

How to Excel in Competitive Examinations





A Separate Presentation?

- How to Excel in Competitive Examinations?
- Well! Everyone seems to know this.
Your typical strategy is given in the next slide.

Is this your answer?

- Well! Everyone knows this. My strategy is-
 - Understand all the concepts and fundamentals well.
 - Prepare all the topics thoroughly.
 - Practice by repeating difficult and lengthy questions.
 - Study more than 6-7-'n' hours a day. Or more.
 - What more.....?



What More.....?

- Yes! Seems you are focused to your studies.
- But the question is about competitive examinations.
- What differences, on preparation level, you plan you are going to make for competitions?
- Think.....



Competitive Examinations are Different!

- At school, if you study more, practice well, you may get more marks than your friends.
- In your class, you may be compared to some 50-100-150 students from all the sections.
- But, in competitive examinations, you might be one of a million or so.



Competitive Examinations are Different!

- At school, you more or less know what your co-student is doing. Is he or she preparing by some particular guide-book, or taking tuition from a good teacher, or has joined some correspondence course.
- Not only this, you know a lot about your co-students study level and can easily compare with them to evaluate your level.



Competitive Examinations are Different!

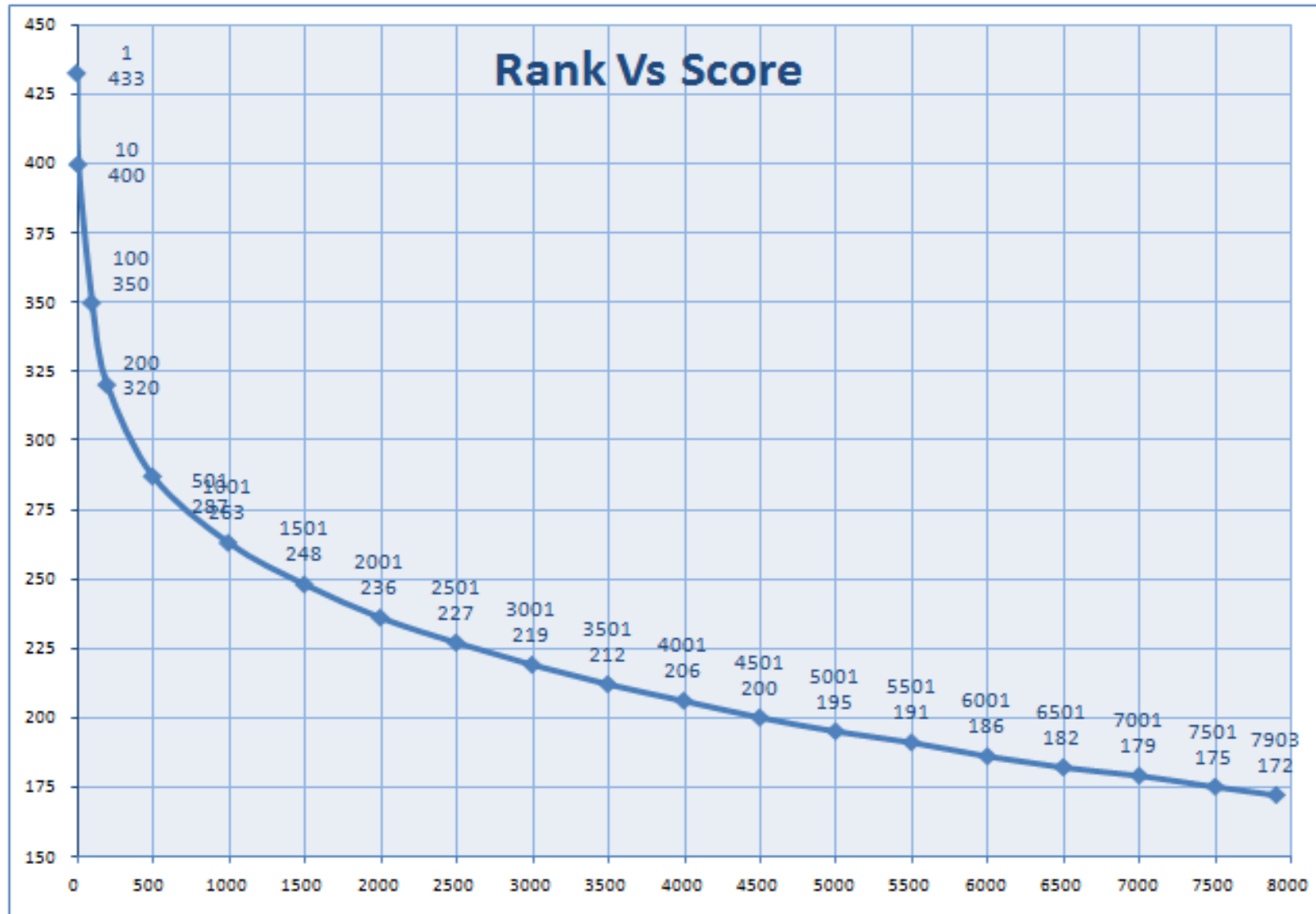
- Unfortunately, this is not the case with competitive examinations.
- You need to look at these with a different point of view.

