# 2025 Indian Puzzle Championship

Instructions Booklet

31st May 2025, Kolkata



Round Composition at a glance (puzzle names are in bold):

Round 1: Familiars for Forints 10 puzzles X minutes

#### **Puzzles Points**

- Tents (Classics) X
- Sus-Shikaku (Classics) X
  - Round Trip (Loops) X
- Battleships (Object Placement) X
  - Skyscrapers (Numbers) X
    - Mukkonn Enn (MII) X
    - Nurikabe (Shading) X
  - Pentominous (Regions) X
    - Hidden Words (Word) X
  - Letter Weights (Casual) X
    - Total X

#### **Puzzles Points**

- Cave (Classics) X
- Shakashaka (Classics) X
- Country Road (Loops) X
- Statue Park (Object Placement) X
  - View (Numbers) X
  - Balance Loop (MII) X
  - Context (Shading) X
  - Sashigane (Regions) X
    - Letter Pairs (Word) X
  - Arithmetic Square (Casual) X
    - Total X

#### **Puzzles Points**

- **Fifty-fifty** (In Memoriam) X
  - Bank Notes (Assorted) X
    - Knights (Cows) X
- Borderless Snake (Borderless) X
  - Scrabble (Evergreens) X
    - Yajilin (Sprint) X
    - Yajilin (Sprint) X
    - Yajilin (Sprint) X
    - Yajilin (Sprint) X
    - Divide and Conquer X
    - XI Snake (Magic 11) X
  - Hungarian Pentomino X (Hungaricum)
  - Sudoku Snail (Innovative) X
    - Total X

- Round 3: Eager for Eger 13 puzzles X minutes
  - Points: X

Round 2: Miscellany for Magyarország 10 puzzles X minutes Points: X

#### Puzzles Points

Letter Pairs X

**Divide and Conquer** X

**Divide and Conquer** X

Divide and Conquer X

Abacus Snake X

**Deal With It** X

- Deal With It X
- Rebus Word Search X

Twins X

- Sudoku Battleships X
- Sudoku Battleships X

Total X

## Acknowledgments:

LMI Thanks the following puzzlers for their involvement in putting this competition together

Rounds 1-3 -

Authors: Chandrachud Nanduri (India), David Altizio (USA), Madhav Sankaranarayanan (India), Martin Ender (Germany), Murat Can Tonta (Turkey), Prasanna Seshadri (India), Walker Anderson (USA)

Curator/Editor: Prasanna Seshadri (India)

Testers: Chiel Beenhakker, David Altizio, Prasanna Seshadri, Walker Anderson (USA)

Round 4 -

Author & Editor: Tawan Sunathvanichkul (Thailand)

Testers: Chiel Beenhakker, Prasanna Seshadri

## Tie Breakers & Bonus Points:

- In case of a tie, the participant with the higher score in Round 3 will rank higher. If there is still a tie, we will look at Round 2, then Round 1. If there is still a tie, a tie-breaker puzzle will be used if the position in question is relevant to the team selection positions or the Puzzle Ramayan playoffs.
- If all puzzles are solved correctly in a round, the participant will score an additional 10 points per minutes saved.

Round 4:

Hangover in Hungary

11 puzzles

X minutes

Time	Activity				
9:00-9:30	Completing registration				
9:30-10:15	Q & A				
10:30-X	Round 1				
X-X	Round 2				
X-X	Lunch				
X-X	Round 3				
X-X	Round 4				
X-X	Fun Event				
X-X	PR Playoffs				
X-18:00	Results & Prize Distribution				

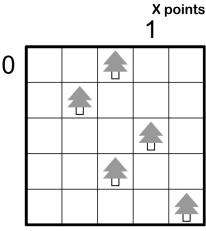
# Schedule

# **Round 1: Familiars for Forints**

<u>Round Description:</u> This round contains puzzle genres that were seen over the course of the Puzzle Ramayan online rounds. Their respective categories are mentioned in brackets. In case of Made In India, we have also specified the original inventor.

