



## QUESTION PAPER PATTERN 2021

### SCHOOL ROUND

#### How does it work?

At their core, KenKen puzzles involve simple arithmetic, but solving them requires a combination of logic, number theory, and combinatorics.

While solving the puzzles, students practice addition, subtraction, multiplication, and division; consider multiple factorizations and partitions of numbers; and invoke deductive reasoning.

CATEGORY	PUZZLE TYPE	NO. OF PUZZLES	OPERATIONS
DELTA (3-5)	From 3X3 to 4X4	4	Addition & Subtraction
KAPPA (6-9)	From 4X4 to 5X5	4	All
SIGMA (10-12)	From 4X4 to 5X5	4	All

Note: Duration of School Round Exam Will Be 20 Minutes.

Criteria to Go for Next Level: - At least 1 Puzzle Should be completely correct to Qualify for the Next Round.

### CITY ROUND 2020

CATEGORY	PUZZLE TYPE	NO. OF PUZZLES	OPERATIONS
DELTA (3-5)	From 4x4 to 5X5	6	Addition/ Subtraction & Multiplication
KAPPA (6-9)	From 5X5 to 6X6	6	Addition & Subtraction
SIGMA (10-12)	From 5X5 to 6X6	6	All

(A) Time Duration: - 30 Minutes.

(B) At least 2 Puzzles should be Correct to Qualify for the State Level.



### STATE ROUND 2020

CATEGORY	PUZZLE TYPE	NO. OF PUZZLES	OPERATIONS
DELTA (3-5)	From 4x4 to 5X5	6	All Operations
KAPPA (6-9)	From 5X5 to 6X6	6	All Operations
SIGMA (10-12)	From 5X5 to 6X6	6	All Operations

(A) Time Duration:- 30 Minutes

(B) A candidate has to solve 4 Puzzles correctly & completely within 30 Minutes to qualify for the National Level of Competition.

### NATIONAL ROUND 2020

CATEGORY	PUZZLE TYPE	NO. OF PUZZLES	OPERATIONS
DELTA (3-5)	Up to 5X5	6	All Operations
KAPPA (6-9)	Up to 6X6	6	All Operations
SIGMA (10-12)	Up to 7X7	6	All Operations

(A) Duration:- 30 Minutes

(B) Participants Who Will Solve all the Puzzles correctly and completely and fastest will qualify for the International round. Participants who will qualify will only go to New York for the International Round.

### SCORING

**(1) Minimum qualifying criteria for any participants to move to the next round is as below.**

**(a) School Round:** - 1 Complete and Correctly Solved Puzzle will qualify for Next Level.

**(b) City Round:** - 2 Compete and Correctly Solved Puzzles will qualify for Next Level.

**(c) State Round:** - 4 Complete and Correctly Solved Puzzle will qualify for Next Level.

**(d) National Level:** - Fastest and All Corrected Puzzles Will qualify for International Level.

