

# Physical Properties of Alkaline Earth Metals

Nurture: Course on Inorganic Chemistry for Class 11

or The pair(s) of reagent that yield paramagnetic species is/are

~~(a)~~ Na and excess of  $\text{NH}_3$

2009 (Advance)

[ (b) Be and excess of  $\text{NH}_3$   
(c) Mg and excess of  $\text{NH}_3$   
(d) all ]

26

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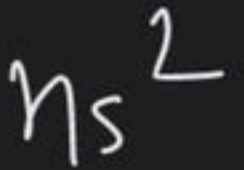
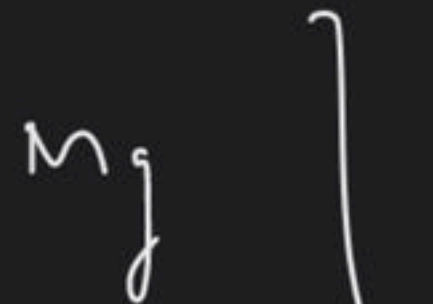
}

The main oxides formed on combustion of Li, Na and K in excess of air are respectively

- ~~(a)  $\text{Li}_2\text{O}$ ,  $\text{Na}_2\text{O}$  and  $\text{K}_2\text{O}$~~  (b)  $\text{Li}_2\text{O}$ ,  $\text{Na}_2\text{O}$ ,  $\text{K}_2\text{O}$   
 (c)  $\text{Li}_2\text{O}_2$ ,  $\text{Na}_2\text{O}_2$ ,  $\text{K}_2\text{O}_2$  (d)  $\text{Li}_2\text{O}$ ,  $\text{Na}_2\text{O}_2$ ,  $\text{K}_2\text{O}_2$

(2016)

