

## SECTION – D

### 8. Scheme Of Examination

There will be Computer Based Test (CBT) to be conducted in bilingual (Hindi/English) form by NTA. On the basis of CBT, the merit list will be prepared keeping the number of candidates to be qualified as ten times the number of vacancies.

(MCQ Type)	Test Components	Duration: 2 hours	
		No. of Questions	Marks
(i)	General Awareness	30	30
(ii)	Reasoning and General Intelligence	30	30
(iii)	Mathematical Abilities	30	30
(iv)	Hindi/English Language and Comprehension	30	30
(v)	Computer Knowledge Module	30	30
<b>Total</b>		<b>150</b>	<b>150</b>
<b>Note*- Extra time will be given to PwBD candidates as per GoI norms</b>			

#### **Tier II**

The candidates qualified in the CBT of Tier I, will have to undergo skill (Typing) test which will be of Hindi or English language and will be qualifying in nature subject to minimum qualifying speed as mentioned in the advertisement.

The detailed examination process and syllabus mentioned are given below:

<b>Tier-II</b>	<b>Skill Test/Typing Test</b>	<b>Qualifying in nature subject to minimum qualifying speed.</b>
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### 9. Syllabus for The Examination

#### ➤ **Mathematical Abilities**

**Number Systems:** Computation of Whole Number, Decimal and Fractions, 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 centres, 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.

### ➤ Reasoning and General Intelligence

Questions of both verbal and non-verbal type. 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, Other subtopics, if any.

### ➤ हिंदी भाषा एवं बोधगम्यता

शब्दावली, व्याकरण, वाक्य संरचना, पर्यायवाची, विलोमार्थक शब्द एवं इनका सही प्रयोग; त्रुटि का पता लगाएं, रिक्त स्थानों की पूर्ति कीजिए, पर्यायवाची/भिन्नार्थक शब्द, विलोमार्थक शब्द, वर्तनी/गलत वर्तनी वाले शब्दों का पता लगाना, मुहावरे और लोकोक्तियाँ, एकार्थी शब्द, वाक्यों में सुधार, क्रियाओं के कर्तृवाच्य/कर्मवाच्य, प्रत्यक्ष/अप्रत्यक्ष कथन में रूपांतरण, वाक्य को पढ़िए और इसके सभी भागों को सही क्रम में कीजिए। किसी पाठांश के वाक्यों को सही क्रम में कीजिए। किसी पाठांश में अर्थग्रहण की दृष्टि से रिक्त स्थानों में उपयुक्त शब्द भरना अपठित पाठांश, उपर्युक्त पाठांश का अर्थग्रहण कीजिए। अर्थग्रहण की दृष्टि से आपकी क्षमता का पता लगाने के लिए आपको दो या अधिक अनुच्छेद दिए जाएंगे और इन पर आधारित प्रश्नों के उत्तर, आपको देने हैं। दिए गए अनुच्छेदों में से एक, मूल रूप से पुस्तक या कहानी पर आधारित होना चाहिए, जबकि दूसरा अनुच्छेद किसी सामयिक विषय के संपादकीय विश्लेषण या किसी रिपोर्ट पर आधारित होना चाहिए।

### ➤ English Language and Comprehension

Vocabulary, grammar, sentence structure, synonyms, antonyms and their correct usage; Spot the Error, Fill in the Blanks, Synonyms/Homononyms, Antonyms, Spellings/Detecting mis-spelt 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.

### ➤ 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, Economics, Science, General Policy and Scientific Research.

### ➤ Computer Knowledge Module

**Computer Basics:** Organization of a computer, Central Processing Unit (CPU), input/output devices, computer memory, memory organization, back-up devices, PORTs, Windows Explorer, Keyboard shortcuts.

**Software:** Windows Operating System including basics of Microsoft Office like MS Word, MS Excel and Power Point etc.

**Working with 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, Trojan etc.) and preventive measures.