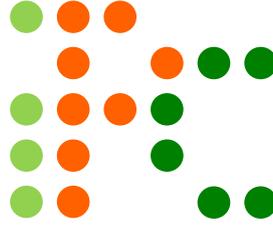


puzzle रामायण

and



Episode – 6
28th May – 2nd June 2021

Casual & Word
by
Anubhav Balodhi

Puzzle Ramayan rounds will also serve as qualifiers for Indian Puzzle Championship for year 2021. Please check <http://logicmastersindia.com/PR/2021pr.asp> for details.

Important Links

Submission Page : <http://logicmastersindia.com/live?contest=PR202106>

Discussion Thread : <http://logicmastersindia.com/t/?tid=2847>

F. A. Q. : <http://logicmastersindia.com/t/?tid=2773>

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

About this Episode

This episode has 22 Puzzles from the following puzzle types:

- 3* Anagrams
- 3* Knight Paths
- 3* Letter Weights
- 2* Nearest Exit
- 3* Word Search
- 3* Word Labyrinth
- 3* Word Nurikabe
- 2* Snaky Search

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 28th May (but on or before 2nd June), login at the submission page using your LMI user-id 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 contest duration is 90 minutes.**
- The puzzle booklet can be downloaded, printed and solved on paper.
- There will not be any interface / applet to solve the puzzles on web browser, but external Penpa links will be provided. The participant is still expected to come back and enter the answer key if solving using the links.
- 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=2773>.

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 the ones explicitly expected by the answer key will cause the red highlight to appear around the submission box.
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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.

Anagrams	1, 1, 2
Knight Paths	5, 3, 5
Letter Weights	2, 7, 11
Nearest Exit	1, 1
Word Search	3, 8, 4
Word Labyrinth	7, 8, 9
Word Nurikabe	5, 7, 6
Snaky Search	2, 2

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. A demonstration for this is shown below.

Original points

04 Araf	50 points	4A	Sum should be 10
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Potential points after 1 incorrect submission

04 Araf	45 / 50	4A	1234
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Potential points after 2 incorrect submissions

04 Araf	35 / 50	4A	23311
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Potential points after 3 incorrect submissions

04 Araf	20 / 50	4A	1111111111
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Potential points after 4 incorrect submissions

04 Araf	0 / 50	4A	541
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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)

Penpa Usage

This contest will also be solvable on the Penpa-Edit software. Below the rules of each puzzle will be a link to click to solve on the editor. The editor DOES NOT have a solution enabled so it will not check a solution. Participants must submit the answer key codes as they would with paper solving. It is therefore advisable to enter solution codes one at a time. To practice on the editor, we have given links for solving the example puzzles too.

Credits

- **Yosh (rand_yosh314)** & **Murat Can Tonta** for test solving the puzzles and providing invaluable feedback.
- The original creator **opt-pan** for penpa edit - <https://opt-pan.github.io/penpa-edit/>
- **Swaroop Guggilam** for his recent efforts in adding features to Penpa-edit - <https://swaroopg92.github.io/penpa-edit/>

About the Puzzle Booklet

The password protected Puzzle booklet will have 13 pages. We expect you to print and solve on paper, so you would need to have a printer accessible with enough paper.

Solutions and keys (including the key explanation) to examples are towards the end of the booklet in the Solutions section.

1-3 Anagrams

1 + 1 + 2 points

Pair up words from the left and right side of the grid such that the words in each pair are anagrams of each other. Write the corresponding word from the list on the right into the boxes next to the word on the left.

[The puzzles in the contest will contain 6, 7 and 8 words respectively. This example contains 3.]

Penpa for example: <https://git.io/JGT9a>

A

P U N	<input type="text"/>	<input type="text"/>	<input type="text"/>		P U N
W A R D	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	D E A R
R E A D	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	D R A W

4-6 Knight Paths

5 + 3 + 5 points

In how many ways can the given word be found in the grid as a knight path? A knight path is one where consecutive letters are a knight-move apart. (A knight-move is two spaces in one orthogonal direction, followed by one space in a perpendicular direction to the first.)

A cell may be revisited along a path.

[The puzzles in the contest will be of sizes 6x6, 5x5 and 7x7. This example is 3x4.]

Penpa for example: <https://git.io/JGkBV>

P	Z	Z	E
E	L	U	Z
Z	U	L	Z

PUZZLE

7-9 Letter Weights

2 + 7 + 11 points

Write a number under 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 allowed numbers is given at the top left.

The extra row below the answer row is for rough work if needed.

[There is no size information about these puzzles.]

Penpa for example: <https://git.io/JGTpV>

1 ~ 5

$$\begin{aligned} C A B &= 11 \\ B E E &= 7 \\ A B E &= 8 \end{aligned}$$

A	B	C	D	E

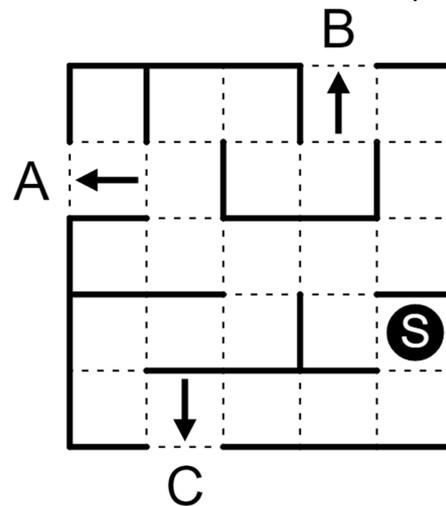
10-11 Nearest Exit

1 + 1 points

Identify the closest/nearest exit from the starting point black circle marked by the letter 'S'.

[The puzzles in the contest will be of sizes 13x13 and 13x13. This example is 5x5.]