#### 1 Tents (Classics)

For each tree in the grid, place a tent in an empty orthogonally adjacent cell, connecting to it. Tents may not touch one another, not even diagonally. A clue given outside the grid represents the number of tents in the corresponding row or column.



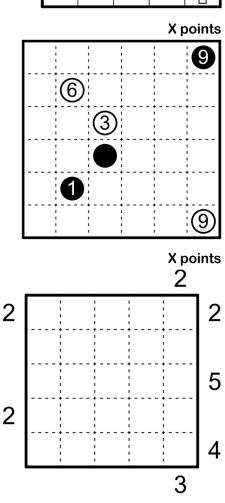
## 2 Sus-Shikaku (Classics)

Divide the grid into regions of orthogonally connected cells. <u>Each rectangular region must</u> <u>contain exactly one black circle. Each nonrectangular region must contain exactly one</u> <u>white circle</u>. A number in a circle represents how many cells are in the region the circle belongs to.

Note: This is a variant of the Classic genre 'Shikaku'. Both classic as well as variant appeared in the corresponding PR Round.

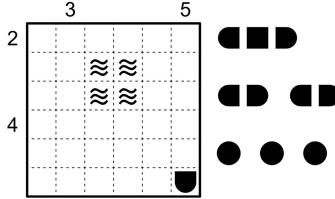
# 3 Round Trip (Loops)

Draw a loop through the centers of some cells so that each number outside the grid represents the number of cells used by the first line segment traveling within the corresponding row or column from the direction of the clue. Two perpendicular line segments may intersect each other, but not turn at their intersection or otherwise overlap.



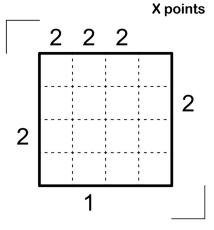
#### **4 Battleships (Object Placement)**

Place the given fleet of ships into the grid so that no two ships are touching, not even diagonally. Rotating ships is permitted. A clue outside the grid indicates the number of cells in the corresponding row or column that are occupied by ships. Cells with waves cannot be occupied by a ship. A given ship segment must be used as the part of a ship that its shape represents.



# 5 Skyscrapers (Numbers)

Place a number from 1 to N into each cell so that each row and each column contains every number from that range with no repeats, where N is the side length of the grid. A clue outside the grid represents how many cells in the corresponding row or column contain a larger number than all cells before it in that row or column from the direction of the clue.

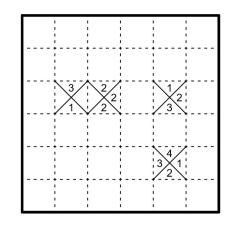


X points

#### 6 Mukkonn Enn

#### (**MII** – Invented by WPC 2017 Team)

Draw a non-intersecting loop through the centers of all cells. When the loop exits a clued cell from a side with a number, it must travel in a straight line for exactly the indicated number of cells (turning on the Nth cell, where N is the value of the clue). A number does not necessarily mean that the clue must be exited from its side.



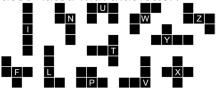
# 7 Nurikabe (Shading)

Shade some cells so that all shaded cells form one orthogonally connected area. Clues cannot be shaded, and every orthogonally connected area of unshaded cells contains exactly one clue, the value of which represents the size of the area. No 2x2 region may be entirely shaded.

	3		
		2	
4			
			1
		4	

# 8 Pentominous (Regions)

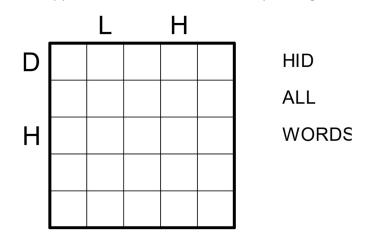
Divide the grid into regions of five orthogonally connected cells so that no two regions of the same shape share an edge, counting rotations and reflections as the same. Clued cells must belong to a region with the pentomino shape associated with that letter.



