# **SYLLABUS**

## **General Intelligence:**

1.	Semantic Analogy	14.	Symbolic operations
2.	Symbolic/Number Analogy	15	Trends
3.	Figural Analogy	16.	Space Orientation
4.	Semantic Classification	17.	Venn Diagrams
5.	Symbolic/Number Classification	18.	Drawing inferences
6.	Figural Classification	19.	Punched hole/pattern-folding & unfolding
7.	Semantic Series	20.	Figural Pattern – folding and completion
8.	Number Series	21.	Embedded figures
9.	Figural Series	22.	Critical Thinking
10.	Problem Solving	23	Emotional Intelligence
11.	Word Building	24.	Social Intelligence
12.	Coding and de-coding	25.	Other sub-topics, if any
13	Numerical operations		

# English Language:

1.	Spot the Error	
2.	Fill in the Blanks	
3.	Synonyms/Homonyms	
4.	Antonyms	
5.	Spellings/Detecting Mis-spelt words	
6.	Idioms & Phrases	
7.	One word substitution	
8.	Improvement of Sentences	
9.	Active/Passive Voice of Verbs	
10.	Conversion into Direct/Indirect narration	
11.	Shuffling of Sentence parts	
12.	Shuffling of Sentences in a passage	
13.	Cloze Passage	
14.	Comprehension Passage	

### **Quantitative Aptitude:**

### ARITHMETIC

C.1.1 Number Systems:

Computation of Whole Number

Decimal and Fractions

Relationship between numbers

C.1.2 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:

- C.2.1 Basic algebraic identities of School Algebra (and their simple applications) e.g. Formulas for  $(a+b)^2$ ,  $(a-b)^2$ ,  $(a+b)^3$ ,  $(a-b)^3$ ,  $a^3-b^3$ ,  $a^3+b^3$ ,  $a^2-b^2$ ; if a+b+c=0, then  $a^3+b^3+c^3=3$  abc etc. and Elementary surds (simple problems)
- C.2.2 Graphs of Linear Equations.

### **GEOMETRY:**

Familiarity with elementary geometric figures and facts:

- C.3.1 Triangle and its various kinds of centres viz. Centroid, In-centre, Orthocentre, Circumcentre
- C.3.2 Congruence and similarity of triangles
- C.3.3 Circle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles.

#### MENSURATION:

- C.4.1 Triangle, Quadrilaterals
- C.4.2 Regular Polygons (sum of the internal angles of a polygon)
- C.4.3 Circle
- C.4.4 Right Prism
- C.4.5 Right Circular Cone
- C.4.6 Right Circular Cylinder
- C.4.7 Sphere, Hemispheres
- C.4.8 Rectangular Parallelepiped
- C.4.9 Regular Right Pyramid with triangular or square Base

### TRIGONOMETRY:

C.5.1 Trigonometry (for acute angles 0 with  $0 \le 0 \le 90$ )

Trigonometric ratios
Degree and Radian Measures
Standard Identities like  $\sin^2 0 + \cos^2 0 = 1$  etc.

C.5.2 Complementary Angles, Heights and Distances (simple problems only)

#### **STATISTICAL CHARTS:**

Use of Tables and Graphs:

- C.6.1 Histogram
- C.6.2 Frequency polygen
- C.6.3 Bar-diagram
- C.6.4 Pic-chart

<u>General Awareness</u>: 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 neighbouring countries especially pertaining to History, Culture Geography, Economic Scene, General policy and scientific research.

<u>NOTE-1</u>: For VH candidates of 40% and above visual disability and opting for <u>SCRIBES</u> there will be no component of <u>Maps/Graphs/Diagrams/Statistical</u> <u>Data in the General Intelligence & Reasoning / General Awareness Paper.</u>

**NOTE-2**: The questions will be of the level to commensurate with Educational Qualification prescribed for the posts.