Result Analysis Show

- In a competitive exam, suppose the topper gets 430 marks, while the cut off is 170 marks.
- There are around 8,000 students who clear the exam. While around 10,00,000 appear in exam.
- Every single mark can boost your rank by 30 or more.

Typical Results

(IITJEE 2008)

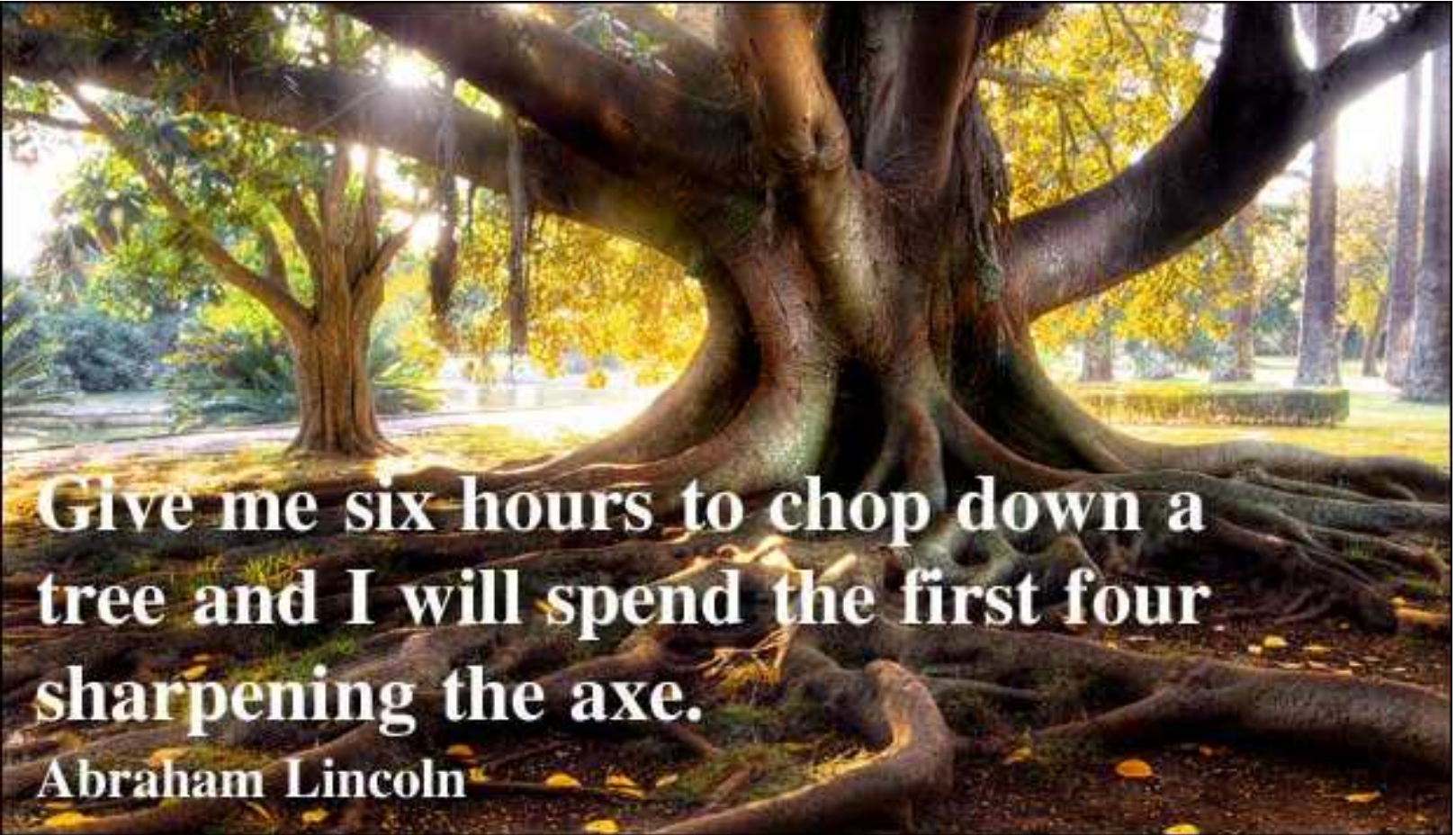




Analysis

- The 30 students for one mark is for the selected students. In fact, one mark may alter your rank much more than that.
- It may even alter your possibilities to clear or not.
- The present presentation focuses on **THAT ONE MARK.**

Conventional Study



Give me six hours to chop down a tree and I will spend the first four sharpening the axe.

