### APTITUDE CHEATSHEET

1min/question should be the speed to aim since the number of questions will be generally framed in that way. Basic math tricks are very imp to get the speed.

Watch this video to learn the basic math tricks to get to this speed and to use this sheet efficiently- <a href="https://youtu.be/gpTH7Wl1s\_0">https://youtu.be/gpTH7Wl1s\_0</a>

Follow our channel for coding & Career videos -

https://www.youtube.com/@curiousfreaks\_/videos

Follow on Insta for short career videos <a href="https://www.instagram.com/its\_me\_nandyy/reels/">https://www.instagram.com/its\_me\_nandyy/reels/</a>
Progress tracker sheet -

https://docs.google.com/spreadsheets/d/1ckq0ltkTveotjmE5iOSqPPLYk86NXI53SgdK3yj56ls/edit?usp=sharing - Make a copy of this sheet and use.

# **Categories in Aptitude Round:**

- 1. Arithmetic
- 2. Verbal
- 3. Reasoning
- 4. Programming

# **Quantitative Aptitude Topics:**

- 1. Average
- 2. Time & Distance
- 3. Time & Work
- 4. HCF & LCM
- 5. Train
- 6. Ages
- 7. Profit & Loss
- 8. Permutations & Combinations
- 9. Ratio & Proportion
- 10. Area
- 11. Simple Interest & Compound Interest
- 12. Probability
- 13. Pipes & Cisterns
- 14. Discount
- 15. Clocks & Calendars
- 16. Height and Distance
- 17. Volume & Surface

## Reasoning

- 1. Analytical
  - a. Puzzles
  - b. Blood Relations
  - c. Directions
  - d. Seating Arrangements
- 2. Logical
  - a. Syllogisms
  - b. Logical connectives
  - c. Assumptions & Conclusions
  - d. Cause & Effect
  - e. Series completion
  - f. Odd one out
- 3. Verbal
  - a. Jumbled sentence
  - b. Passange comprehension
  - c. Spotting errors
  - d. Sentence formation
- 4. Data Sufficiency Evaluating is the provided data is enough to answer the question.

# **Aptitude topic patterns**

## **Average**

- 1. Type 1 : Average of Numbers
- 2. Type 2: Average of weight / age / marks of two or more groups / classes.
- 3. Type 3: Change in average when one entry is added/replaced.
- 4. Type 4: Change in average when one entry is entered wrong.
- 5. Type 5 : Average speed
- 6. Type 6: Cricket/Scores/Innings

Learn the patterns - <a href="https://www.careerride.com/average.aspx">https://www.careerride.com/average.aspx</a>
Practice the topic - <a href="https://www.indiabix.com/aptitude/average/">https://www.indiabix.com/aptitude/average/</a>
Video tutorial - <a href="https://youtu.be/rhSxQ4ieAYc?si=BgHz60i0IGxSNg6F">https://youtu.be/rhSxQ4ieAYc?si=BgHz60i0IGxSNg6F</a>

#### **Time & Distance**

- 1. Type 1: Calculate either time, speed or distance from the other two given parameters.
- 2. Type 2: Calculate speed of two people moving between two points, A and B, in opposite directions & crossing each other on the way.

- 3. Type 3: Finding Relative Speed for two bodies moving in same or opposite directions.
- 4. Type 4: Numericals on Average Speed when the same part of total distance is traveled at two or more different speeds.

Learn the Patterns - <a href="https://www.careerride.com/time-and-distance-aptitude-test.aspx">https://www.careerride.com/time-and-distance-aptitude-test.aspx</a>
Practice questions - <a href="https://www.indiabix.com/aptitude/time-and-distance/">https://www.indiabix.com/aptitude/time-and-distance/</a>
Video tutorial - <a href="https://youtu.be/jzNxXm5twx4?si=xfeKhJSlriwFxydv">https://youtu.be/jzNxXm5twx4?si=xfeKhJSlriwFxydv</a>

#### Time & Work

- 1. Type 1: Efficiency of two or more workers is give separately. Find how much time would they take to finish the work together.
- 2. Type 2: Find the time required to complete the work
  - a) by one worker if the total time taken by all workers and one of the workers are given.
  - b) either alone or together by the workers for the given times of workers in combined form.
- 3. Type 3: Find the time required
  - a) to complete the work together if one worker is 'm' times as efficient as the other worker & takes 'D' days less than the other worker
  - b) to complete the work by one of the workers if they work together or if work efficiencies of two workers are given.
- 4. Type 4: Calculate the time required by men or (combination of men with other people) to complete a certain work in certain hours for the given another set of number of required men, work & hours.

Learn the topics from - <a href="https://www.careerride.com/time-and-work-aptitude-test.aspx">https://www.careerride.com/time-and-work-aptitude-test.aspx</a>
Practice questions - <a href="https://www.indiabix.com/aptitude/time-and-work/">https://www.indiabix.com/aptitude/time-and-work/</a>
Video tutorial - <a href="https://youtu.be/KE7tQf9spPg?si=D">https://youtu.be/KE7tQf9spPg?si=D</a> WInt4wm3zwtowR

#### **HCF & LCM**

- 1. Type 1: Find H.C.F. and L.C.M of composite numbers
- 2. Type 2: Find H.C.F. and L.C.M. of decimal numbers and fractions
- 3. Type 3: Find the numbers/sum of numbers/product of numbers if
  - a. 1) Their ratio and H.C.F. are given.
  - b. 2) Product of H.C.F. and L.C.M are given.
- 4. Type 4: Find the least number, which when divided by another number leaves a remainder.

