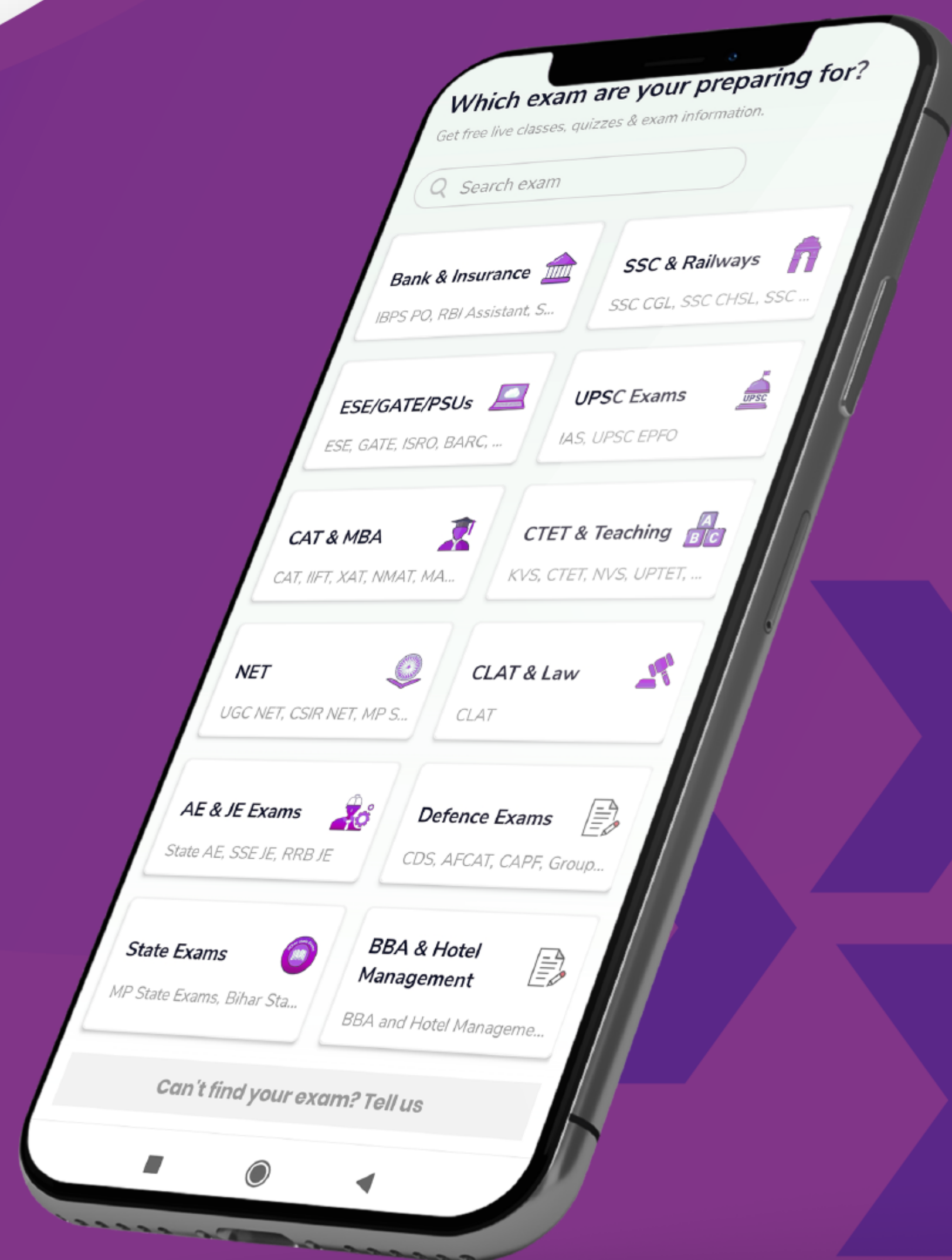


Formula Sheet On Time & Distance



Unit Conversion

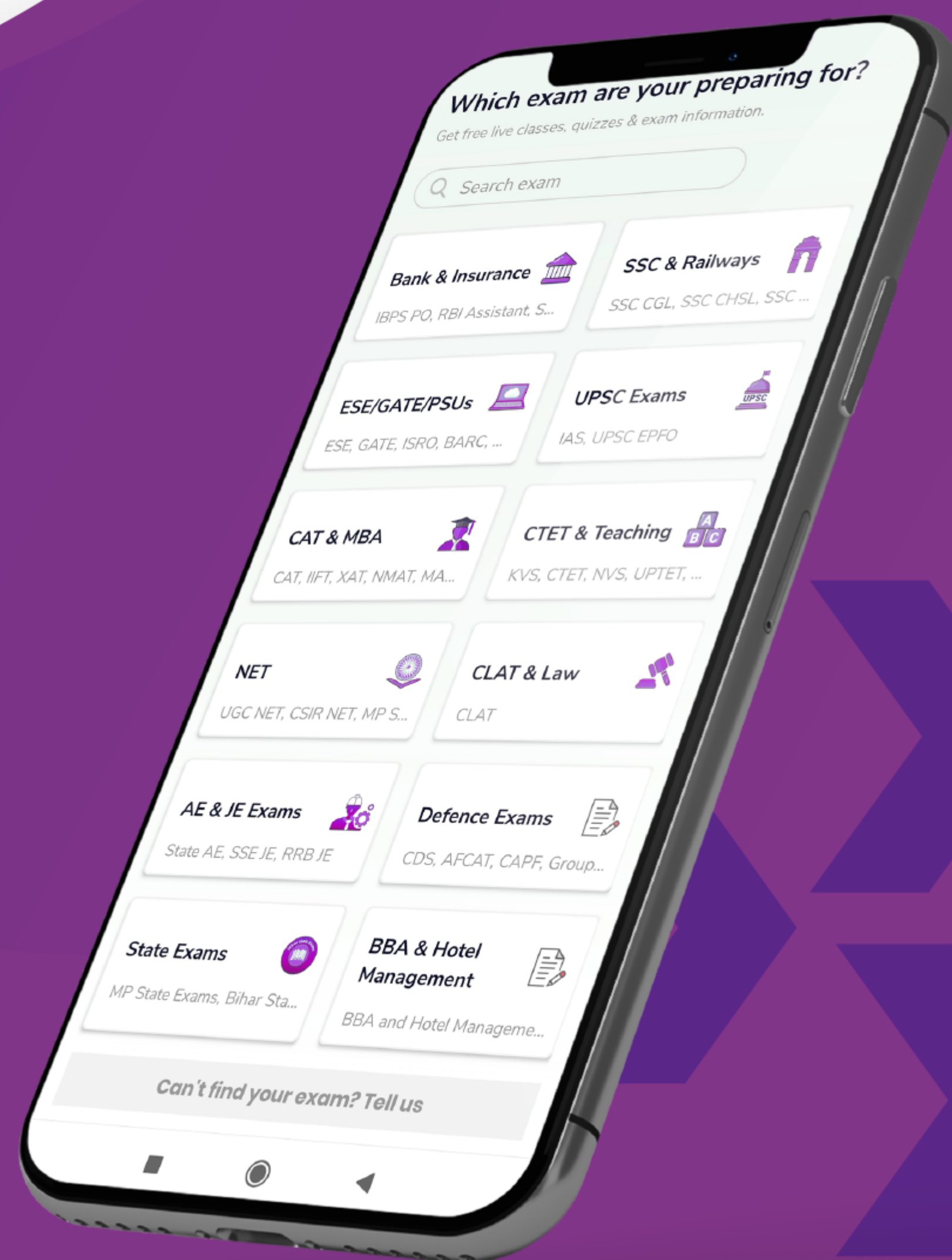
1 hour = 60 min = 3600 seconds

