



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 analogy,
- analyze different types of analogy,
- solve various problems relating to analogy.

Analogy

- Overall Knowledge
- Power of Reasoning
- Ability - Think Concisely & Accurately
- Corresponding Items
- Correspondence
- Particular Relationship - Given Relationship

Types of Analogy

- Gender
 - Bull : Cow
 - Dog : Bitch
 - Horse : Mare
 - Cock : Hen

Types of Analogy

- Animal - Young One
 - Dog : Puppy
 - Bear : Cub
 - Hen : Chick
 - Cat : Kitten

Types of Analogy

- Individual - Living Place
 - Lion : Den
 - Bee : Hive
 - Bird : Nest
 - Cow : Byre/Pen

Types of Analogy

- Country - Capital
 - Afghanistan : Kabul
 - Australia : Canberra
 - Canada : Ottawa
 - Japan : Tokyo

Types of Analogy

- State - Capital
 - Maharashtra : Mumbai
 - Karnataka : Bengaluru
 - Assam : Dispur
 - Bihar : Patna

Types of Analogy

- Country and currency
 - India : Rupee
 - Bangladesh : Taka
 - Burma : Kyat

Types of Analogy

- Instrument - Measurement
 - Barometer : Pressure
 - Thermometer : Temperature
 - Anemometer : Wind
 - Odometer : Speed

Types of Analogy

- Quantity - Unit
 - Length : Metre
 - Mass : Kilogram
 - Time : Second
 - Force : Newton

Types of Analogy

- Animal - Movement
 - Duck : Waddle
 - Bird : Fly
 - Cock : Strut
 - Eagle : Swoop

Types of Analogy

- Animal/Thing - Sound

- Lion : Roar
- Donkey : Bray
- Frog : Croak
- Goat : Bleat

Types of Analogy

- Individual/Thing - Class
 - Lizard : Reptile
 - Man : Mammal
 - Butterfly : Insect
 - Whale : Mammal

Types of Analogy

- Individuals - Group
 - Sailors : Crew
 - Cattle : Herd
 - Sheep : Flock
 - Flowers : Bouquet

Problem

- Rat : Cat :: Worm : ?
- Fishing
- Earth
- Bird
- Silk
- Second feeds on the first.

Problem

- Walking : Running :: Smiling : ?
- Feeling
- Laughing
- Face
- Weeping
- Second is the more intense from the first.

Problem

- Safe : Secure :: Protect : ?
- Conserve
- Sure
- Guard
- Lock
- The words in each pair are synonyms of each other.

Problem

- Chair : Furniture :: Shoe : ?
- Socks
- **Footwear**
- Leather
- Cobbler
- Second denotes the class to which the first belongs.

Problem

- Typist : Typewriter :: Writer : ?
- Book
- Paper
- Script
- Pen
- Second is the device used by the first.

Problem

- Apparel is related to cloth in the same way as Footwear is related to?
- Material
- Leather
- Cobbler
- Shoes
- First is made from the second.

Problem

- Which of the following is related to Melody in the same way as Delicious is related to Taste?
- Voice
- Speak
- Tongue
- Highness
- Delicious represents good taste. Similarly, Melody describes pleasant voice.

Problem

- Waves is related to Air in the same way as Ripples is related to ?
- Wind
- Water
- Storm
- Smoke
- Waves travel in air, Ripples travel in water.

Problem

- Young is related to old in the same way as Wide is related to?
- Insufficient
- Big
- **Narrow**
- Long
- The words in each pair are antonyms of each other.

Problem

- Heart is related to Blood in the same way as Lung is related to ?
- Air
- Oxygen
- Chest
- Respiration
- First is the prime organ carrying out circulation of the second in the human body.

Problem

- Run : Race
- Enjoy : Journey
- Lecture : Study
- **Study : Book**
- Party : Dance
- One runs a race similarly Studies a book.

Problem

- Incubator : Infant
- Archives : Document
- Green House : Plant
- Bullet : Revolver
- House : Rooms
- Second is provided the desired conditions and environment in the first.

Problem

- Dinosaur: Dragon ::
- Evolution : Revelation
- Gorilla : Soldier
- Snow : Ice
- Primeval : Medieval
- Dinosaur and Dragon fall under the same category as snow and ice.

Problem

- Telephone : Ring :: _____ : _____
- Door : Knock
- Gate : Open
- Door : Wood
- Lock : Key
- Ring is related with telephone and Knock is related to door.

Problem

• $6 : 222 :: 7 : ?$

• 210

• 336

• 343

• 350

• $a : (a^3 + a)$

Problem

- Given set : (3, 18, 36)
- (2, 10, 16)
- (4, 24 48) 
- (6, 42, 48)
- (12, 72, 96)
- (3, $3 \times 6 = 18$, $18 \times 2 = 36$)
- (4, $4 \times 6 = 24$, $24 \times 2 = 48$)

Conclusion

- Analogy
 - Corresponding Items
 - Correspondence
 - Particular Relationship – Given Relationship
 - Gender – Name, Animal – Young One,
 - Individual – Living place, Country – capital,
 - State – capital, Country – currency,
 - Instrument – Measurement, Quantity – Unit,
 - Animal – movement, Animal/Thing – Sound,
 - Individual/Thing – class, and Individuals – group.

Summary

- Verbal Reasoning
 - Analogy

That's all for now...