5. Type 5: Application based numerical of H.C.F. and L.C.M.

#### Learn the topics from -

https://www.careerride.com/problems-on-H.C.F-and-L.C.M-aptitude-test.aspx

Practice questions - https://www.indiabix.com/aptitude/problems-on-hcf-and-lcm/

Video tutorial - https://youtu.be/xyyejJYelLM?si=6fPYbBjl3ULIFMQA

#### **Train**

- 1. Type 1: I) A train crosses a stationary object on the platform. Find
  - a) the time taken or
  - b) length of train
- 2. Type 2: I) A train of given length crosses the platform at a given speed. Find:
  - a) Time taken to cross the platform or
  - b) Length of platform
- 3. Type 3: Find time taken by a train to cross a person running in opposite direction at a given speed.
- 4. Type 4: Find time taken by a train to cross a person running in same direction at a given speed.
- 5. Type 5: Find time taken by two trains moving in opposite direction at given speed, to cross each other
- 6. Type 6: Two trains move at a given speed in same direction. Find:
  - a) Time taken to cross each other
  - b) Length of train

Learn the topic - <a href="https://www.careerride.com/problems-on-trains-aptitude-test.aspx">https://www.careerride.com/problems-on-trains-aptitude-test.aspx</a>
<a href="Percentage: Practice questions">Practice questions</a> - <a href="https://www.indiabix.com/aptitude/problems-on-trains/">https://www.indiabix.com/aptitude/problems-on-trains/</a>
<a href="Video tutorial">Video tutorial</a> - <a href="https://youtu.be/78b4Jn4rw44?si=F5tO9Rk-La5Dpk2b">https://youtu.be/78b4Jn4rw44?si=F5tO9Rk-La5Dpk2b</a>

## Ages

- 1. Type1: Calculate Present age
- 2. Type 2: Numerical to Determine Ages in ratio form
- 3. Type 3: Numerical to Determine Age of a Person before x Years
- 4. Type 4: Numericals to Determine Age of a Person after x Years

Learn the topic - <a href="https://www.careerride.com/problem-on-ages.aspx">https://www.careerride.com/problem-on-ages.aspx</a>
Practice questions - <a href="https://www.indiabix.com/aptitude/problems-on-ages/Video tutorial">https://www.indiabix.com/aptitude/problems-on-ages/Video tutorial</a> - <a href="https://youtu.be/tJHI73PBnwY?si=cvF4d79ycjuowowV">https://youtu.be/tJHI73PBnwY?si=cvF4d79ycjuowowV</a>

#### **Profit & Loss**

1. Type 1: To find Profit/Loss or Selling Price/Cost Price.

- 2. Type 2: Calculate profit/loss If cost price of X articles is equal to selling price of Y articles. (C.P. of X articles = S.P. of Y articles)
- 3. Type 3: Find loss incurred by the shopkeeper
  - a) Material A sold at x % gain and material B sold at x % loss.
  - b) Material A sold at x % gain and material B sold at y % loss.
- 4. Type 4: Trader sells goods at cost price but uses a weight of x kg instead of y kg (false weights) and makes profit. Calculate profit.
- 5. Type 5: Numerical on Discount and Successive discounts/profit

Learn the topic - <a href="https://www.careerride.com/profit-and-loss-aptitude-test.aspx">https://www.careerride.com/profit-and-loss-aptitude-test.aspx</a>
<a href="Percentage-12">Practice the topic - <a href="https://www.indiabix.com/aptitude/profit-and-loss/">https://www.indiabix.com/aptitude/profit-and-loss/</a>
<a href="Video tutorial">Video tutorial - <a href="https://youtu.be/T2odvmxqi1l?si=kkveC3Yrc39fl4x3">https://youtu.be/T2odvmxqi1l?si=kkveC3Yrc39fl4x3</a>

### **Ratio & Proportion**

- 1. Type 1: Proportion
- 2. Type 2: Division and Distribution of objects into ratios
- 3. Type 3: Mixture of different contents
- 4. Type 4: Income/ Expenditure and Salary
- 5. Type 5: Coins and Values

**Learn the topic** - <a href="https://www.careerride.com/ratio-and-proportion-aptitude-test.aspx">https://www.careerride.com/ratio-and-proportion-aptitude-test.aspx</a> **Practice the topic** - <a href="https://www.indiabix.com/aptitude/ratio-and-proportion/">https://www.indiabix.com/aptitude/ratio-and-proportion/</a> **Video tutorial** - <a href="https://youtu.be/ifoJBivWlnQ?si=zQcDJI4wX3R035hW">https://youtu.be/ifoJBivWlnQ?si=zQcDJI4wX3R035hW</a>

