HOME (POLICE) DEPARTMENT

SYLLABUS

The following pattern of examination and syllabus shall be followed for conducting competitive examination for the direct recruitment to various posts of Scientific Staff for the Mobile Forensic Crime Scene Unit in the Directorate of Forensic Sciences, Government of Meghalaya.

Candidates who fail to secure the minimum marks fixed in the screening test shall stand disqualified.

A. Syllabus for screening test of Scientific Officer

Screening Test

Paper 1 - 100 Marks (General English, General Knowledge, General Mathematics, General Aptitude, Reasoning - must be of Matriculation Level)
Duration of examination –2hrs
Paper 2 - 200 Marks (Forensic Science and Crime Scene Management)
Duration of examination –2 hrs
Minimum Qualifying Marks - 60%

Personal Interview– 100 Marks

Paper 1

a. General English
b. General Knowledge and Current Affairs
c. General Mathematics (Matriculation Level)
d. General Aptitude and Reasoning

Paper 2

a. Forensic Sciences
    1. Introduction to Forensic Science – History of Forensic Sciences; Laws of Forensic Science; Introduction to New Criminal Laws (BNSS, BNS, BSA); Forensic Science in India – Structures, types of labs, divisions, evidences; Introduction to Criminology – Understanding Crime, Defining Culprit, Suspect, Victim, types of crimes in India; Different Courts in India and their jurisdiction; Basic Introduction to The Police System in India; Basic Introduction to Indian Judiciary System;
    2. Forensic Chemistry and Toxicology – Introduction to Basic Chemistry; Introduction to Explosives; Introduction to Forensic Toxicology and Definition of terms; Introduction to NDPS Act; Types of Chemical Evidences; Collection and Preservation of Chemical Evidences; Field Test for Various Chemical Evidences; Introduction to Basic Forensic Chemistry Instruments like GCMS, TLC, HPLC, HPTLC, ICPMS, etc.
    3. Forensic Physics – Introduction to Basic Physics, Types of Physical Evidences, Collection and Preservation of Various Physical Evidences like Hair, Fibers, Glass, Toolmarks, tyremarks, etc; Introduction to Basic Forensic Physics Experiments and equipments like EDXRF, SEMEDX, FTIR, etc.
    4. Ballistics – Introduction to Ballistics; Introduction to Firearms – Basic History, Parts of a firearms, Handling of a firearms, etc; Collection and Preservation of Firearms and bullets; Gunshot Residue – Importance, Collection Technique, Spot Test, etc; Wound Ballistics; Introduction to Basic Ballistic Experiments and Instruments like Comparison Microscope, SEMEDX, etc.

5. Forensic Biology and DNA – Introduction to Basic Biology and DNA; Types of Biological Evidences, Collection and Preservation of Various Biological Evidences like Blood, Semen, Bone, Hair, Saliva, urine, sweat etc; Preliminary Test for various Biological Fluids like Blood, Saliva, Semen, etc. Introduction to Basic Biological Equipment like Stereo Microscope, Compound Microscope, TEM, DNA Extraction techniques.
6. Questioned Document – Introduction to Questioned Document; Types of Document Evidence; Collection and Preservation of Questioned Document Evidences; Security Features of Indian Currency Notes, High Security Documents like Cheque, Passports, etc; Introduction to Basic Questioned Documents Instruments – ESDA, VSC, Simple Microscope, etc;
7. Cyber Forensics – Introduction to Basic of Cyber Forensics; Collection and Preservation of Digital Evidences, Basic Introduction to IT Act.
8. Fingerprint – Introduction and History of Fingerprint; Types of Fingerprints, Types of Fingerprint patterns (Whorl, Loop, etc); Collection and Preservation of Fingerprints; Basic of Fingerprint Classification (Henry Ten Digit, Baitley Single Digit); NAFIS (National Automated Fingerprint Identification System);

b. Crime Scene Investigation and Management
   1. Introduction to Crime Scene; Types of Crime Scene; Principles of Crime Scene Investigation; Different types of Searching Techniques; Evaluation of Crime Scene; Documentation of Crime Scene (Notesmaking, Sketching, Photography, etc); role of the first arriving Officer at the Crime Scene.
   2. Forensic Photography – Definition of Photography and terms related to Photography (Shutter Speed, ISO, FPS, Etc); Types of Crime Scene Photography, Videography; Parts of a Camera; etc.
   3. Introduction to Chain of Custody, Expert Testimony, Quality Management System, etc.
   4. Introduction to Arson Investigation and Management of Arson Crime Scenes.
   5. Introduction to basics of Forensic Medicine – Death; Cause of Death; Postmortem Changes; Injury and their significance, etc.

