

21. Which one of the following carbonate is water insoluble?

- A.  $\text{Na}_2\text{CO}_3$       B.  $\text{K}_2\text{CO}_3$   
C.  $(\text{NH}_4)_2\text{CO}_3$       D.  $\text{CaCO}_3$

**Answer:** Option D

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22. The deliquescence is a property in which a solid

- A. Absorbs moisture and remains solid  
C. Loses water of crystallization      B. Absorbs moisture and turns to liquid form  
D. Increases the number of water of crystallization

**Answer:** Option B

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23. In diaphragm cell hydrogen is discharged by the reduction of

- A. Water      B.  $\text{HCl}$   
C.  $\text{Na}^+$       D.  $\text{NaCl}$

**Answer:** Option A

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24. In diaphragm cell level of brine in anode compartment is kept slightly higher which prevents

- A. Hydroxide ions to reach anode      B. Chlorine gas to mix  
C. Cathode to decay      D. All of the above

**Answer:** Option A

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25. Gypsum is applied to the soil as a source of

- A. Ca and P      B. S and P  
C. Ca and S      D. we could not apply

**Answer:** Option C

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26. Alkali and alkaline earth metals impart colours when heated over burner. It is due to
- A. Smaller electronegativity of alkali metals      B. Smaller ionic radius of these metals  
C. De-excitation of electrons from higher energy levels to low energy level      D. Excitation of electrons from low energy levels to higher energy levels

**Answer:** Option C

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27. Which one of the following alkali metals forms only normal oxide when it reacts with O<sub>2</sub>?
- A. Lithium      B. Sodium  
C. Potassium      D. Rubidium

**Answer:** Option A

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28. First ionization potential of alkaline earth metal is greater than alkali metals because
- A. They are more reactive      B. They have greater atomic radii  
C. They have smaller atomic sizes      D. All

**Answer:** Option C

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29. Which one of the following pairs shown diagonal relationship in the periodic table?
- A. Sodium and Lithium      B. Lithium and magnesium  
C. Lithium and beryllium      D. Boron and Beryllium

**Answer:** Option B

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30. NaOH is named as caustic soda because
- A. It corrodes the organic tissues      B. It is used in soda water

C. It reacts with chlorine gas

D. It reacts with fats to form soap

**Answer:** Option A