Abraham Lincoln





Engineered Study

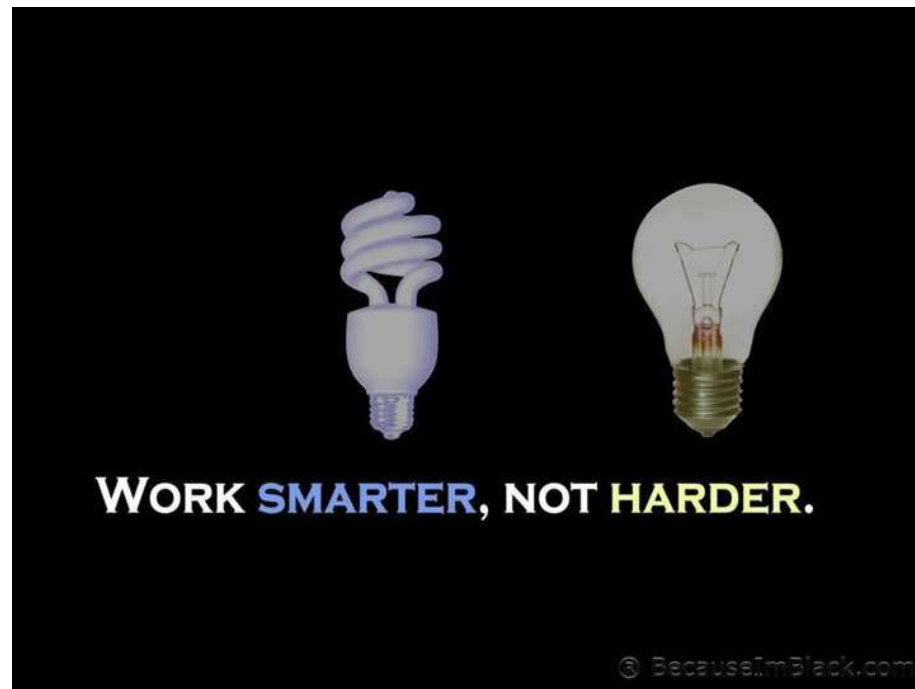
- Sir, if you need 4 hours to sharpen your axe, why don't you get a good sharpening tool? You may sharpen axe within a few minutes.

Engineered Study

- Axe Sharpeing....



- Only hard work is not enough. You need to sharpen your tools (brain) to get best results.





Mental Preparation



Mental Preparation

- Mental preparation is extremely important for getting the best performance in examinations.
- This include training your brain to not get distracted easily during study, acquiring necessary willpower to say no to your TV serial for going to study, and of course, getting accustomed to remain calm during last minute

Concentration

- It is a common problem that our mind starts thinking something else while we are studying. The thought may be any- a song from a recent movie, a dialogue from a famous serial etc.
- Next few slides show some tricks to maintain your concentration.

The Secret of
Concentration

Enjoy
What You Do

Interest \rightleftharpoons concentration

(Interest and concentration are proportional to each other)



O = One Think At a Time

- Make your mind a deal it can't refuse. Yes, the mind takes bribes. Instead of telling it NOT to think about another topic, assign it a single task with start-stop time parameters.
- In case you are studying linear motion, and your brain starts thinking about some movie, speak to yourself, I'll think of movie after solving these 5 questions.
- After 5 questions, your mind may forget the movie.



O = One Think At a Time

- Still can't get other concerns out of your head? Write them down on your to-do list so you're free to forget them. Now, you don't have to use your brain as a "reminder" bulletin board, which means you can give your undivided attention to your top priority subject.



Say 'NO' to TV / Games

- No, No, No, No, No! I am not saying you should not watch TV.
- However, you must develop a capability to just switch off immediately whenever your brain orders. At most interesting time during a serial, just at last game ball at a cricket match, gather capability to turn your head around just to miss it.
- You should not become slave of TV; TV should be your slave.



U = Use Your Hands as Blinkers

- What if you want to switch to telephoto focus? What if you have to prepare for a test and you need 100% concentration? Cup your hands around your eyes so you have "tunnel vision" and are looking solely at your text book. Placing your hands on the side of your face blocks out surroundings so they are literally "out of sight, out of mind." Think about the importance of those words.
- Remember, using your hands as blinkers every time you want to narrow your focus teaches your brain to switch to "one track" mind and concentrate on your command.

