Tier-1 Examination Syllabus

Part	Subject	No. of Questions / Maximum Marks	Time Duration
I	English	25/ 50	60 Minutes / 1 Hour
II	Reasoning	25/ 50	
III	Aptitude	25/ 50	
IV	General Awareness	25/ 50	

NOTE:

The Tier-I examination will consist of **Multiple Choice Questions** only. There will be a **negative marking of 0.50 marks** for each wrong answer.

Detailed Tier-1 Syllabus:

English Language: Spot the Error, Fill in the Blanks, Synonyms/ Homonyms, Antonyms, Spellings/ Detecting misspelled words, Idioms & Phrases, One-word substitution, Improvement of Sentences, Active/ Passive Voice of Verbs, Conversion into Direct/ Indirect narration, Shuffling of Sentence parts, Shuffling of Sentences in a passage, Cloze Passage, Comprehension Passage.

General Intelligence: It would include questions of both verbal and non-verbal types. The test will include questions on Semantic Analogy, Symbolic operations, Symbolic/ Number Analogy, Trends, Figural Analogy, Space Orientation, Semantic Classification, Venn Diagrams, Symbolic/ Number Classification, Drawing inferences, Figural Classification, Punched hole/ pattern-folding & unfolding Semantic Series, Figural Pattern-folding and completion, Number Series, Embedded figures, Figural Series, Critical Thinking, Problem Solving, Emotional Intelligence, Word Building, Social Intelligence, Coding and de-coding, Numerical operations.

Quantitative Aptitude:

Number Systems: Computation of Whole Numbers, Decimals and Fractions, and Relationship between Numbers.

Fundamental arithmetical operations: Percentages, Ratio and Proportion, Square roots, Averages, Interest (Simple and Compound), Profit and Loss, Discount, Partnership Business, Mixture and Allegation, Time and distance, Time and Work.

Algebra: Basic algebraic identities of School Algebra and Elementary surds (simple problems) and Graphs of Linear Equations.

Geometry: Familiarity with elementary geometric figures and facts: Triangle and its various kinds of centers, Congruence and similarity of triangles, Circle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles.

Mensuration: Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular or square Base.

Trigonometry: Trigonometry, Trigonometric ratios, Complementary angles, Height and distances (simple problems only) Standard Identities like $\sin 2\theta + \cos 2\theta = 1$, etc.

Statistical Charts: Use of Tables and Graphs: Histogram, Frequency polygon, Bar-diagram, Pie-chart.

General Awareness: Questions are designed to test the candidate's general awareness of the environment around him and its application to society. Questions are also designed to test knowledge of current events and of such matters of everyday observation and experience in their scientific aspect as may be expected of an educated person. The test will also include questions relating to India and its neighboring countries especially pertaining to History, Culture, Geography, Economic Scene, General policy, and scientific research.

Tier-2 Examination Syllabus

Session	Subject	Number of Questions	Maximum Marks	Time Duration
Session-I (2 hours and 15 minutes)	**Section-I:** **Module-I:** Mathematical Abilities **Module-II:** Reasoning and General Intelligence.	30 30 Total = 60	60*3 = 180	1 hour
	Section-II: **Module-I:** English Language and Comprehension **Module-II:** General Awareness	40 20 Total = 60	60*3 = 180	1 hour
	Section-III: **Module-I:** Computer Knowledge Module	15	15*3 = 45	15 Minutes
Session-II	**Section-III:** **Module-II:** Skill Test/ Typing Test Module	**Part A:** Skill Test for DEOs in Department	-	15 Minutes
		Part B: Skill Test for DEOs except in Department	-	15 Minutes
		Part C: Typing Test for LDC/ JSA	-	10 Minutes

NOTE:

- It will be mandatory for the candidates to qualify for all the sections of Tier-II.
- **Tier-II** will consist of Objective Type, Multiple choice questions, except for Module-II of Section-III. The questions will be set in English, Hindi and any language opted by the candidate in the application form, as given in AnnexureXVI except for Module-II (i.e. English Language and Comprehension module) in Section-II.
- There will be a **negative marking of 1 mark** for each wrong answer in Section-I, Section-II, and Module-I of Section-III.
- Module-I of Section-III i.e. Computer Knowledge Test is mandatory but qualifying in nature.

