Syllabus for Written Examination

Goa State Pollution Control Board (GSPCB)

The written examination for all four posts shall be objective-type (multiple choice), OMR-based, and shall carry 75 marks with a duration of 90 minutes. The marks are distributed as follows:

Component	Marks
Post-specific subject knowledge	30
General Knowledge, Reasoning and Mathematics	35
Konkani language	10
Total	**75**

General Instructions

1. The standard and difficulty level of questions shall be commensurate with the educational qualifications prescribed for each post under the applicable Recruitment Rules.
2. The written examination shall comprise objective-type multiple-choice questions to be answered on an OMR sheet. The maximum marks shall be 75 and the duration shall be 90 minutes.
3. The syllabus indicates the topics to be covered; questions may be framed from relevant aspects of the prescribed topics without exceeding the scope of the syllabus.
4. Questions relating to laws, rules and regulations shall be based on provisions applicable as on the cut-off date notified by the examining authority.
5. A minor variation of up to 3 marks in allocation among the prescribed components may be permitted to maintain a balanced question paper, provided that the total marks remain 75.

Part I: Post-Specific Syllabus

1. Scientific Assistant (Microbiology)

Post-specific subject knowledge – 30 marks

General microbiology; marine microbiology; environmental microbiology; microbial physiology; microbial growth and identification; water and wastewater microbiology; coliform testing; MPN method; membrane filtration technique; microbial indicators of pollution; biological wastewater treatment; laboratory techniques; sterilisation and disinfection; sample collection and preservation; laboratory safety and quality control.

2. Scientific Assistant

Post-specific subject knowledge – 30 marks

General and analytical chemistry; environmental chemistry; water and wastewater analysis, including determination of pH, BOD, COD, dissolved oxygen, TDS, TSS, hardness and heavy metals; air and soil pollution; environmental monitoring; spectrophotometry; chromatography; laboratory instruments; sample collection and preservation; environmental standards; and laboratory safety.

3. Laboratory Attendant

Post-specific subject knowledge – 30 marks

Basic physics, chemistry and biology; common laboratory apparatus and glassware; basic laboratory procedures; preparation and handling of samples; cleaning and maintenance of laboratory equipment; handling and storage of chemicals; laboratory safety; first aid; waste disposal; basic environmental pollution and pollution prevention.

4. Multi-Tasking Staff

Post-specific subject knowledge – 30 marks

Basic office procedures; handling and movement of files and records; office cleanliness and maintenance; basic knowledge of office equipment; workplace safety; general environmental awareness; waste segregation and disposal; water conservation; sanitation and hygiene; and the duties and responsibilities of Multi-Tasking Staff.

Part II: Common Syllabus for All Posts

A. General Knowledge, Reasoning and Mathematics – 35 marks

General Knowledge: Indian history; geography; the Indian Constitution; general science; current affairs; Goa history and geography; government administration; environmental awareness; and important national and international events.

Reasoning: Analogies; classification; number and letter series; coding-decoding; blood relations; directions; logical sequences; simple puzzles and problem-solving.

Mathematics: Number system; simplification; fractions; decimals; percentages; ratio and proportion; averages; profit and loss; simple interest; time and work; time and distance; and basic data interpretation.

Basic Computer Awareness: Basic knowledge of computers, including hardware and software, input and output devices, operating system basics, word processing, spreadsheets, internet and email, and cyber safety. This is common to all posts and forms part of the 35 marks of this section.

B. Konkani Language – 10 marks

The Konkani paper shall be in Devanagari script.

Basic Konkani grammar; vocabulary; synonyms and antonyms; sentence formation; sentence correction; comprehension; and common usage of the Konkani language.