Don't Forget....

Studying for 30-50 minutes, with a 10 minute break is one of the best methods to improve your retention.





Do Calculations Need more Time?

- Are you one of those students who find numerical problems and calculations difficult?
- Are you fond of using calculators too often, and are worried that calculators are not allowed in examination hall?
- Are you afraid that low calculating speed may result in a loss of significant time in the exam?



Understand Your Brain

- Take a simple test-
- Add $7 + 9$ in your mind. How much time do you need to solve this?
- Multiply 8×6 in your mind. Do you need much time?
- Now, add $237 + 116$ in your mind.
- Stuck! Needing more time. Why?

How Our Brain Works?

- We are very good in basic operations like addition, subtraction, multiplication and division.
- But, the number we keep aside (carry) for using later on, is difficult to save & retrieve.

$$\begin{array}{r} 237 \\ + 116 \\ \hline 353 \end{array}$$



How Our Brain Works?

- Fortunately or unfortunately, we are aware of this, and take additional steps so the stored number is easily available when required.
- In other words, we can say our ROM is good, but RAM is not so good. Or probably, sending data to RAM and retrieving it is a slow process.



Similar Problems

- Many of us have made stupid mistakes just due to this.
- Remember when a question asked add 27 and 37, and you have added 27 and 57 in your notebook or something similar.
- This is a clear case of forgetting a number within a fraction of a second.



What Can We Do?

- So, this is a part you need to be extra careful for calculations part.
- As most competitive examinations do not allow students to use calculators, make a habit to practice numerical problems **without a calculator.**



Improving RAM

- With brain you cannot just get a higher capacity RAM card and replace it.
- Practice with some ‘mental ability’ and ‘general reasoning’ type worksheets.
- Slowly and slowly, you will start feeling the difference.



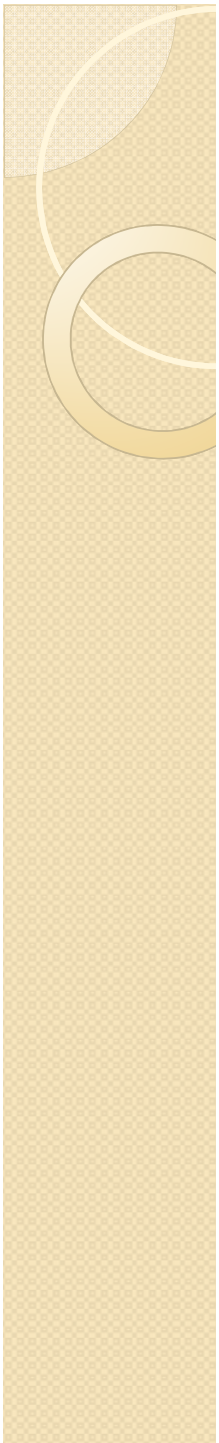
What Can We Do to Improve Calculation Speed?

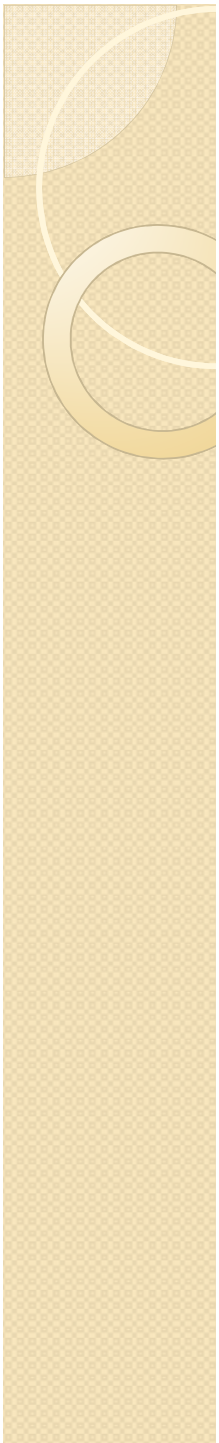
- Try to practice calculation speed with class 3-4-5 worksheets. Don't shy!
- Make a target to solve such one hr. worksheets within say 10-12 minutes. Use a stopwatch to note down your time.
- After some time, try to solve these just in your mind, without actually solving the problems with pen and paper, but write only the answer for checking later.



Remembering Things









Other Preparations



Environment

- **Make sure you're comfortable** – ensure that your chair and desk are at the right height for you.
- **Shut out distractions as much as possible** – Listening to music can help, especially if it's instrumental music. You may even use noise like ocean waves, or falling rain (prerecorded). This is called white noise. This steady background noise can drown out other noise, helping you focus better and ignore distractions.