1 km = 1000 m

$$\frac{1 \text{ km}}{\text{h}} = \frac{5}{18} \text{ m/s}$$

$$\frac{1 \text{ m}}{\text{sec}} = \frac{18}{5} \text{ km/h}$$

1 mile = 1.60 km



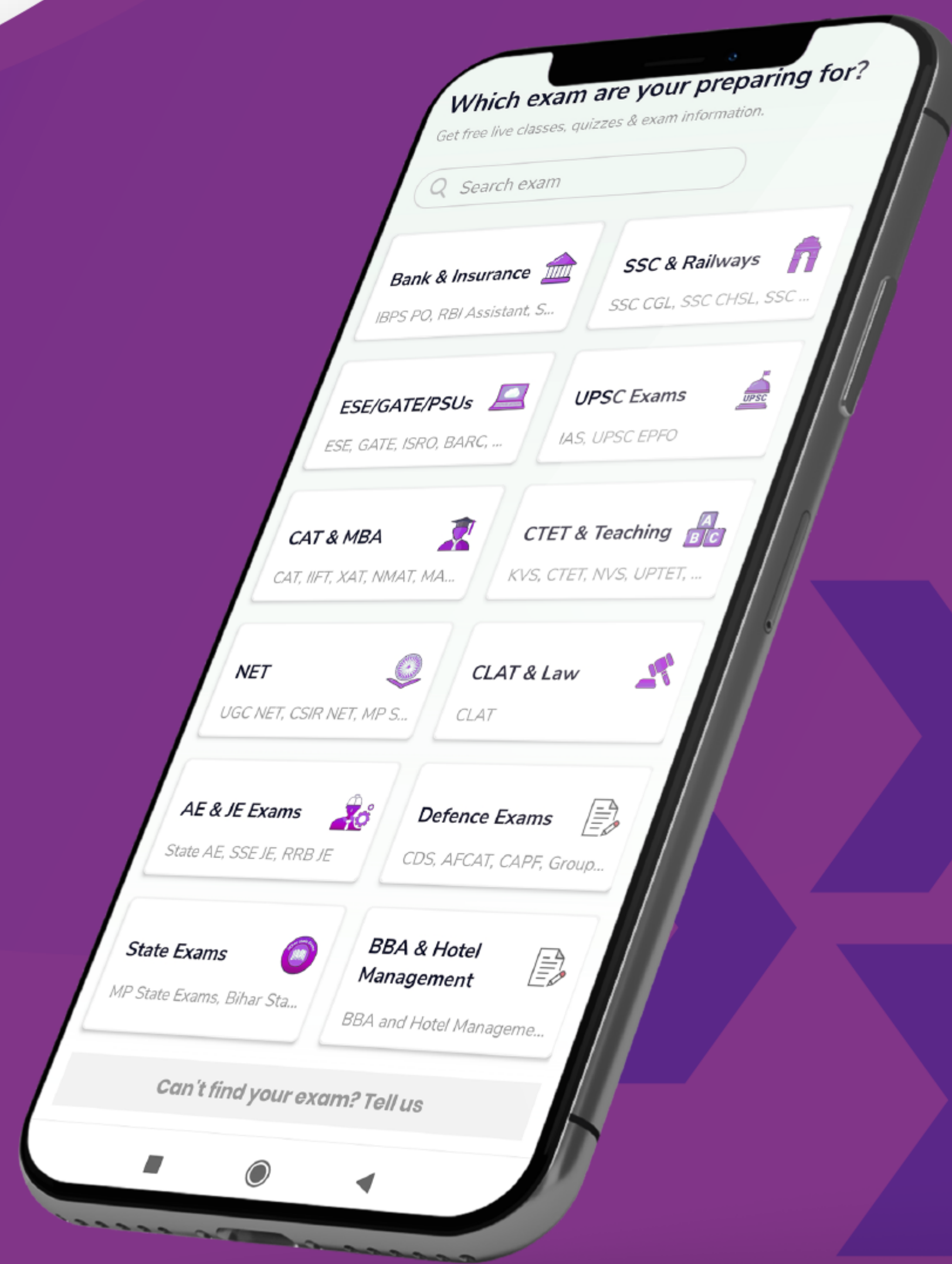
Formulas

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$\text{Distance} = \text{Speed} \times \text{Time}$$

