

SYLLABUS FOR NSPCL ADV 01/2026

APTITUDE:

General Knowledge: Current Affairs/Events, General Science, History, Geography, Political Science, Date, Famous Place, Famous Personality, etc

English: Synonyms, Antonyms, Fill in the Blank, Correct Spelling, Gender, Singular & Plural, Idioms & Phrase, One word Substitution, Logical Sequence, etc

Quantitative Aptitude: Simplification, Fraction, LCM/HCF, Number System, Average, Simple Interest, Compound Interest, Percentage, Profit & Loss, Allegation & Mixture, etc

Reasoning: Classification/ Series, Blood Relation, Position/Direction/Distance, Coding-Decoding, Ranking Arrangement, Diagrammatic Reasoning, etc

SYLLABUS FOR SR. ASSISTANT OFFICER – IT

(SUBJECT KNOWLEDGE Test)

- Programming C, Python and OOPS (Object Oriented Programming)
- Data Structures Arrays, stacks, queues, linked lists, trees, binary search trees, binary heaps, graphs.
- Algorithms Searching, sorting, hashing. Asymptotic worst-case time and space complexity.
- Algorithm design techniques. Graph traversals, minimum spanning trees, shortest paths.
- Operating System calls, processes, threads, inter-process communication, concurrency, and synchronization. Deadlock. CPU and I/O scheduling. Memory management and virtual memory. File systems.
- Databases ER-model. Relational model: relational algebra, SQL. Integrity constraints, normal forms.
- File organization, indexing, Transactions and concurrency control.
- Computer Networks OSI and TCP/IP Protocol, Data link layer, Routing protocols, Fragmentation and IP addressing, IP protocols, NAT, Transport layer, Application layer protocols.
- Web Technologies HTML, CSS, MVC Architecture (Model View Controller), HTTP methods.
- ERP Architecture & Enterprise Systems
- Cyber Security