Nutrition

- **Drink water** – Lack of water can make us feel tired, irritable, slow, or even sick. When our brains don't have enough fluid, they can't operate at peak performance. Staying hydrated is an easy way to help improve your concentration during the day.
- **Eat Healthy** –It's much harder to concentrate when you're hungry, so eat a well-rounded meal before you go to study. You can also help your concentration throughout the day by keeping healthy snacks at your study table. Almonds, whole-grain crackers, fresh fruit, and vegetables are good choices.

Brain Exercises

- When the brain is tired, we cannot learn things well, and our capability drops. If we can enhance our limit of getting tired, we definitely can perform better.





F = Five More Rule

- Read five more pages. Finish five more math problems. Work five more minutes.
- Just as athletes build physical stamina by pushing past the point of exhaustion, you can build mental stamina by pushing past the point of peak stress. Continuing to concentrate when your brain is tired is the key to S-T-R-E-T-C-H-I-N-G your attention span and building mental endurance.



Study a While when Your Brain Doesn't Like

- If you are tired after a cricket match, or too relaxed while watching a movie, feeling sleepy after a heavy meal, or too hungry, it is often difficult to study.
- Train your brain to be capable of studying even at that “tough times”. Suddenly, divert your mind from the ‘problem’ to a short but brain storming ‘Maths problem’.

Sleep to Wake-up Time

- Time between your sleep and when you wake up is extremely important.
- Develop a habit of immediately leaving the bed after you open your eyes.
- This habit helps you command your laziness in ON/OFF mode. After sleep, it is difficult to run immediately, but such practices help your brain to run immediately after rest.





Study in Noise

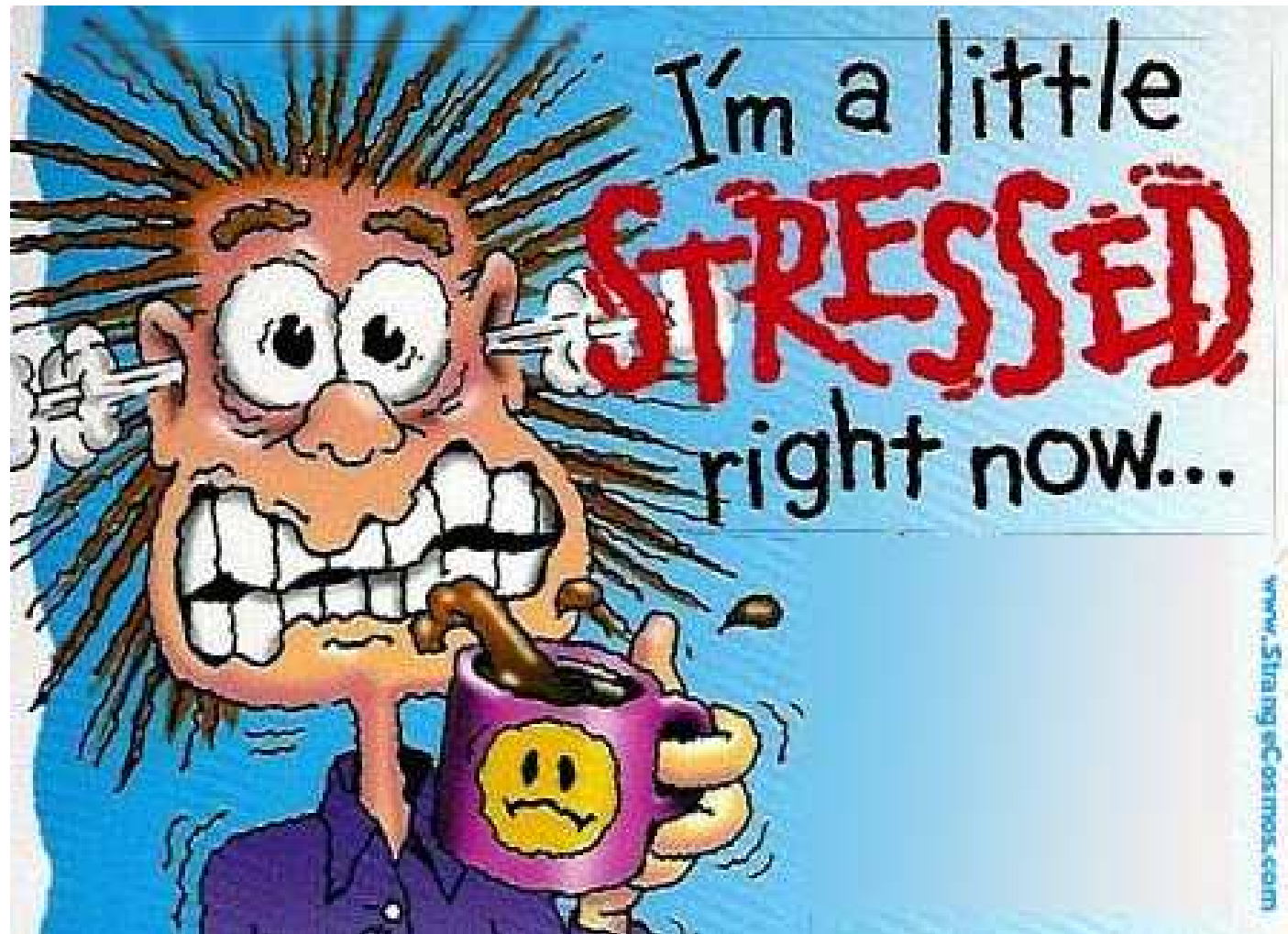
- It is often difficult to study while hearing some song, news or someone is talking aloud.
- For short durations, try studying while such distractions are there to deviate your mind. If possible, play some recording initially at low volume, and increase volume in each sittings slowly.
- Such exercise will help your brain saying NO to distractions.