M | HVC  
↓

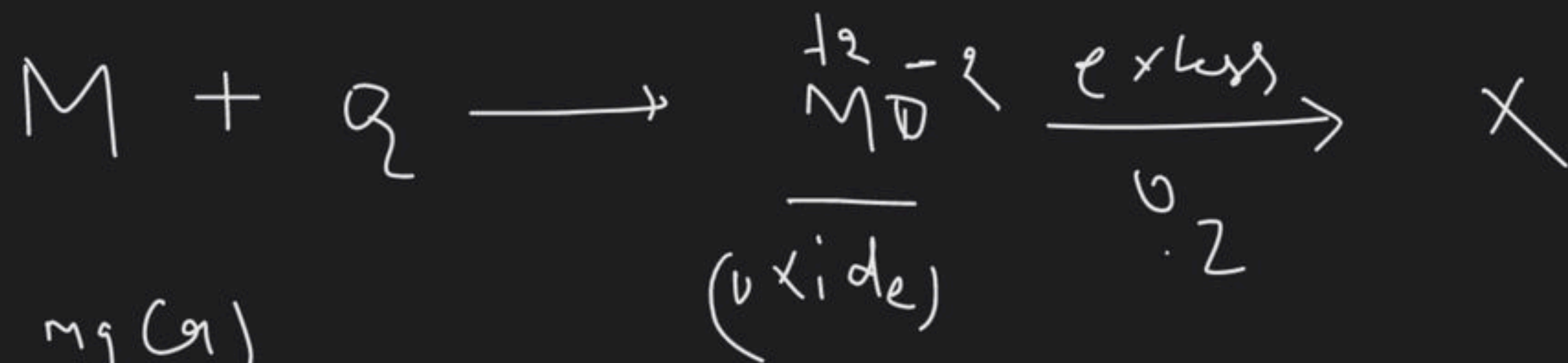


\*  $\text{Ra} = \text{radioactive}$

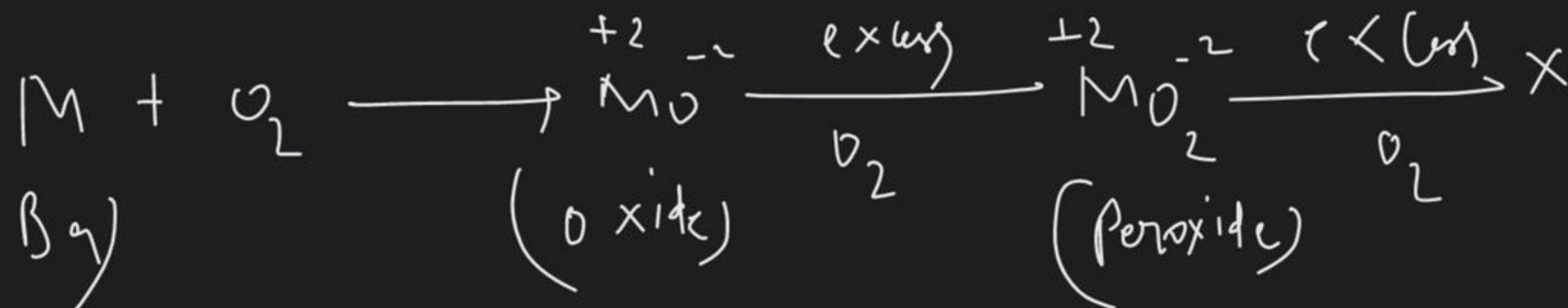
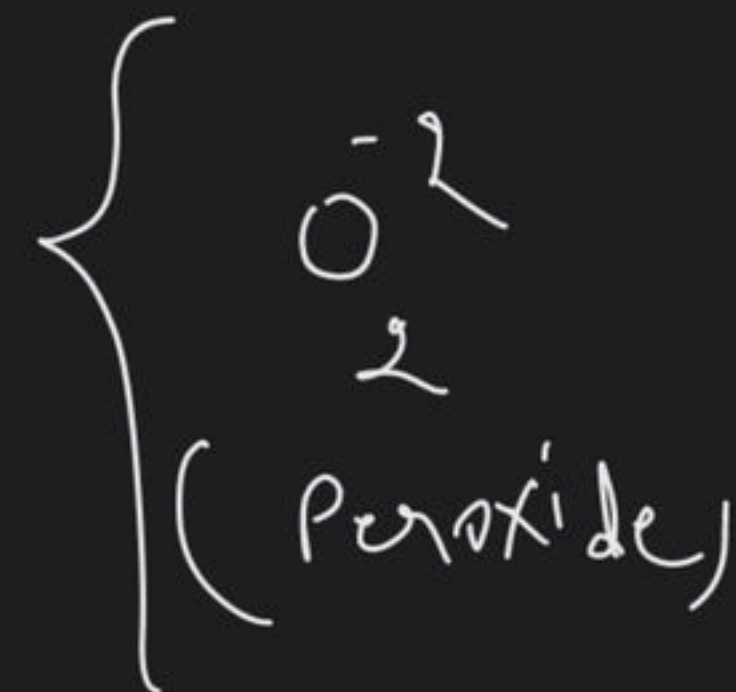
Note  $\rightarrow$  Be is not an alkali earth  
metal



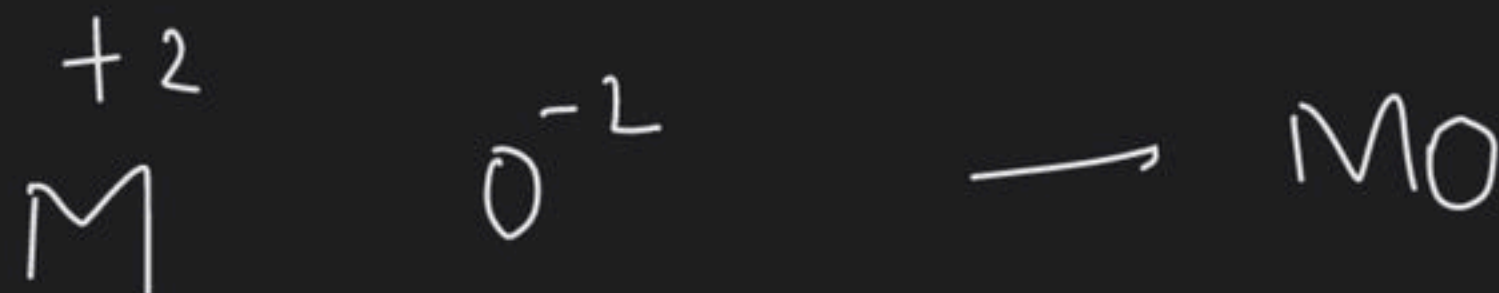
# Reaction with $O_2$



(Be, Mg, Ca)



(Sr, Ba)



Ques

Which of the following compound have  $-O-O-$  bond  
(peroxide)

(a)



