledge of Number System
  - Basic concept of Computer (Hardware & Software)
    - o Computer Software
    - o Operating System
    - Computer language
  - Basic knowledge of MS Office
    - o MS word
    - MS excel
    - o MS Power point
  - Basic knowledge of Internet
    - Web browser
    - o E-mail
    - Search Engines
    - Web servers
  - Basic knowledge of computer network
    - o LAN
    - o WAN
    - o MODEM
  - Basic knowledge of cyber security
    - Virus , Malware etc.
    - o Warm
    - Internet security
    - Network security
    - o Firewall