Remain Cool

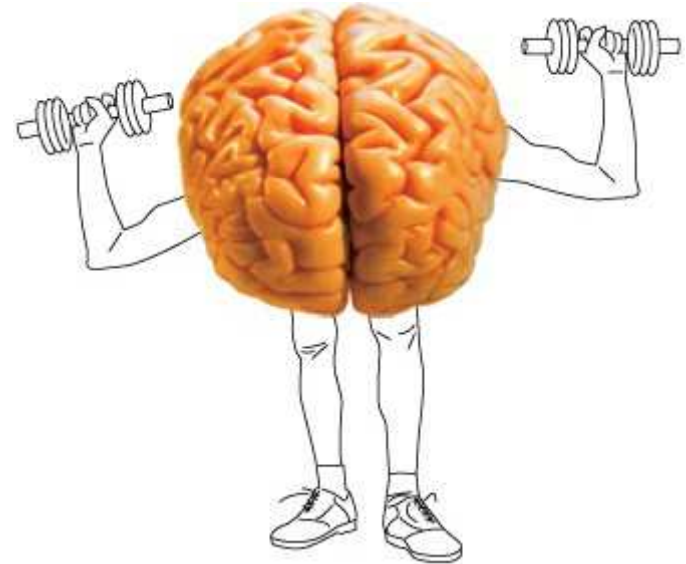
- Many of the students get irritated, tense while the exam is just to finish. It is in the same way, you often become tense while your favorite cricket match is near an end.
- Try to remain cool throughout the exam. Ask yourselves immediately after mock tests, or class tests etc., “Was I able to remain cool during the whole exam?”
- If you wish, learn a couple of ‘YOGA’ techniques for the same.

Remain Cool, Otherwise You'd
Feel.....



Brain Exercises

- Use brain exercises in forms of riddles, puzzles etc.



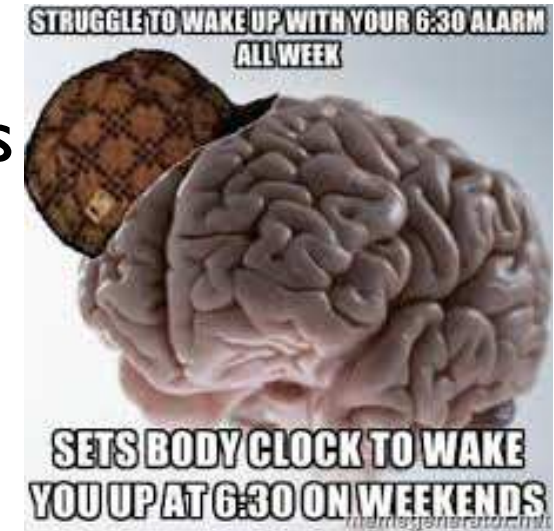
Time Management

- Time Management plays an important role in Competitive Examinations now a days.
- Without time management you don't get enough results even with studying the best.
- So give first priority to time management and make best use of available time.



Body Clock

- Do you know each one of us has a clock in our body.
- Practice to feel its presence. Remind yourselves several times while going to sleep, “I’ve to wake up tomorrow at 7:00AM”. Set alarm at 7:05AM in case you don’t wake up.
- Within some days, you shall be able to wake up without an alarm.





