

Qualification of a System Analyst & Required Skills

**Subject: Information Technology in
Management**

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1. Introduction

1. A **System Analyst** is a professional who studies an organization's systems, identifies problems, and designs solutions using information technology.
2. To perform this role effectively, a system analyst must possess a combination of **educational qualifications and key skills**.

Educational Qualification of a System Analyst

A system analyst typically requires:

a. Academic Qualification

- Bachelor's degree in:
 - Computer Science
 - Information Technology
 - Software Engineering
 - BCA / B.Tech / MCA

b. Additional Knowledge

- Understanding of:
 - Database Management Systems (DBMS)
 - Operating Systems
 - Networking basics
 - Software Development Life Cycle (SDLC)

Educational Qualification of a System Analyst

c. Certifications (Optional but Valuable)

- Certifications in:
 - Data Analysis
 - Cloud Computing
 - Cybersecurity
 - Business Analysis (e.g., CBAP)

Skills Required for a System Analyst

A system analyst must have four major types of skills:

3.1 Analytical Skills

Analytical skills help a system analyst to **understand problems and find logical solutions.**

Key Points:

- Ability to break down complex problems
- Critical thinking and logical reasoning
- Data analysis and interpretation
- Problem-solving capability

Example:

If a company's software is slow, the analyst identifies whether the issue is in:

- Hardware
- Software
- Network

3.2 Technical Skills

Technical skills help in understanding and working with **technology and systems**.

Key Points:

- Knowledge of programming languages (Java, Python, C++)
- Understanding of databases (SQL, Oracle)
- Familiarity with operating systems (Windows, Linux)
- Knowledge of networking and cybersecurity
- Understanding of SDLC models (Waterfall, Agile)

Example:

A system analyst should be able to:

- Read code
- Suggest technical improvements
- Communicate with developers

Management Skills

Management skills help in **planning, organizing, and controlling projects.**

Key Points:

- Project management
- Time management
- Resource allocation
- Decision-making ability
- Risk management

Example:

While developing software, the analyst ensures:

- Project is completed on time
- Team coordination is maintained