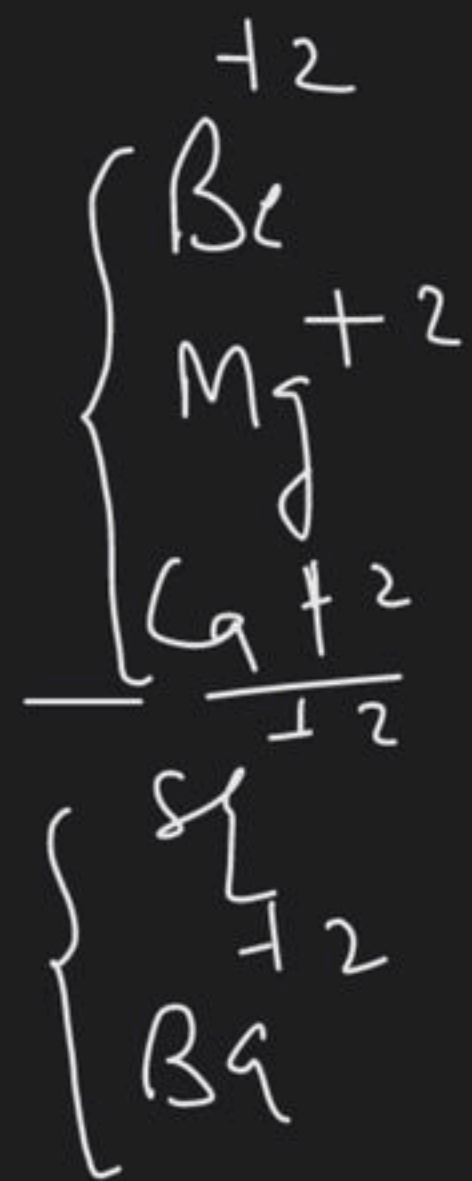
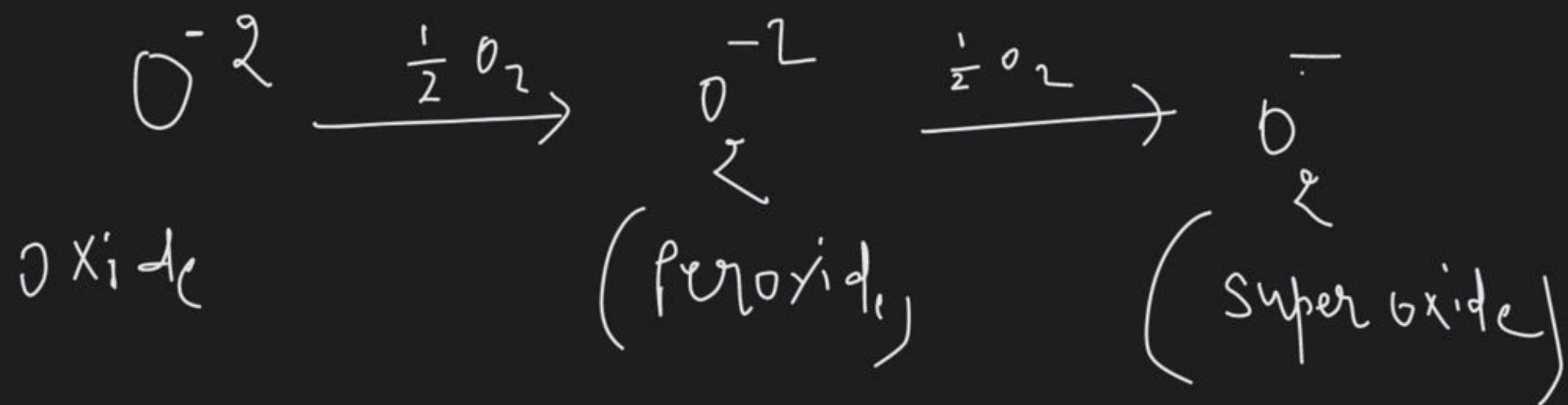
(b)



(c)



