
and


Episode-1
$26^{\text {th }}-29^{\text {th }}$ January 2018

## Classics

by
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Puzzle Ramayan rounds will also serve as qualifiers for Indian Puzzle Championship for year 2018. Please check http://logicmastersindia.com/PR/2018pr.asp for details.

Submission Page : http://logicmastersindia.com/PR/201801/
Discussion Thread : http://logicmastersindia.com/t/?tid=1585
F. A. Q. : http://logicmastersindia.com/t/?tid=381

Registration, if required : http://logicmastersindia.com/register.asp

## About this Episode

This episode has 22 Puzzles from the following puzzle types:

- 3* Numberlink
- $3^{*}$ Hitori
- $3^{*}$ Tents
- 3* Black and White
- 3* Loop Finder
- 3* Doors
- 2* Number Tri Link
- 2* Black and White and Grey


## How to participate?

- Understand the rules of different puzzles that will appear in this episode. This Instruction Booklet has rules for each puzzle.
- Download the password protected Puzzle booklet (will be uploaded before the test starts). The Puzzle booklet contains the actual Puzzles to be solved. It is password protected, so you won't be able to open it.
- Any time on or after $26^{\text {th }}$ January (but on or before $29^{\text {th }}$ January), login at the submission page using your LMI userid and password. Please check the submission page for exact timing.
- Click on "Start". At this time, password for pdf will be shown and timer will start.
- The puzzle booklet should be downloaded, printed and solved on paper.
- There will not be any interface / applet to solve the puzzles on web browser.
- Most of the puzzles are designed to be solved faster on paper.
- We advise you to have a printer accessible with enough paper.
- Outside solving help of any kind is not permitted. This includes but is not limited to: assistance of any kind from any other person; prepared notes, books, calculators, computers, or tools other than items explicitly permitted.
- You are allowed to use writing implements, eraser, blank paper (including commercial graph paper), ruler, scissors, and tape.

If you are participating at LMI for first time, you must check the F.A.Q. at http://logicmastersindia.com/t/?tid=381.

## About answer keys and Submission

- Each puzzle has some answer keys, as described in the instructions.
- After solving the puzzle, you need to submit the puzzle using the answer keys.
- You may submit the answer keys anytime during the test duration. You may consider submitting a puzzle as soon as you solve it.
- Answer keys are always to be entered from left to right or top to bottom
- Don't enter any separator unless specified in the answer key
- If one row and one column is marked, enter the row first and then the column
- If multiple rows are marked, enter from top to bottom for marked rows
- If multiple columns are marked, enter from left to right for marked columns
- If horizontal and vertical keys are needed, first enter the horizontal and then the vertical
- Uppercase or lower case of answer key does not matter
- Characters other than alphabets, numbers and comma will be removed while checking the answer


## Points Table and Scoring

Points typically indicate difficulty of the Puzzles and time required to solve them. You will get full points if you enter the correct answer key. While the organizers have made best efforts to match them, your personal experience and preference may differ.

| Numberlink | $1,3,4$ |
| :--- | :--- |
| Hitori | $2,5,6$ |
| Tents | $2,3,8$ |
| Black and White | $1,2,6$ |
| Loopfinder | $1,4,8$ |
| Doors | $3,5,15$ |
| Numbertrilink | 1,7 |
| Black and White and Grey | 3,10 |

This test uses instant grading where a solver can submit any individual Puzzle and receive confirmation that the solution is correct or not. Each incorrect submission reduces the puzzle's potential score. The first, second, third, and fourth incorrect submissions reduce the potential score to $90 \%, 70 \%, 40 \%$, and $0 \%$ respectively.

## Bonus and Ranking

If you submitted all Puzzles correctly, you can have bonus points 1 point per minute saved, computed up to seconds.

Ranking will be based on following rules in order:

1. Most total points
2. Earliest final submission time, up to seconds (ignoring incorrect submissions)

## About the Puzzle Booklet

The password protected Puzzle booklet will have 8 pages. We expect you to print and solve on paper, so you would need to have a printer accessible with enough paper.

## 1-3 Numberlink

Connect every pair of digits through horizontal/vertical paths such that no two paths touch or cross each other.


Answer Key: Enter length of largest line segment in marked row/column. Enter ' 0 ' if there are no line segments along the marked direction.

Example: 112, 531

## 4-6 Hitori

Shade cells such that digits do not repeat in rows and columns. Shaded cells cannot be adjacent to each other and all unshaded cells must be orthogonally connected.

$\sqrt{5}$| 5 | 7 | 5 | 4 | 7 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 5 | 6 | 2 | 3 | 4 | 7 |
| 4 | 1 | 6 | 4 | 2 | 6 |
| 3 | 1 | 1 | 7 | 5 | 6 |
| 2 | 2 | 4 | 5 | 3 | 1 |
| 2 | 6 | 6 | 5 | 1 | 4 |


| 5 | 7 | 5 | 4 | 7 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 6 | 2 | 3 | 4 | 7 |
| 4 | 1 | 6 | 4 | 2 | 6 |
| 3 | 1 | 1 | 7 | 5 | 6 |
| 2 | 2 | 4 | 5 | 3 | 1 |
| 2 | 6 | 6 | 5 | 1 | 4 |

Answer Key: Enter the length of continuous areas of shaded and unshaded cells in the marked rows/columns.

Example: 1311, 114, 213

## 7-9 Tents

Place one tent horizontally or vertically next to each tree. Tents do not touch each other, not even diagonally. The numbers outside the grid indicate the number of tents in that row or column.


3
1
Answer key: Enter the maximum continuous non-tent area for each row, from top to bottom. In case of double digit numbers, enter the right (unit) digit only.

Example: 262633

## 10-12 Black and White

Place either a black or a white circle in each empty cell, so that the grid is divided into two areas of black and white. All circles of same colour should be connected to each other, vertically or horizontally. No $2 \times 2$ group of cells can contain circles of a single colour.


Answer Key: For each marked row/column, enter the lengths of continuous white and black circle blocks - from left to right / top to bottom.

Example: 11211,132

## 13-15 Loop Finder

Draw a single continuous loop that visits all the dots. The loop has only horizontal and vertical line segments. The loop cannot intersect or overlap itself. Some line segments are already drawn.


Answer Key: Enter length of largest line segment in marked row/column.
Example: 442,315
16-18 Doors
$3+5+15$ points
Each cell in the grid represents a room. Some doors are open, while the others are closed. The number inside a room indicates the number of rooms that can be seen (through open doors) from it in all four directions, including itself. All rooms are interconnected by open doors. Draw the closed doors.


Answer Key: Enter number of vertical closed doors in the marked rows and number of horizontal closed doors in the marked columns.

Example: 11,21

## 19-20 Number Trilink

Each number appears three times. A single connected line (without branches) must connect each set of three numbers. All paths are horizontal or vertical, and no two paths touch or cross each other.


Answer Key: Enter length of largest line segment in marked row/column. Enter ' 0 ' if there are no line segments along the marked direction.
Example: 223, 334

## 21-22 Black and White and Grey

Place either a black or a white or a grey circle in each empty cell, so that the grid is divided into three areas of black, white and grey. All circles of same colour should be connected to each other, vertically or horizontally. No $2 \times 2$ group of cells can contain circles of a single colour.

Answer Key: For each marked row/column, enter the length of continuous letter blocks - from left to right / top to bottom.

Example: 112111,115


