

SYLLABUS FOR WRITTEN TEST

Marks: 100

Time: 02:00 Hours

ITEM GRID AND SYLLABUS:

	GRID	TOTAL NUMBER OF QUESTIONS
APTITUDE	General English	20
	General knowledge and current affairs (India)	15
	<u>General knowledge with special reference to J&K</u>	5
	Numerical and Reasoning Ability	15
	Basic Concepts of Computers	5
	TOTAL MARKS (APTITUDE)	60
TECHNICAL	TECHNICAL QUESTIONS	40
	TOTAL MARKS	100

DETAILED SYLLABUS INDICATED BELOW FOR APTITUDE AND TECHNICAL

APTITUDE SYLLABUS

GENERAL ENGLISH

- Articles
- Clauses
- Pronouns
- Homonyms/ homophones
- Tenses
- Clauses
- Punctuation
- Synonyms and antonyms
- Analogies

- Idioms and phrases
- Uses of Prepositions

GENERAL KNOWLEDGE AND CURRENT AFFAIRS (INDIA)

- Important dates in Indian History / Freedom struggle, different dates and events
- First in world (Adventure, Sports, Discoveries). First in India (Adventure, Sports, Discoveries)
- Popular names of Personalities (Religion, Politics, Scientific discoveries, Geographical, Sports, History)
- The Newspaper world – (Current Dailies & Weeklies of India)
- Books & Authors – General
- Languages
- Capitals & Currencies
- United Nations Organizations – Veto Powers

- No. of Countries as its Members

- Principal organs and their functions
- SAARC, ASEAN
- Everyday Science
- World famous Awards - (1. in Science)
(2. in Literature)
(3. in Sports)
- National Awards - (1. in Science)
(2. in Literature)
(3. in Sports)

- The world of Sports
- Climate & Crops in India
- Democratic Institutions
- Forms of Government
- Political & Physical divisions of world & India
- Important rivers & Lakes in India
- Current Events of National and International Level
- Role of Mathematics in Economics
- Agriculture in economic development; Industrialization and economic development
- Indian Foreign Trade
- New economic reforms and growth of foreign trade
- Inflation – Concept and types; Causes and consequences

GENERAL KNOWLEDGE WITH SPECIAL REFERENCE TO J&K

- Abbreviations, Important dates, popular names of personalities and their achievements/Contribution (National and International)
- Constitution of J&K – Formation, Fundamental rights, Directive Principles
- Weather, Climate, Crops, Means of Transport
- Important power projects and their impact on State Economy
- Rivers and Lakes
- Important Tourist Destinations
- History of J&K
- Historical places of the State and their importance
- RTI Act
- Indus Water Treaty and its impact on State economy

NUMERICAL AND REASONING ABILITY

The candidates will be tested primarily on the fundamental mathematical concepts and application oriented reasoning. The broad areas will include the following;

Basic Arithmetic:

- Number System
- Percentage
- Average
- Profit & Loss
- Ratio & Proportion
- Speed, Distance and Time
- Mathematical reasoning

Reasoning ability:

- Number series
- Letter series
- Coding decoding
- Direction sense
- Blood relations
- Statements and conclusions
- Logical Reasoning
- Mental Reasoning

BASIC CONCEPTS OF COMPUTERS

The candidates' understanding of the concepts of computers and its application will be tested and it will broadly cover the following:

- Computer terminology
- Hardware and Software
- Storage and Operating systems
- Safety and Security
- E-mail and Internet Usage

TECHNICAL SYLLABUS

- Fundamentals of Electrical Engineering

- Basics of Information Technology
- Engineering Drawing
- Electronic Components and Materials
- Basic Electronics
- General Engineering
- Electronic Devices and Circuits
- Electronic Instruments and Measurements
- Principles of Communication Engineering
- Digital Electronics
- Electronic Drawing, Design and Fabrication Techniques
- Computer Programming and Applications
- Electrical Machines
- Communication Systems
- Network Filters and Transmission Lines
- Microprocessors and Applications
- Fundamentals of Electronic Instrumentation
- Microwave and Radar Engineering
- Troubleshooting of Electronic Equipment
- Power Electronics
- Advanced Microprocessors
- Consumer Electronics
- Micro controllers and Embedded Systems
- Digital and Data Communication