## 💡 Q -Why Non-Technical Subjects Are Important Along with Technical Subjects in Diploma and B.Tech?

ANS -Including non-technical subjects along with technical subjects in **Diploma** and **B.Tech** programs plays a crucial role in shaping well-rounded professionals. Whether you're aiming for a private job or a government job, these non-technical subjects add important skills that purely technical knowledge cannot provide.

Here's a detailed explanation with references to **BOTH PRIVATE JOB AND GOVERNMENT JOB** perspectives:

#### **1.** Holistic Skill Development

- Technical subjects (like mechanics, electronics, coding, etc.) develop core professional knowledge.
- Non-technical subjects (like communication skills, environmental studies, management, ethics, etc.) build **soft skills**, awareness, and values needed in real-world situations.

### **1** 2. Importance in Private Jobs

#### **a.** Communication & Teamwork

- Most private companies (IT firms, manufacturing industries, MNCs) value employees who can communicate clearly, work in teams, and handle clients.
- Subjects like English, professional communication, and management improve interpersonal skills.
- Example: A software engineer who can present ideas clearly is more likely to be promoted to team lead or manager.

#### **b.** Adaptability & Ethics

- Private jobs often demand adaptability, time management, and ethical decisionmaking.
- Subjects like Professional Ethics, Human Values, or Organizational Behavior help employees navigate corporate challenges with integrity.

#### **c.** Leadership & Management

• Non-technical subjects like **Engineering Management** or **Entrepreneurship Development** prepare students to **take initiative** or even start their own businesses.

#### **1** 3. Importance in Government Jobs

#### **a.** Competitive Exams

- For most government jobs (UPSC, SSC, RRB, PSU exams like GATE), the syllabus includes **non-technical topics**:
  - o English Language
  - o General Knowledge & Current Affairs
  - Ethics and Integrity
  - o Aptitude and Reasoning

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• WITHOUT A FOUNDATION IN THESE, EVEN TECHNICALLY STRONG STUDENTS STRUGGLE TO CLEAR EXAMS.

#### **b.** Administrative and Field Roles

- Engineers in government roles (like PWD, Electricity Boards, DRDO, etc.) also handle:
  - o Project management
  - Public dealing
  - o Documentation and communication
- These roles require skills taught in non-technical subjects like **report writing**, **environmental awareness**, or **sustainable development**.

## 4. Examples of Useful Non-Technical Subjects ( AFTER DIPLOMA ,BTECH )

#### **Examples of Non-Technical Subjects and Their Importance**

Non-Technical Subject	Importance in Private Jobs	Importance in Government Jobs
1. Aptitude	Helps in logical thinking, problemsolving, and cracking interviews/tests.	Forms a major part of exams like GATE, SSC, Banking, Railways, etc.
2. Reasoning	Useful in coding logic, system design, and decision-making.	Asked in almost all competitive exams (reasoning ability, puzzles, etc.)
3. English	Essential for email writing, presentations, documentation, client communication.	English section is compulsory in exams like UPSC, SSC, Banking, etc.

No	n-Technical Subject
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#### **Importance in Private Jobs**

## Importance in Government Jobs

4. General Knowledge (GK)

Useful in company discussions, HR interviews, and global project awareness.

Crucial for clearing written exams and interviews in PSU, UPSC, etc.



Non-technical subjects are not just formalities they are essential tools that complement technical knowledge. Whether you choose a **private sector job**, appear for **government exams**, or aim for **leadership roles**, these subjects prepare you to perform better, communicate effectively, and grow in your career.

\*\*An engineer is not just a machine builder, but a problem solver and a leader and for that, both technical and non-technical skills are needed."

4. General Knowledge (GK) Useful in company discussions, HR interviews, and global project awareness.

Crucial for clearing written exams and interviews in PSU, UPSC, etc.

5. General Studies (GS)

Improves awareness about current affairs, environment, politics, economics.

Main subject in govt exams like UPSC, State PSCs, and defense services.

