15.1 **Computer Based Test (CBT)**

a) Total Duration: 120 minutes
b) Total Questions: 100
c) There will be negative marking, and 1/3 mark shall be deducted for each wrong answer.
d) Normalization will be done for CBT held in multiple shifts.

The CBT is of screening nature and the standard of questions for the CBT will be generally in conformity with the educational standards prescribed for the posts. The normalized score of CBT shall be used for short listing of candidates for CBAT as per their merit.

Candidates who are shortlisted for CBAT **availing the reservation benefits of OBC(NCL)/SC/ST/EWS and ExSM shall continue to be considered only against OBC(NCL)/SC/ST/EWS and ExSM for all subsequent stages of recruitment process.**

Syllabus For CBT: The Questions will be of objective type with multiple choices and are likely to include questions pertaining to:

1) Basic Science, Mathematical and Analytical Capability (60 Marks)

1. **Basic Science & Mathematics (30 Marks):** Number System, Ratio & Proportions, Averages, Percentages, Profit, Loss & Discounts, Time, Speed, Distance, Power & Work, Algebra, Linear Equations. Arithmetic Progression, LCM, HCF, Geometry and Trigonometry, Area & Volumes, Probability and Statistics (Both only Basic Level).Units, Measurements, Mass Weight and Density, Work Power, Energy, Kinetic Energy, Friction, Speed, Velocity, Relative Velocity, Heat and Temperature, Basic Electricity, Levers and Simple Machines.
2. **Data Analysis & Interpretation (30 Marks):** Multi-source Data Analysis - Examination, analysis and Inference drawing from text, tabular data and data represented graphically (charts, graphs, scatter plot, pie chart, statistical curve distribution, Venn Diagrams, Data Sufficiency, Data Arrangement.

2) Logical Capability (20 Marks)

1. **Logical Reasoning:** Binary Logic, Syllogism, Clocks & Calendars, Assumptions, Blood Relations, Family Tree, Solving logic-based puzzles.
2. **Reading Comprehension:** Reading Comprehension Passages and Questions would be given in English language from any subjects on History, Society, Literature, Science, Environment, Abstract, Mythology, Technology and Culture and the candidate would be required to understand and answer questions on the - Main idea, Supporting idea, Application, Logical Structure & Style of the given Paragraph.

3) Mental Reasoning (20 Marks)

Analogy - Identifying relationship between two items and applying it to another pair, Series Completion - Identifying the pattern in a sequence of numbers and predicting the next term, Solving Coding-Decoding type questions, Solving Ranking and Arrangements based problems.

It **may be noted that the topics listed above are illustrative and not necessarily exhaustive**. **Section Wise Distribution.**

Exam Duration in Minutes	No. of Questions (each of 1mark)			Total No. of Questions
	Basic Science, Mathematical and Analytical Capability	Logical Capability	Mental Reasoning	
120	60	20	20	100

The **section** wise distribution given in the above table is only indicative and there may be some