# W V W L

## 9 Hidden Words (Word)

Place the given words into the grid in straight lines of consecutive cells going from left to right or top to bottom. Words may not touch each other, not even diagonally. A letter outside the grid must appear somewhere in the corresponding row or column.



#### X points

X points

# 10 Letter Weights (Casual)

Write a number next to each letter (in each cell) so that the numbers corresponding to the letters in each given word have the given sum. Different letters must have different numbers. The range of numbers is given. {1~5}
RAT = 11
TEAR = 12
ATE = 8
THE = 9
HAT = 10

# Round 2: Miscellany for Magyarország

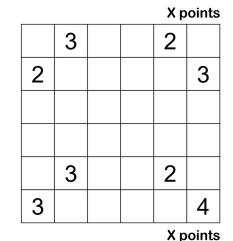
<u>Round Description:</u> This round contains puzzle genres that were <u>NOT</u> seen over the course of the Puzzle Ramayan online rounds but belong to the respective categories. Their respective categories are mentioned in brackets. In case of Made In India, we have also specified the original inventor.

#### 1 Cave (Classics)

Shade some cells so that the shaded cells are all connected orthogonally by other shaded cells to the edge of the grid, and the remaining unshaded cells form one orthogonally connected area. Clues cannot be shaded, and represent the total number of unshaded cells that can be seen in a straight line vertically or horizontally, including itself.

## 2 Shakashaka (Classics)

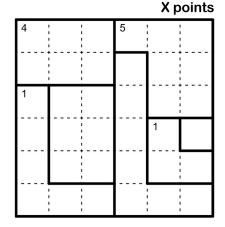
Shade a right triangle in some empty cells, each of which occupies exactly half the cell it's in. Each unshaded area must be rectangular in shape. A number in a cell represents how many of the (up to) four cells orthogonally adjacent to the clue contain triangles.



2 0 1 1

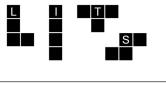
#### 3 Country Road (Loops)

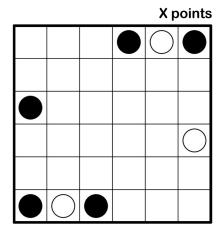
Draw a non-intersecting loop traveling orthogonally through the centers of some cells which passes through each region exactly once. A number in a region represents how many cells in the region are visited by the loop. Orthogonally adjacent cells across a region border may not both be unused.



#### 4 Statue Park (Object Placement)

Place each shape from the bank given outside the grid into the grid so that no two shapes share an edge and all unused cells form one orthogonally connected area. Rotating and reflecting shapes is allowed. Cells with black circles must be used by a shape, and cells with white circles must not be used by a shape.





#### 5 View (Numbers)

Place a number into some cells so that all cells with numbers form one orthogonally connected area. Numbers represent how many numberless cells are connected to them in a straight line horizontally or vertically. No two orthogonally adjacent cells may contain the same number.

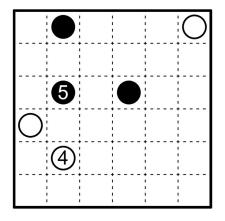
Note: Example taken from Puzz.link

× points							
		4	0	1			
	3		2				
1	0	1					

#### 6 Balance Loop

(MII – Invented by Prasanna Seshadri)

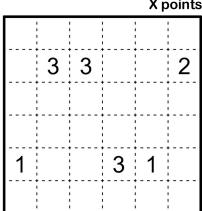
Draw a non-intersecting loop through the centers of some cells that passes through every circle. The straight line segments coming out of a white circle must have equal length, while the straight line segments coming out of a black circle must have different lengths. A clue in a circle represents the sum of the lengths of these two line segments.



X points

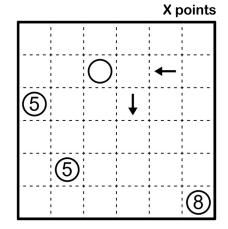
#### 7 Context (Shading)

Shade some cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. An unshaded clue indicates the number of orthogonally adjacent shaded cells. A shaded clue indicates the number of diagonally adjacent shaded cells.