Detailed Tier-2 Syllabus:

Module-I of Section-I (Mathematical Abilities):

Number Systems: Computation of Whole Numbers, Decimals and Fractions, and Relationship between Numbers.

Fundamental arithmetical operations: Percentages, Ratio and Proportion, Square roots, Averages, Interest (Simple and Compound), Profit and Loss, Discount, Partnership Business, Mixture and Alligation, Time and distance, Time and Work.

Algebra: Basic algebraic identities of School Algebra and Elementary surds (simple problems) and Graphs of Linear Equations.

Geometry: Familiarity with elementary geometric figures and facts: Triangle and its various kinds of centers, Congruence and similarity of triangles, Circle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles.

Mensuration: Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular or square Base.

Trigonometry: Trigonometry, Trigonometric ratios, Complementary angles, Height, and distances (simple problems only) Standard Identities like $\sin 2\theta + \cos 2\theta = 1$, etc.

Statistics and probability: Use of Tables and Graphs: Histogram, Frequency polygon, Bar-diagram, Pie-chart; Measures of central tendency: mean, median, mode, standard deviation; calculation of simple probabilities.

Module-I of Section-II (English Language And Comprehension):

Vocabulary, grammar, sentence structure, synonyms, antonyms, and their correct usage; Spot the Error, Fill in the Blanks, Synonyms/ Homonyms, Antonyms, Spellings/ Detecting misspelled words, Idioms & Phrases, One-word substitution, Improvement of Sentences, Active/ Passive Voice of Verbs, Conversion into Direct/ Indirect narration, Shuffling of Sentence parts, Shuffling of Sentences in a passage, Cloze Passage, Comprehension Passage. To test comprehension, two or more paragraphs will be given and questions based on those will be asked. At least one paragraph should be a simple one based on a book or a story and the other paragraph should be based on current affairs editorial or a report.

Module-I of Section-III of Paper-I (Computer Proficiency):

Computer Basics: Organization of a computer, Central Processing Unit (CPU), input/ output devices, computer memory, memory organization, back- up devices, PORTs, Windows Explorer, and Keyboard shortcuts.
Software: Windows Operating system including basics of Microsoft Office like MS Word, MS Excel, and PowerPoint, etc.
Working with the Internet and e-mails: Web Browsing & Searching, Downloading & Uploading, Managing an E-mail Account, e-Banking.
Basics of networking and cyber security: Networking devices and protocols, Network and information security threats (like hacking, virus, worms, Trojans, etc.), and preventive measures.

Module-II of Section-I (Reasoning and General Intelligence):

Questions of both verbal and non-verbal types. These will include questions on Semantic Analogy, Symbolic operations, Symbolic/ Number Analogy, Trends, Figural Analogy, Space Orientation, Semantic Classification, Venn Diagrams, Symbolic/ Number Classification, Drawing inferences, Figural Classification, Punched hole/ pattern-folding & unfolding, Semantic Series, Figural Pattern-folding and completion, Number Series, Embedded figures, Figural Series, Critical Thinking, Problem Solving, Emotional Intelligence, Word Building, Social Intelligence, Coding and de-coding, Numerical operations.

Module-II of Section-II (General Awareness):

Questions are designed to test the candidates' general awareness of the environment around them and its application to society. Questions are also designed to test knowledge of current events and of such matters of everyday observation and experience in their scientific aspect as may be expected of an educated person. The test will also include questions relating to India and its neighboring countries especially pertaining to History, Culture, Geography, Economic Scene, General policy, and scientific research.

Mode of Selection:

Minimum qualifying marks in Tier-I, and Section-I, Section-II & Module-I of Section-III of Tier-II Examination are as follows:

UR: 30%
OBC/ EWS: 25%
All other categories: 20%

Candidates will be shortlisted for Tier-II Examination on the basis of their performance in the Tier-I Examination. Normalized scores of candidates will be used to determine merit and for final selection.