Body Clock

- In a similar way, if you know your exam is scheduled at 10:00AM to 1:00PM, make a practice to study at during this time at least 10-15 days before exam.
- This will make your body clock tuned to exam time, and you'll be able to perform better.

Know Your Strength and Weakness

- Your strength and weakness play an important role in competitive exams.
- It becomes extremely important to have your **SWOT analysis** done.



SWOT Analysis

- **Strength**

- “I can study long hours without break”
- “I have good command over Organic Chemistry”
- “I love solving numerical problems”

- **Weakness**

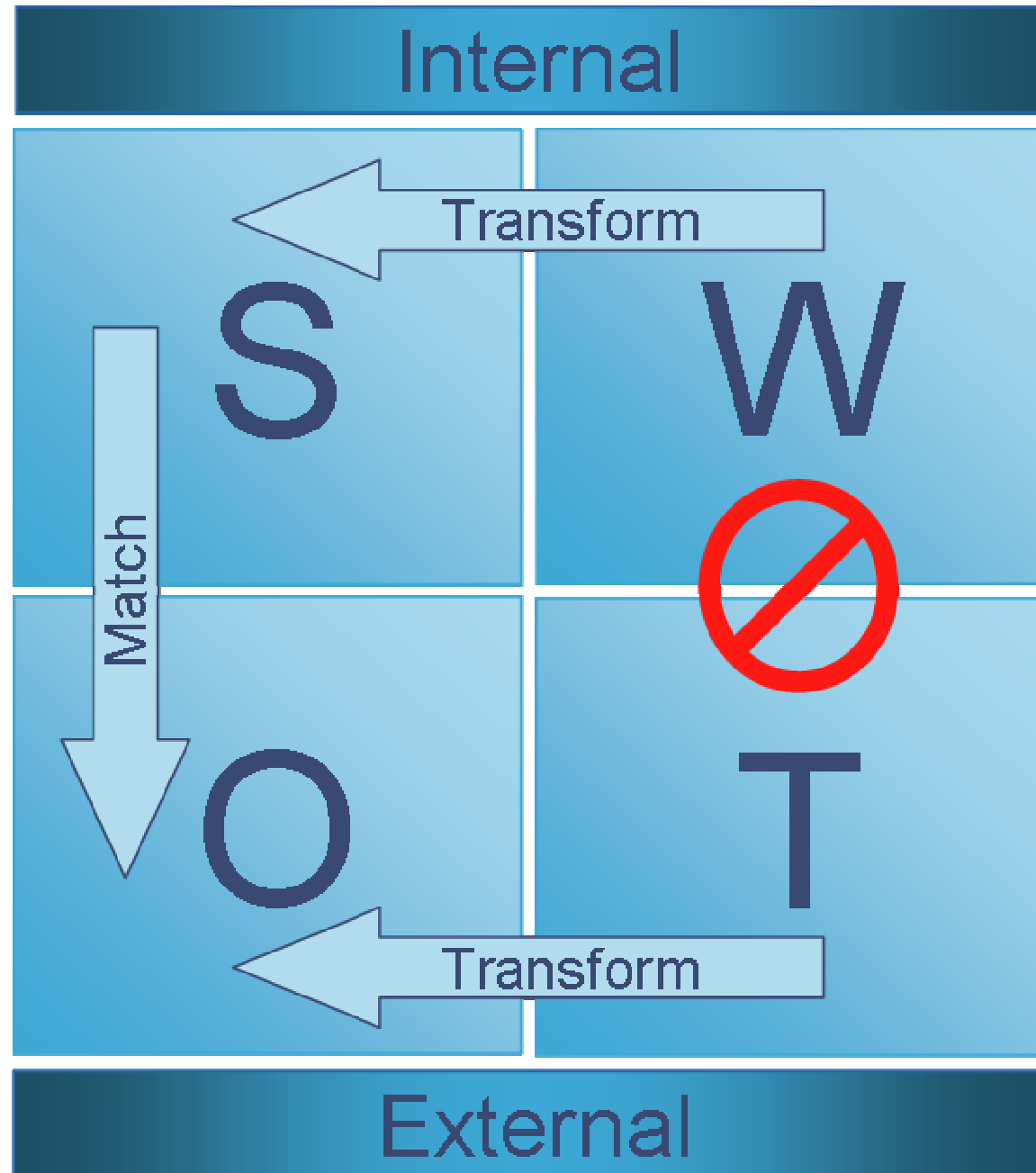
- “I just cannot resist skipping CID or action serials”
- “Mobile games are my passion. I’ve scored more than 1,00,000 in ‘Temple Run’”

- **Opportunity**

- “Extra class being organized in our school to improve our studies”

- **Threat**

- “India-Pak match live telecast tomorrow. I’ve to loose my five hours of study time.”