#### 8 Sashigane (Regions)

Divide the grid into regions of orthogonally connected cells. Each region must be an L shape with a width of one cell. Arrows must lie at one end of an L and point toward the bend. Circles must lie at the bend of an L, and if one contains a number, the L it's inside must contain the indicated number of cells.

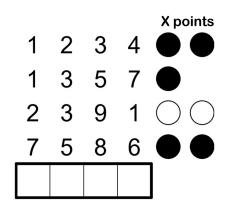


#### 9 Letter Pairs (Word)

Refer to Round 4 IB

#### 10 Mastermind (Casual)

Find the secret answer. Some guesses have been given. There are clues next to each guess. A black circle indicates a correct digit in the correct position. A white circle indicates a correct digit in the wrong position. Digits cannot repeat in the answer and guesses. In all cases, black circles take precedence over white circles.



#### X points

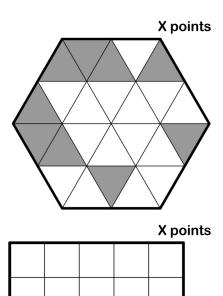
# **Round 3: Eager for Eger**

**Round Description:** This round has puzzles inspired by the individual rounds of the 2011 WPC held in Eger, Hungary. There is one puzzle genre taken from each round. To mimic the Sprint round, 4 puzzles are included of the same genre. The index page shows the round each genre is based on.

Note: Some examples are from the WPC 2011 IB.

## 1 Fifty-fifty

Paint some more triangles so that every equilateral hexagon that consists of six small triangles has three painted triangles and three white triangles.

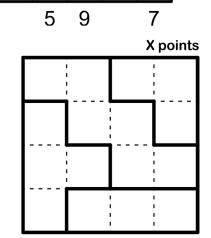


#### 2 Bank Notes

Locate five 1x3 banknotes in the grid, without overlapping each other. Banknotes have different values from 1 to 9 (1 to 5 in the example). Clues outside the grid indicate the sum of all banknotes in the corresponding direction.



Put some chess Knights into the figure so that there be an equal number of Knights in each row, column and in each area surrounded by thick lines. Knights may be occupying neighbouring squares, but they cannot attack (defend) each other. The number of Knights in a row is given next to the grid.



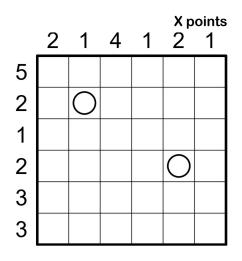
8

9

10

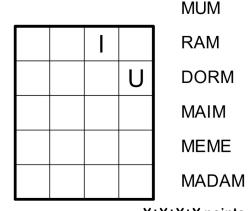
#### **4 Borderless Snake**

Find a rectangular Snake puzzle in the grid. In the puzzle area, draw a continuous line (the snake) of unknown length, travelling horizontally and vertically, never crossing or touching itself, not even diagonally. Numbers outside the grid in rows/columns covered by the puzzle indicate the number of cells in that row/column occupied by the snake. Numbers outside the grid that do not belong to the puzzle's rows or columns have no meaning.



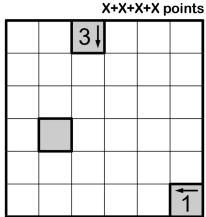
#### **5** Scrabble

Place all the listed words exactly once in the grid going across (left to right) or down (top to bottom). Each word intersects with at least one other word and all words are interconnected. No words of two or more letters can appear anywhere in the grid, except the ones listed. Some letters are given.



#### 6-9 Yajilin

Shade some cells and then draw a single closed loop (without intersections or crossings) through all remaining white cells. Shaded cells cannot share an edge with each other. Some cells are outlined and in gray and cannot be part of the loop, but aren't counted as 'shaded' either. Numbered arrows in such cells indicate the total number of shaded cells that exist in that direction in the grid.