#### **In Private Jobs:**

- Aptitude and Reasoning are often tested during placement drives and campus recruitments.
- **English communication** is a must-have skill for writing emails, attending meetings, and dealing with clients.
- A basic understanding of current affairs and general knowledge adds confidence during HR interviews.

Example: A student with strong technical knowledge but poor communication skills may fail in the HR round of an MNC interview.

#### **n** In Government Jobs:

- Almost all competitive exams (like GATE, SSC JE, RRB, Banking, UPSC, etc.) include:
  - Quantitative Aptitude
  - Logical Reasoning
  - o English
  - o General Studies (Polity, History, Geography, Economy)
  - Current Affairs

• Non-technical subjects help students clear exams and perform in interviews and group discussions.

Example: A diploma student applying for SSC JE needs to score well in Reasoning, GK, and English, apart from technical subjects.

#### Why It Matters During Diploma and B.Tech-

- These subjects are taught early to prepare students for future challenges.
- They help students become:
  - o Better communicators
  - Smarter problem-solvers
  - o More employable in both private and public sectors

A good engineer is not just technically sound, but also logically smart, well-informed, and a clear communicator.

# Expanded Exam-Wise Non-Technical Subject Breakdown

Exam Name	Aptitude	Reasoning	English	GK/GS	Current Affairs	Total Non- Tech Qs
SSC JE (Staff Selection Commission – Junior Engineer)	15–20	10–15	10–15	20–25	5–10	~70
RRB JE (Railway Recruitment Board – Junior Engineer)	15	15	15	20	10	~75
ISRO Technical Assistant	20–25	15-20	10-15	10-15	5-10	~80
BARC Technical Assistant / Scientific Officer	20	15	15	15	10	~75
DRDO CEPTAM – Technician A / STA-B / Scientist B	20	20	15	15	10	~80
NIELIT – Technical Assistant / Scientist-B	15–20	15–20	10–15	10–15	10	~75
DMRC / Metro Rail JE Exams (Delhi, Mumbai, etc.)	15	15	15	15	10	~70
UPPCL JE (Uttar Pradesh Power Corporation Ltd.)	20	20	15	15	10	~80

Exam Name	Aptitude	Reasoning	English	GK/GS	Current Affairs	Total Non- Tech Qs
PSU Exams (NTPC, BHEL, SAIL, GAIL, ONGC)	15–20	15–20	15	10–15	10	~75
State JE Exams (e.g., RSMSSB, UPSSSC, HSSC, TNEB, etc.)	15–20	15–20	10–15	20–25	10	~80–90
MES – Military Engineer Services JE Exam	15	15	10	20	10	~70
CPWD JE Exam (via SSC or UPSC)	15–20	10–15	15	20	10	~70–80
Indian Navy/IAF/Army Technical Trades & Assistant Posts	20	15	15	15	10	~75
GATE (General Aptitude Section only)	15 (Fixed)	-	-			15

**Note**: The number of questions may vary slightly depending on the latest notification and conducting authority. Always check the official syllabus.

## **Why You Should Prepare Non-Technical Subjects** Seriously

- Many students fail to qualify due to **low scores in non-technical sections**, despite strong technical knowledge.
- These sections test your:
  - Logical thinking
  - Communication skills
  - Awareness of current events
  - o National-level general knowledge
- Some exams have **minimum qualifying marks** for these sections.

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## **@** Preparation Tips

- Practice previous year papers to understand question patterns.
- Regularly read newspapers and follow monthly current affairs PDFs.
- Use apps and books specifically for:
  - o Quantitative Aptitude (e.g., RS Aggarwal)
  - o Reasoning (e.g., Verbal & Non-Verbal by R.S. Aggarwal)
  - o English (e.g., Wren & Martin, Objective General English)
  - o GS & GK (e.g., Lucent GK, NCERT summaries)

### **Final Note:**

• All students targeting government technical jobs OR Private jobs after Diploma or B.Tech must take **non-technical subjects seriously**. Start preparing early to improve your chances of selection.

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