B. Syllabus for screening test of Senior Scientific Assistant

Screening Test

Paper 1 - 50 Marks (General English & General Knowledge)
Paper 2 - 150 Marks (Forensic Science and Crime Scene Management)
Duration of examination –Paper 1 & Paper 2 combined 3 hrs
Minimum QualifyingMarks - 50%

Personal Interview – 100 Marks

Paper 1

a. General English
b. General Knowledge and Current Affairs

Paper 2

a. Forensic Sciences
    1. Introduction to Forensic Science – History of Forensic Sciences; Laws of Forensic Science; Introduction to New Criminal Laws (BNSS, BNS, BSA); Forensic Science in India – Structures, types of labs, divisions, evidences; Introduction to Criminology – Understanding Crime, Defining Culprit, Suspect, Victim, types of crimes in India; Different Courts in India and their jurisdiction; Basic Introduction to The Police System in India; Basic Introduction to Indian Judiciary System;
    2. Forensic Chemistry and Toxicology – Introduction to Basic Chemistry; Introduction to Explosives; Introduction to Forensic Toxicology and Definition of terms; Introduction to NDPS Act; Types of Chemical Evidences; Collection and Preservation of Chemical Evidences; Field Test for Various Chemical Evidences;
    3. Forensic Physics – Introduction to Basic Physics, Types of Physical Evidences, Collection and Preservation of Various Physical Evidences like Hair, Fibers, Glass, Toolmarks, tyremarks, etc;
    4. Ballistics – Introduction to Ballistics; Introduction to Firearms – Basic History, Parts of a firearms, Handling of a firearms, etc; Collection and Preservation of Firearms and bullets; Gunshot Residue – Importance, Collection Technique, Spot Test, etc; Wound Ballistics;
    5. Forensic Biology and DNA – Introduction to Basic Biology and DNA; Types of Biological Evidences, Collection and Preservation of Various Biological Evidences like Blood, Semen, Bone, Hair, Saliva, urine, sweat etc; Preliminary Test for various Biological Fluids like Blood, Saliva, Semen, etc.
    6. Questioned Document – Introduction to Questioned Document; Types of Document Evidence; Collection and Preservation of Questioned Document Evidences; Security Features of Indian Currency Notes, High Security Documents like Cheque, Passports, etc;
    7. Cyber Forensics – Introduction to Basic of Cyber Forensics; Collection and Preservation of Digital Evidences, Basic Introduction to IT Act.
    8. Fingerprint – Introduction and History of Fingerprint; Types of Fingerprints, Types of Fingerprint patterns (Whorl, Loop, etc); Collection and Preservation of Fingerprints; Basic of Fingerprint Classification (Henry Ten Digit, Baitley Single Digit); NAFIS (National Automated Fingerprint Identification System);

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5. Introduction to basics of Forensic Medicine – Death; Cause of Death; Postmortem Changes; Injury and their significance, etc.

C. Syllabus for screening test of Scientific Assistant

Screening Test

Paper 1 - 100 Marks (Forensic Science and Crime Scene Management)
Duration of examination –2hrs
Minimum QualifyingMarks - 50%

Personal Interview – 100 Marks

Paper 1

a. Forensic Sciences
   1. Introduction to Forensic Science – History of Forensic Sciences; Laws of Forensic Science; Introduction to New Criminal Laws (BNSS, BNS, BSA); Forensic Science in India – Structures, types of labs, divisions, evidences; Introduction to Criminology – Understanding Crime, Defining Culprit, Suspect, Victim, types of crimes in India; Basic Introduction to The Police System in India; Basic Introduction to Indian Judiciary System;
   2. Forensic Chemistry and Toxicology – Introduction to Basic Chemistry; Introduction to Explosives; Introduction to Forensic Toxicology and Definition of terms; Types of Chemical Evidences; Collection and Preservation of Chemical Evidences; Field Test for Various Chemical Evidences;
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