FORENSIC SCIENCE LABORATORIES
POLICE DEPARTMENT
Madivala, Bangalore

SYLLABUS FOR THE POST OF
LABORATORY ASSISTANT (PHOTOGRAPHY)
(PHOTOGRAPHY SECTION)

Paper I: General Paper

- General awareness, Current affairs, Qualitative & Quantitative and general basic questions about all the subjects related to Physics, Chemistry, Biology, Electronics and Computer Science.

Paper II: Subject Paper

- **History:** Evolution of cinematography, Basic elements of cinematography, various prospective of Cinematography. Early contributions, Image recording medium, early image development techniques, Developments in photography.

- **Camera:** Types of cameras, principles of camera, Anatomy of Still camera- Lens, Aperture, Shutter, Film negative, Latent image formation etc., Types of Still cameras-Pin hole, Box, Folding, Range finder, Studio, TLR,SLR, Stereo cameras and their Applications. Functions and Controls of Camera, Camera Lens and types. Camera Support System. Outdoor & Indoor Shooting accessories.

- **Basic Camera Techniques:** Basic shot Compositions. Exposure, photographic exposure & its effects, Exposure meters, Depth of field, Depth of focus. Aperture, F-stops, Focus, Hyper focal distance. Framing, frame factors-borders, Image size, angle. Concept of looking space, head room. Camera movements, Camera angles, Rule of thirds, Rule of odds, Rule of space, 180axes of action rule, Imaginary line and continuity.

- **Lenses:** Types of lenses, Construction of camera lenses. Lens formula Image formation with convex lens, Real image, Virtual image, Simple/Compound lens, Focal length of a lens, Depth of field, Angle of coverage, Types of lens- Normal, Wide, Telephoto, Macro, Micro, Zoom, Fish eye, Focal length, F-number.

- **Lighting:** Basic properties of Light, Objectives of lighting. Source of light- Light Direction-intensity. Composition of lighting - Unit of light-foot candle, lux. Lighting and exposure-direct light, diffused light. Lighting Instruments, lighting accessories. Quality of light attributes of light – quantity –quality–colour quality–Colour temperature.

- **Filters:** Filter, filter factor, Types, kinds, Light sources, Filter materials – Glass filters – Gelatin filters – Sandwich filters – Filters for black & white-Colour photography –Polarisers – Neutral density filters – UV filters –Contrast filters – Colour correction filters – Special effect filters – Creative use of filters.

- **Digital Cinematography:** Basics of digital Cinematography, Digital Applications, Image Recording, types of digital Cameras, Sensors, pixels and resolutions, Image and Video formats, Data storage.

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KSP Laboratory Assistant Syllabus - Subject Wise

ksp.gov.in Laboratory Attender General Awareness Syllabus

- National Dance
- Music & Literature
- Indian Culture
- Scientific observations
- Political Science
- World organizations
- Countries and Capitals
- Famous Places in India
- Books and Authors
- Important Dates
- About India and it's neighboring countries
- Science and innovations
- New inventions
- Economic problems in India
- Geography of India
- National and International current affairs

Karnataka State Police EEG Technician Current Affairs Syllabus

- Books & Authors
- Finance
- Science & Technology
- Environment
- Economy
- Banking
- Awards
- Sports & General
- Festivity
- International Affairs
- Current Events
- Current Ministers & Governors
- Business
- Indian Financial System
- Politics

- Capitals & Currencies
- Education
- Government Schemes
- Abbreviations and Economic Terminologies
- Summits & Conferences, etc
- Obituary
- Talkies

KSP Laboratory Assistant Quantitative Syllabus

- Time and Work Partnership
- Ratio and Proportion
- Boats and Streams
- Simple Interest
- Time and Distance
- Problems on Trains
- Areas
- Races and Games
- Numbers and Ages
- Mixtures and Allegations
- Mensuration
- https://www.freshersnow.com/syllabus/
- Permutations and Combinations
- Problems on L.C.M and H.C.F
- Pipes and Cisterns
- Percentages
- Simple Equations
- Problems on Numbers
- Averages
- Indices and Surds
- Compound Interest
- Volumes
- Odd Man Out
- Quadratic Equations
- Probability
- Profit and Loss
- Simplification and Approximation

KSP Forensic Science Laboratory Physics Syllabus

- Mathematical Methods

- Classical Mechanics
- Relativity
- Atomic
- Molecular Physics
- Condensed Matter Physics
- Thermodynamics
- Statistical Mechanics
- Nuclear and Particle Physics
- Quantum Theory and its Applications
- Electromagnetic Theory
- Electronics
- Experimental Physics

ksp.gov.in Laboratory Attender Chemistry Syllabus

- General Chemistry
- Structure of Atom
- Electrochemistry
- Periodicity
- Solid State
- Solutions
- Classification of Elements
- Molecular Structure
- Chemical Bonding
- Surface Chemistry
- Redox Reactions
- Chemical Kinetics
- States of Matter
- Equilibrium
- Thermodynamics
- Processes of Isolation of Elements
- Coordination Compounds
- P, D, F Block Elements
- Hydrogen
- D Block Elements
- Alkali and Alkaline earth metals (S Block)
- Haloarenes
- Alcohols
- Haloalkanes
- Aldehydes
- Phenols

- Ketones
- Ethers
- General Organic Chemistry
- Carboxylic Acids
- Biomolecules
- Hydrocarbons
- Environmental Chemistry
- Amines
- Chemistry in Everyday Life

Karnataka State Police EEG Technician Biology Syllabus

- Embryology of angiosperms
- Plant Physiology
- Biochemistry
- Plant growth and growth hormones
- Ecology
- Pteridophyte
- Gymnosperm
- Morphology of Angiosperm
- Anatomy
- Algae, Fungi
- Plant Diseases
- Viruses
- Bacteria
- Bryophytes
- Plant Succession
- Environmental Pollution
- Cell Biology

KSP Forensic Science Laboratory Electronics Syllabus

- Basics of Circuits and Measurement Systems
- Electrical and Electronic Measurements
- Analytical
- Control Systems
- Optical Instrumentation
- Process Control
- Signals & Systems, and Communications

KSP Laboratory Assistant Computer Science Syllabus

- Knowledge of C++
- Operating Systems – DOS
- PHP
- MS SQL Server
- Oracle PL_SQL Architecture
- ASP.NET
- ADO.NET
- Java & JavaScript
- Manageable switch/router & wireless LAN with the network security
- Firewall & anti virus
- UML
- Object-Oriented designing
- Proposing and creating architecture and re-usable libraries in.NET
- JavaScript
- Networking with LAN/WAN
- Novel
- Window OS client & server & Linux OS-client & server.
- Web Services
- Window Services
- JSON
- The query will be an added plus
- Grid Computing, Distributed
- OS
- Image processing, Digital signal processing
- Image processing
- VLSI
- Embedded System