Penpa for example: <https://git.io/JGks1>



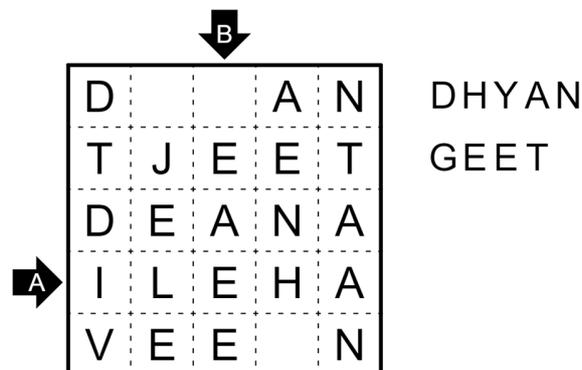
12-14 Word Search

3 + 8 + 4 points

Find all the words from the list in the grid of letters. Each words reads in a straight line in any direction: horizontally, vertically or diagonally. Some cells have been left blank and can be filled with exactly one letter each to help find all the words.

[The puzzles in the contest will be of sizes 10x10, 12x12 and 12x12. This example is 5x5.]

Penpa for example: <https://git.io/JGk8L>



15-17 Word Labyrinth

7 + 8 + 9 points

Write all the given words into the grid. Each word must be readable following the spiral inwards and all letters of a word must appear in consecutive cells. Different words must be separated by at least one empty cell. Letters cannot appear more than once in any row or column.

Some letters are already given.

[The puzzles in the contest will be of sizes 8x8, 8x8 and 9x9. This example is 5x5.]

Penpa for example: <https://git.io/JGknc>

18-20 Word Nurikabe

5 + 7 + 6 points

Place the given words in the grid as 'islands', so that the words are readable in orthogonally (horizontally and vertically) connected cells. It may be possible to trace the word in multiple ways within an island but there must be at least one way to do so. The individual letters will resolve uniquely for answer key purposes. If a word appears multiple times in the list, it must appear the same number of times in the solved grid.

Different words can't touch each other orthogonally (horizontally and vertically). The remaining cells must form a single connected shape and can't have any 2x2 areas anywhere. Each word has exactly one letter given in the grid.

The words are underlined to distinguish between them when they're listed in the same row, to save space.

[The puzzles in the contest will be of sizes 8x8, 9x9 and 9x9. This example is 5x5.]

Penpa for example: <https://git.io/JGkC8>

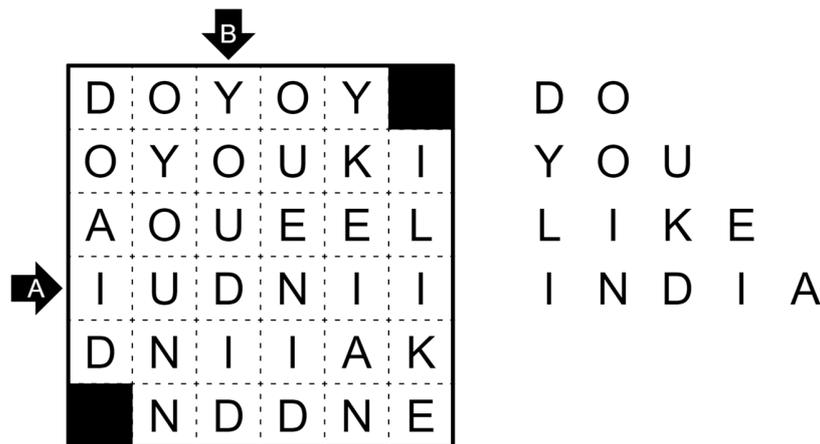
21-22 Snaky Search

2 + 2 points

Find the given list of words in the grid. Each word is in the form of a Snake. A snake can NOT touch/cross itself or other Snakes even diagonally. The letters in the Snake must follow the same order as the word. Certain black cells can be given which can NOT be visited by Snakes. Ignore any punctuations, numbers or special characters in the words.

[The puzzles in the contest will be of sizes 10x10 and 8x8. This example is 6x6.]

Penpa for example: <https://git.io/JGk4p>



Solutions

For this round, all answer keys will NOT be the same for all puzzles.

The keys are given section by section.

Anagrams – Enter the letters along the marked directions.

Knight Paths – Enter the total count.

Letter Weights – Enter the values of the letters in order as per the table at the bottom of the puzzle, from left to right. Enter unit's digit for two-digit values.

Nearest Exit – Enter the letter corresponding to the nearest exit.

Word Search & Snaky Search – For each marked row/column enter the letters that are part of the words found from the list from left to right/top to bottom.

Word Labyrinth & Word Nurikabe - For each marked row/column, enter the letters appearing in it from left to right/top to bottom. Ignore blank/shaded cells.

Anagrams

P U N P U N
 W A R D D R A W
 R E A D D R A W

P U N P U N
D R A W D E A R
D E A R D R A W

Key: PRA

Letter Weights

1~5
 C A B = 11
 B E E = 7
 A B E = 8

A	B	C	D	E
2	5	4	3	1

Key: 25431

Word Search

D H Y A N D H Y A N
T J E E T G E E T
D E A N A
I L E H A
V E E G N

Key: E, YE

Word Nurikabe

A	A	G	E
A			
	B	D	
	A	B	
			C

A A A
 B A B
 C D
 E G

Key: AB, EC

Knight Paths

Key: 5

Nearest Exit

Key: C

Word Labyrinth

T R I J E D A N
C D D V A
I E V T R I
N R I T A C E T I R I
A D E J

Key: NRITA, RIE

Snaky Search

D O Y O Y D O
O Y O U K I Y O U
A O U E E L L I K E
I U D N I I I N D I A
D N I I A K
N D D N E

Key: II, I