#### **Permutation & Combination**

- 1. Type 1: Direct Permutation
- 2. Type 2: Direct Combination

Learn the topic - <a href="https://www.careerride.com/permutations-and-combinations.aspx">https://www.careerride.com/permutations-and-combinations.aspx</a>
Practice the topic - <a href="https://www.indiabix.com/aptitude/permutation-and-combination/">https://www.indiabix.com/aptitude/permutation-and-combination/</a>
Video tutorial -

## **Probability**

- 1. Probability given direct values with indirect statement
- 2. Probability given indirect values

Learn the topic - <a href="https://www.careerride.com/probability.aspx">https://www.careerride.com/probability.aspx</a>
Practice the topic - <a href="https://www.indiabix.com/aptitude/probability/">https://www.indiabix.com/aptitude/probability/</a>
Video tutorial - <a href="https://youtu.be/ximxxERGSUc?si=7L5Qqqv4-1PCuqNI">https://youtu.be/ximxxERGSUc?si=7L5Qqqv4-1PCuqNI</a>

### **Pipes & Cisterns**

- 1. Type 1: Find the time to fill/ empty the tank by the pipes together for the given time of individual pipes.
- 2. Type 2: Find the capacity of tank for given
  - a) time of each pipe to fill up a tank if they work alone and
  - b) rate at which outlet pipe can empty the tank.
- 3. Type 3: Find the time taken by leak to empty the tank for given
  - a. a) time of pipe to fill a tank &
    - b) time taken by leak to fill the tank due to leakage.
- 4. Type 4:

i)Find the time taken by two pipes to fill the tank if they work individually if it is given that -

- a) one pipe is 'm' times faster/slower than another pipe and
- b) time taken by two pipes to fill the tank together.
- a. ii) Find the time taken to fill an empty tank for given
  - a) time of each pipe to fill the tank separately and
  - b) one of the pipes is full-time working and the other 2 pipes are open for certain hour alternately.
- 5. Type 5:
  - i) Find the time taken to fill the tank for given -
  - a) the time of inlet pipes to fill a tank if they work alone and the outlet pipe to empty a tank &
    - b) all pipes are opened but outlet pipe is opened/closed after certain hours
  - ii) Find the total time required to fill the tank if
    - a) the time of each inlet pipe to fill the tank individually and
  - b) all the pipes are opened simultaneously and after certain time, one of the pipes is turned off.

Learn the topic - <a href="https://www.indiabix.com/aptitude/pipes-and-cistern/">https://www.indiabix.com/aptitude/pipes-and-cistern/</a>
Practice questions - <a href="https://www.careerride.com/pipes-and-cistern-aptitude-test.aspx">https://www.careerride.com/pipes-and-cistern-aptitude-test.aspx</a>
Video tutorial - <a href="https://www.be/mBtBD1N7vwQ?si=wOiRvORbe">https://www.be/mBtBD1N7vwQ?si=wOiRvORbe</a> I6GueR

# Simple Interest

- 1. Type 1: Find simple interest
- 2. Type 2: Find rate of interest
- 3. Type 3: Find principal or amount

Practice questions - <a href="https://www.indiabix.com/aptitude/simple-interest/">https://www.indiabix.com/aptitude/simple-interest/</a> Learn the topic - <a href="https://www.careerride.com/simple-interest-aptitude-test.aspx">https://www.careerride.com/simple-interest/</a>

#### Video tutorial - https://youtu.be/jvRq87ZWzlk?si=n7oSdSO18R1j8sVn

### **Compound interest**

- 1. Type 1: Numerical based on population
- 2. Type 2: Numerical to find compound interest (yearly, quarterly, and half-yearly)
- 3. Type 3: Numerical to find rate of interest/years
- 4. Type 4: Numerical to find sum/rate of interest when difference between C.I. and S.I. is specified

Learn the topic - <a href="https://www.careerride.com/compound-interest.aspx">https://www.careerride.com/compound-interest.aspx</a>
Practice questions - <a href="https://www.indiabix.com/aptitude/compound-interest/">https://www.indiabix.com/aptitude/compound-interest/</a>
Video tutorial - <a href="https://youtu.be/PbUZnzncmR4?si=oB-L7a52asCgghMl">https://youtu.be/PbUZnzncmR4?si=oB-L7a52asCgghMl</a>

#### **Discount**

Learn the topic - https://www.careerride.com/true-discount.aspx

Practice questions - https://www.indiabix.com/aptitude/true-discount/

Video tutorial - https://youtu.be/FW97hRrHcSw?si=yGw2XTq8JjAj-nPo

#### **Volume & Surface**

Learn the topic -\_https://www.careerride.com/volume-and-surface-area.aspx

Practice questions - https://www.indiabix.com/aptitude/true-discount/

Video tutorial - https://youtu.be/2rp \_-h6PnFo?si=ltByo1VXdOQ-fBVg

## **Height and Distance**

Learn the topic -\_https://www.careerride.com/height-and-distance-aptitude-test.aspx

Practice questions - https://www.indiabix.com/aptitude/height-and-distance/

Video tutorial - https://youtu.be/uRA-QqVI3ec?si=MI6Zbf-odN1icuA7