



A collage of various analytical chemistry and data visualization elements. It includes a lightbulb with a brain-like filament, a 3D pie chart, a flowchart with arrows, laboratory glassware like test tubes and flasks, and a smartphone displaying data. The background features a dark area with floating black circles and diamonds.

# EPEA516 ANALYTICAL SKILLS II

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# Learning Outcomes



After this lecture, you will be able to

- develop understanding about the basics of seating/placing arrangements,
- analyze different types of seating/placing arrangements,
- solve various problems relating to seating/placing arrangements.

# Puzzle Test

- Number of Items
  - Persons/Things
- Analyze - Information

# Puzzle Test

- Seating/Placing Arrangements
- Comparison Type Questions
- Sequential Order of Things
- Family

# Seating/Placing Arrangements

- Clues/Hints
- Linear/Circular
- Proper Sequence

# Problem 1

## Problem 2

- J, K, L, M, N, O, and P are sitting on a bench and all of them are facing towards east. L is on the immediate right of M. K is at an extreme end and has E as his neighbour. P is between N and O. M is sitting third from the south end. Immediately between which of the following pairs of people M is sitting?
  - (1) JL      (2) JO      (3) LN      (4) LO      (5) OP

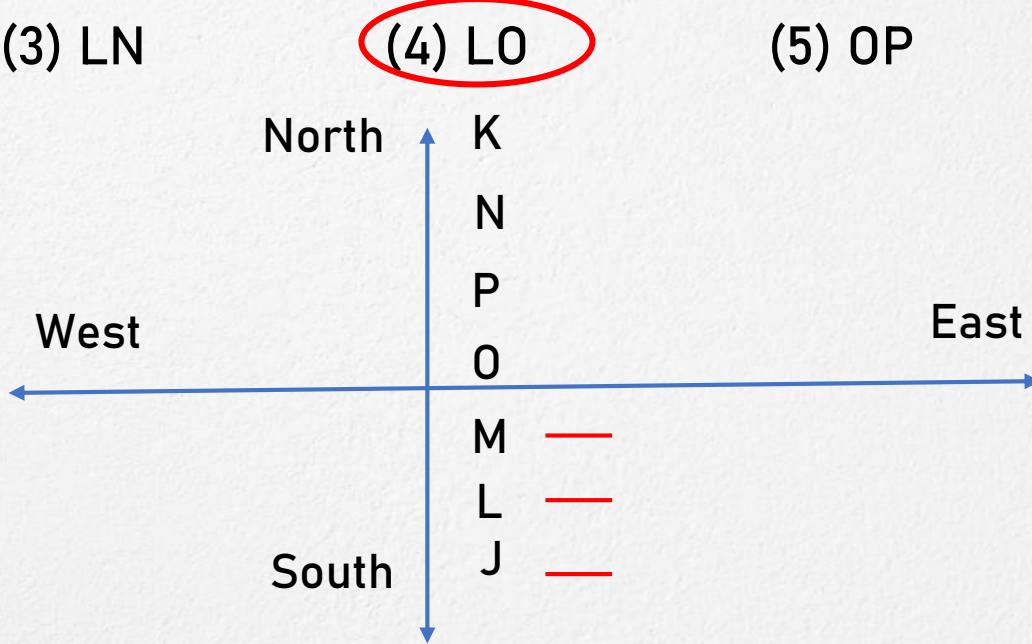
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- (1) JL
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- (3) LN

- (4) LO

- (5) OP



# Problem 3

## Problem 3

- In the Olympic games, the flags of six nations were flown on the masts in the following way: The flag of Russia was to the left of Indian flag and to the right of the flag of France. The flag of Australia was to the right of Indian flag but was to the left of the flag of Japan, which was to the left of China. Find the two flags which are in the centre.