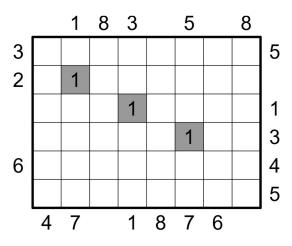
## 10 Divide and Conquer

Refer to Round 4 IB

X points

## 11 XI Snake

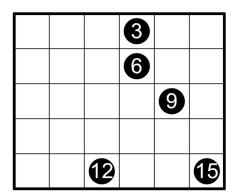
Find eleven (11) snakes in the grid, each of length 11 (three snakes of length 8 in the example). The snakes cannot touch each other or themselves, not even diagonally. Numbers outside the grid indicate the number in the first cell occupied by a snake seen from outside in that row/column. The head of each snake is given and marked with a 1.

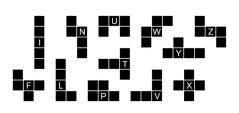


12 Hungarian Pentomino

105 points

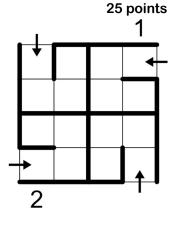
Place the given twelve pentomino pieces into the grid so that they do not touch each other, not even diagonally. Pieces may be rotated and reflected. Reading rows from left to right, from top to bottom, every third cell occupied by a piece is marked. Note: The example uses only the L, P and W Pentominoes.

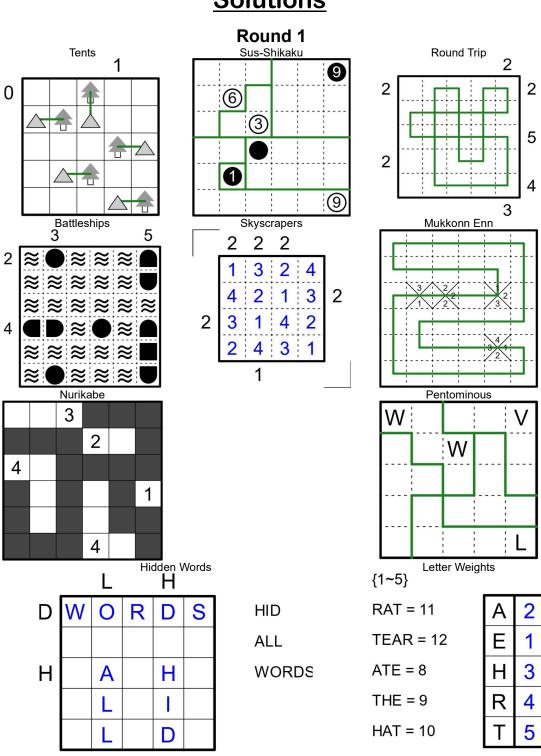




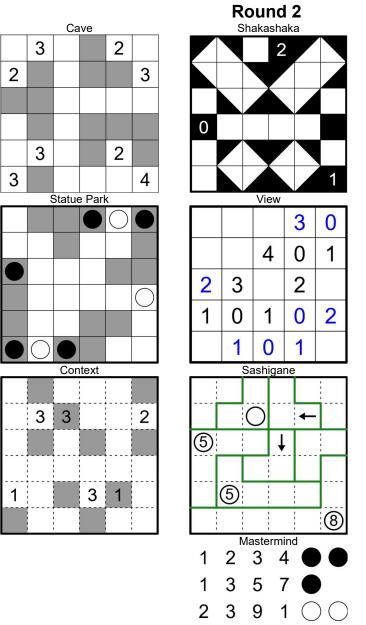
## 13 Sudoku Snail

Fill the grid with digits from 1 to 4 (1 to 2 in the example), so that each digit appears exactly once in every row, column and every 3x3 spiral. Digits should be placed orderly in the spirals, from the entrance to the centre. The numbers outside the grid indicate the first seen number from that direction. Some numbers inside the grid or empty squares ("-") may be given.





**Solutions** 



5 8

2 8

