SYLLABUS FOR COMPUTER BASED TEST FOR SUPERVISOR (IT)

Indicative Syllabus

Section-I

1. **General Intelligence & Reasoning:** The Syllabus for General Intelligence would include questions of both verbal and non-verbal type. The test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc. The test will also include questions designed to test the candidate's abilities to deal with abstract ideas and symbols and their relationships, arithmetical computations and other analytical functions.

2. **General Awareness:** Questions will be aimed at testing the candidate's general awareness of the environment around him/her and its application to society. Questions will also be designed to test knowledge of current events and of such matters of everyday observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India and its neighbouring countries especially pertaining to History, Culture, Geography, Economic Scene, General Polity and Scientific Research, etc. These questions will be such that they do not require a special study of any discipline.

Section-II: Branch (IT/Computer Science)

INTERNET & WEB TECHNOLOGIES:
HTML, Java Script, JSON, AJAX, XML, Web Servers: Tomcat, Apache, WAMP, IIS etc., Server Programming Language- Java, .Net , PHP, Web Design Tools, API Integration, DNS & Web Hosting, Static & Dynamic Web Development.

IT PROJECT MANAGEMENT:
Software Development Life Cycle, Requirement Analysis & Engineering, IT Project planning & Execution, Unified Modeling Language, Software Analysis & Design, Concepts of OOPs, Object Oriented Analysis and Design, Software Change Management, IT Vendor Management, client/ server architecture, deployment of web based applications.

SOFTWARE TOOLS & TECHNIQUES:
Content Management System (CMS), Software Installation & Configuration, Database Management System, Database design, ER diagrams, Database Client.

CYBER SECURITY AND EMERGING TECHNOLOGIES:
Secure programming techniques, OWASP top 10 vulnerabilities, concepts on IOT, Cloud Technology etc.

COMPUTER NETWORKS & OPERATING SYSTEM:
LAN Management, Routing Protocols, SMTP, VLAN, VoIP, Wireless Networks, WLAN, Wi-Fi, LAN Testing, Network Extension, VPN, Network Protection & Security Threats, Network Change Management, LAN Proxy Server, Web Servers & File Servers, Operating System: Microsoft Windows & Linux Installation & Configuration.