~~(d)~~ all



$$\text{Charge density} = \frac{\text{Charge}}{\text{Size}}$$

Charge density ↓

Size ↑



Reaction

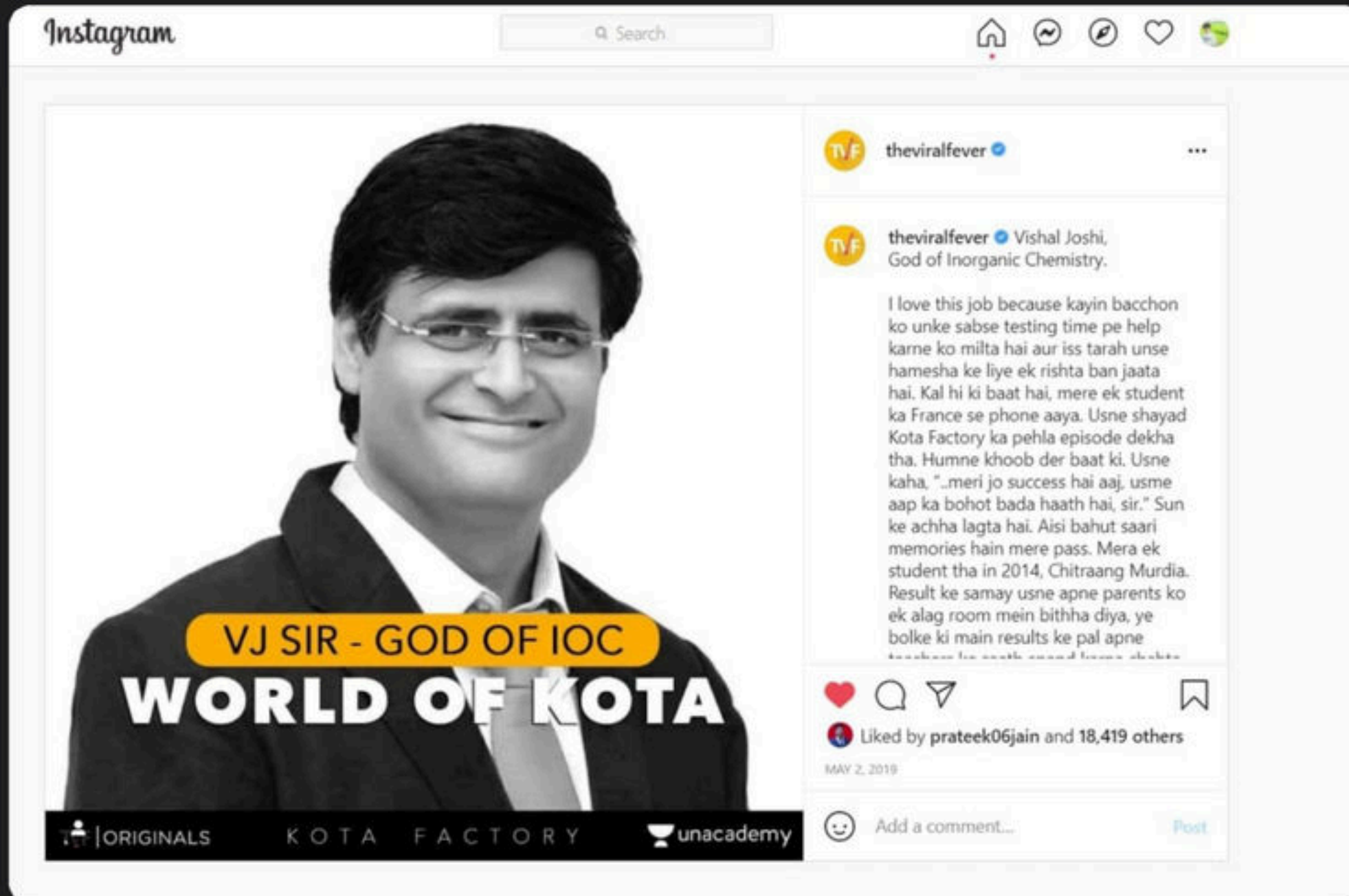




## Question

from Viswesh Shukla

### VJ Sir GOD OF IOC



10 page

7 PM

5.30 - 6.30 [S-Block]

4 loc. ← 7 PM - 8 PM [Q.N]

2 June — Periodic

2023

Nurture

from 2<sup>nd</sup> June

5.30 - 7 PM

for one year



① Size

Bc

mg

Cg

SA

Bg

down the group size ↑

① I.E  $\downarrow$  Be) Mg > Ca > Sr > Ba

② Electropositive ch.

Be < Mg < Ca < Sr < Ba

③ Metallic ch.

Be < Mg < Ca < Sr < Ba