- (1) Russia and Australia (2) Japan and Australia
  - (3) India and Australia (4) Russia and India



## Problem 4

- Eleven students - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11 are sitting in the first row of the class facing the teacher. 4 who is the immediate left of 6 is second to the right of 3. 1 is the second to the right of 5, who is at one of the ends. 10 is the immediate neighbour right of 1 and left of 2 and third to the left of 7. 8 is to the immediate left of 4 and third to the right of 9. Who is sitting in the middle of the row?
    - (A) 2
    - (B) 3
    - (c) 7
    - (d) 9

# Problem 4

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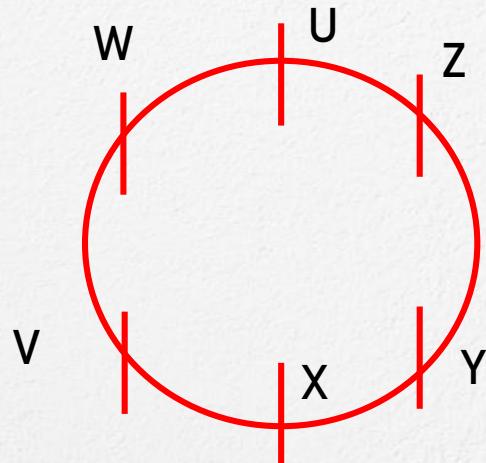
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- (A) 2
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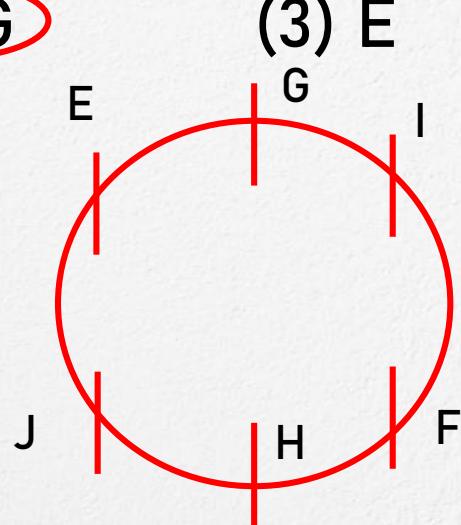
# Problem 5

- Six friends U, V, W, X, Y, and Z are sitting in a closed circle facing the centre. U is facing X. W is between U and V. Z is between U and Y. Who is to the immediate left of V?
- (1) W      (2) U      (3) Z      (4) X



# Problem 6

- Six students – E, F, G, H, I, and J are seated in a circle facing the centre. H is between F and J. E is second to the left of H and second to the right of I.
- Who among the following is facing H?
- (1) I      (2) G      (3) E      (4) J



## Problem 7

- In a shop, the items were arranged in a shelf consisting of six rows. Biscuits are arranged above the boxes of chocolates but below the rows of boxes of chips, cakes are at the bottom and the boxes of peppermints are below the chocolates. The topmost row had the display of jam boxes. Where exactly are the boxes of peppermints from the top?
  - (a) 5<sup>th</sup>
  - (b) 2<sup>nd</sup>
  - (c) 4<sup>th</sup>
  - (d) 3<sup>rd</sup>
  - (e) 1<sup>st</sup>

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- (a) 5<sup>th</sup>

- (b) 2<sup>nd</sup>

- (c) 4<sup>th</sup>

- (d) 3<sup>rd</sup>

- (e) 1<sup>st</sup>

Jam

Chips

Biscuits

Chocolates

Peppermints

Cakes

# Problem 8

- Radha, Sheela, Mahima, and Sita are sitting around a table.  
Radha is sitting on the right side of Sheela. Mahima is in the left of Sita. Which of the following pair is sitting opposite/infront of each other?

- (1) Mahima & Radha
  - (2) Sheela & Sita
  - (3) Radha & Sita
  - (4) Radha & Sheela

**Sheela**

Radha

Sita

Mahima

# Problem 9

- Nalini, her brother, her daughter, and her son are tennis players and are playing game of doubles. Their positions on the court are as follows:
  - Nalini's brother is directly across the net from her daughter. Nalini's daughter is diagonally across the net from the worst players sibling. The best and the worst players are on the same side of the net. Who is the best player?
    - (1) Nalini's brother
    - (2) Nalini's daughter
    - (3) Nalini's son
    - (4) Nalini

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- (1) Nalini's brother
- (2) Nalini's daughter
- (3) Nalini's son
- (4) Nalini



# Conclusion

- Puzzle Test
  - Number of Items (Persons/Things)
  - Analyze - Information
- Seating/Placing Arrangements
  - Clues/Hints
  - Linear/Circular
  - Proper Sequence

# Summary

- Puzzle Test
  - Seating/Placing Arrangements

That's all for now...