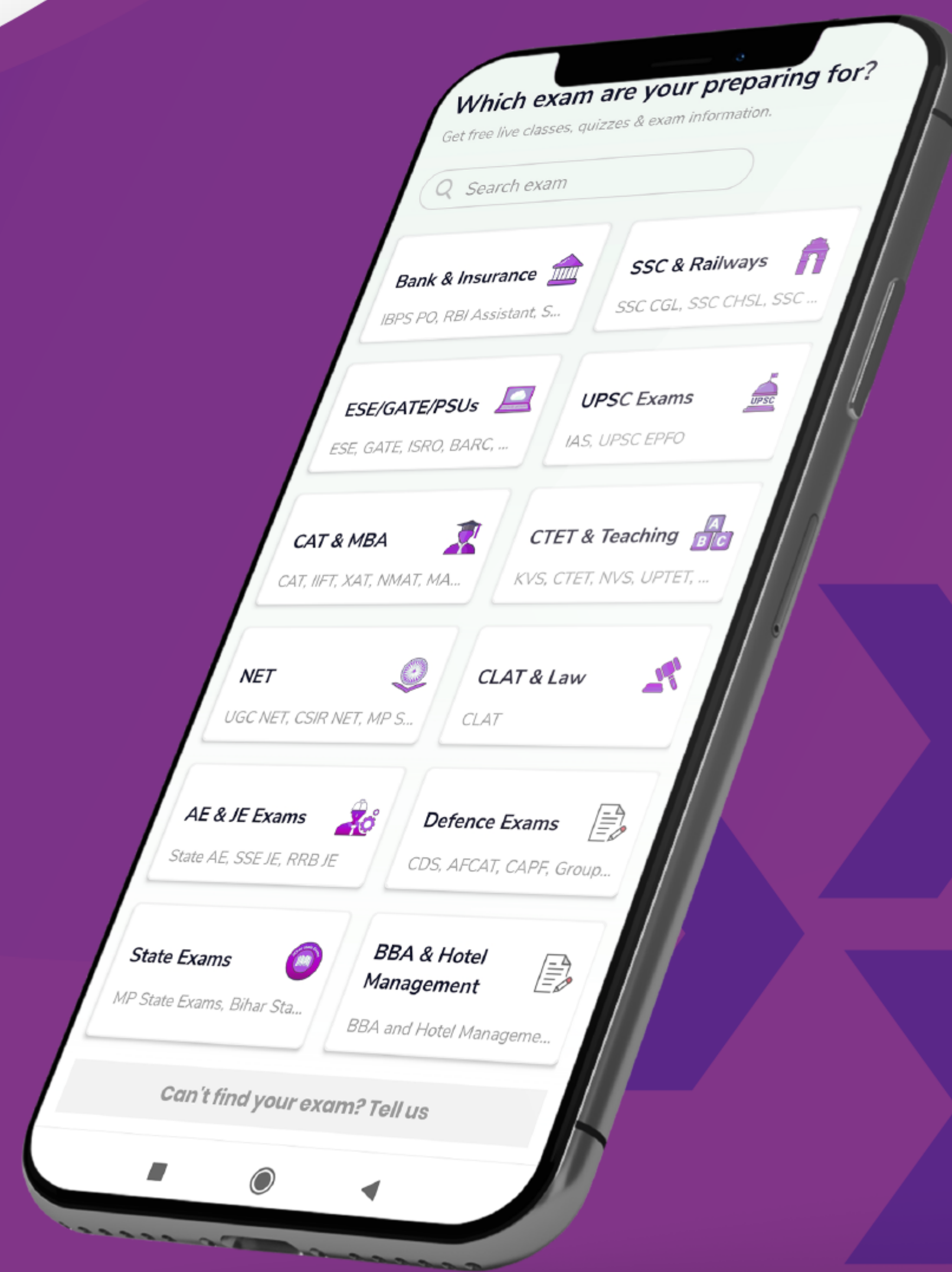
$$\text{Time} = \frac{\text{Distnace}}{\text{Speed}}$$

$$\text{Average Speed} = \frac{\text{Total Distance}}{\text{Total Time}}$$



Concept

- Suppose while travelling a certain distance 'd' if there is a change in speed in the ratio m:n, then the ratio of time taken will become n : m.
- If speed changes during the journey then average speed will be = $\frac{2xy}{x+y}$



Relative Speed

- When objects move in the same direction with speed S_1 and S_2 resp.

Then relative speed = $S_1 - S_2$

- When an object moving in the opposite direction with speed S_1 and S_2 resp.

Then their Relative speed will be = $S_1 + S_2$

- When objects move towards each other.

Then time taken by them to meet will be = $\frac{\text{Distance}}{S_1+S_2}$

- When object moving in opposite direction time taken to meet will be = $\frac{\text{Distance}}{S_1-S_2}$

CRASH COURSES

Enrol for Ongoing CSIR NET Crash Courses

CSIR NET General Aptitude Course 2021

Complete Study Plan to Boost the CSIR NET Score

What to Expect?

- Live Classes
- Quizzes
- Doubt Sessions
- PYQ Discussion
- Mock Tests
- Chapter-wise Tests
- Revision Tests
- Expert faculty

Course Language

- Bilingual

This Course Includes

-  **80+** Live Classes
-  **1000+** Practice Questions
-  Study Notes & Formula Sheets
-  **10+** Mock Tests

CSIR NET Life Science 2021 Crash Course

Revision Plan to clear the exam

What to Expect?

- Live Classes
- Quizzes
- Doubt Sessions
- PYQ Discussion

Course Language

- English

This Course Includes

-  **200+** Live Classes
-  **3000+** Practice Questions
-  **200+** Study PDFs
-  **10+** Mock Tests

CSIR NET Chemical Science 2021 Crash Course

Complete Revision Plan to ACE the Exam

What to Expect?

- Live Classes
- Quizzes
- Doubt Sessions
- PYQ Discussion
- Mock Tests
- Chapter-wise Tests
- Revision Tests
- Expert faculty

Course Language

- English

This Course Includes

-  **180+** Live Classes
-  **3000+** Practice Questions
-  **200+** Study PDFs
-  **10+** Mock Tests