

Mechanical Aptitude Test

One-page study plan. Full guide and free timed practice test at primedprep.com/mechanical-aptitude-test

Test format

- Mechanical reasoning items covering pulleys, gears, levers, springs, hydraulics, and rotational motion.

Study focus (what actually moves your score)

- Pulley problems: count supporting rope segments — that is the mechanical advantage.
- Lever problems: force $\times$ distance from pivot on each side must balance.
- Inclined plane: $MA = \text{length} \div \text{height}$.
- Gears: driven speed ratio inverts tooth count; more teeth = slower + more torque.
- Hydraulic press: $F_1/A_1 = F_2/A_2$ (Pascal's principle).
- Springs in parallel share the load; springs in series add stretch.

One-week study plan

- Day 1: full timed practice test diagnostic.
- Days 2–5: one topic per day + a 10-question timed drill.
- Days 6–7: full mixed timed sets at real pace.

Test day

- Read each question for the underlying principle before touching numbers.
- Watch for 'ignoring friction' / 'in a vacuum' — they change the correct answer.
- Don't leave blanks — guess strategically at the end.