SWOT

- Having understood your strength and opportunities, you get more confidence in you.
- Similarly, if you have listed your weakness and threats, you may take necessary steps to overcome many of these.
- SWOT helps not only in exams, but everywhere in your life.

Complete Your Matrix

SWOT Matrix

	HELPFUL (for your objective)	HARMFUL (for your objective)
INTERNAL (within organisation)	Strengths • • • • • • S	Weaknesses • • • • • • W
EXTERNAL (outside organisation)	Opportunities • • • • • • O	Threats • • • • • • T



Strategies Formation



Time Management for Exam

- Understand the pattern of Exam
 - Evaluate the pattern
 - Study how can you get the best
 - Practice your strategy.
-
- However, be prepared for sudden unexpected changes.



Understand the Pattern of Exam.

- Of course, most exams are based upon your performance in objective tests.
- You are supposed to choose an option out of four or five available and darken its circle.
- In some exams, there may be more than one options and to get marks only and all of the correct answers should be circle darkened.



Pattern of Exam!

- The above points hold good for most of the competitions. But there is something else to look at.
- A close look at a typical exam looks like-

Exam Pattern Evaluation

- 150 questions; 3 Hours
- Average time: 72 seconds per question
 - If you reduce time for reading and understanding a problem, you get average 60 seconds only.
- Typical time required for solving-
 - 25 questions: 015-045 seconds per question
 - 75 questions: 030-120 seconds per question
 - 30 questions: 75-300 seconds per question
 - 20 questions: 150-600 seconds per question



Strategy

- 25 questions: 015-045 seconds per question
 - 75 questions: 030-120 seconds per question
 - 30 questions: 75-300 seconds per question
 - 20 questions: 150-600 seconds per question
- Identify the questions which take less time to solve.
 - How much time will it take for you to **decide**? 5s, 10s or more?
 - The more time you take to decide, the less you get for solving.
 - How to practice this?



Rapid Attack

- Take a sample paper, with say 100-150 questions.
- The Maximum Time could be 2½ or 3 hours.
- Assign yourselves only 30 Minutes, and solve as much questions as you can. Leave the difficult ones.
- Increase your score with practice.



Rapid Attack

- “Rapid Attack” helps you to identify and target weak enemies (sorry! questions) to get the best score.
- This will be helpful in less time consumption in solving first two type of problems, and you get more time for remaining ones.



Relatively Longer Questions

- You may practice relatively longer questions to take lesser time. Quite often, one or two options can be ruled out without much calculations.
- Focus on these during practice.
- Make a practice to re-evaluate wrong answers during your practice sessions to identify **what** was the reason you chose a wrong answer.



Stupid Mistakes

- Many students select wrong answers just as they slipped some unit, some decimal point or similar small issue in question.
- If that is the case, improve!



Tougher Questions

- Tougher questions is a section many students start too early, giving relatively lesser time to earlier medium tough questions.
- As a result, the time loss in these questions does not yield much, compared to situation if the same time was allotted to previous types.



Tougher Questions

- However, some students are much quicker in typical problems. If you are one of those, don't worry.
- The ultimate aims should be-



Ultimate Aim During Exam

- Nobody cares how many questions you attempted. Your score will depend only on correct answers.
- If there is a negative marking, don't bluff.
- Use your capability to quickly identify the problem whether you can solve it, or you have to 'fight' with it.



Fill OMR Sheet Properly

- Most exams use OMR sheet for answering the questions.
- Some answers, occasionally, get rejected as the students has not darkened the correct circle properly.
- Some others, waste more time in darkening the circles.
- Get some blank OMR sheets and practice on these in your mock tests.



My best wishes.....



About the Author:

Born in 1968, D K Singhal is B.E., M.E. (Pulp & Paper, 1993) from Dept. of Paper Technology, University of Roorkee (now IIT, Roorkee). He was certified as Certified Energy Auditor in 2004 with Bureau of Energy Efficiency.

With nearly 6 dozen publications, he has emphasized on development of low cost technologies and management practices for quality and profitability improvement. With publications on energymanagertraining.com and paperonweb.com, he has been constantly contributing to IPPTA (Indian Pulp & Paper Technical Association). He is also serving IPPTA as a member of Editorial Board and Executive Committee.

An initiative by D K Singhal, a cyber campaign initiated against unjustified targeting of paper industry by “Idea” mobile, in their “**Sirjee**” advertisement campaign, after which this advertisement was taken off air.

He has also moderated a Yahoo group, “**PaperTechnology**” with nearly 360 members from India and abroad to discuss problems related to pulp & paper making.

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