

## DPP

DAILY PRACTICE PROBLEMS

**CLASS : XI<sup>th</sup>**

**DATE :**

**SUBJECT : CHEMISTRY**

**DPP No. :2**

### Topic :- THE S-BLOCK ELEMENTS

- In which of the following, sodium carbonate is not used?
  - In soap making
  - In paper making
  - In tyre making
  - In baking of bread
- Alkaline earth metals are not found free in nature because of their:
  - Low melting point
  - High boiling point
  - Thermal instability
  - Great chemical activity
- The principal products obtained on heating iodine with concentrated caustic soda solution are:
  - NaOI + NaI
  - NaIO<sub>3</sub> + NaI
  - NaOI + NaIO<sub>3</sub> + NaI
  - NaIO<sub>4</sub> + NaI
- NaOCl is used as a bleaching agent and sterilising agent. It can be synthesised by the action of
  - NaCl with H<sub>2</sub>O
  - NH<sub>4</sub>Cl with NaOH
  - Cl<sub>2</sub> with cold and dilute NaOH
  - Cl<sub>2</sub> with hot and concentrated NaOH
- The compound insoluble in acetic acid is:
  - Calcium oxide
  - Calcium carbonate
  - Calcium hydroxide
  - Calcium oxalate
- Sodium carbonate contains:
  - 5 molecules of crystalline water
  - 10 molecules of crystalline water
  - 3 molecules of crystalline water
  - No molecule of crystalline water
- Sodium carbonate reacts with SO<sub>2</sub> in aqueous solution to give:
  - NaHCO<sub>3</sub>
  - NaHSO<sub>3</sub>
  - Na<sub>2</sub>SO<sub>3</sub>
  - NaHSO<sub>4</sub>
- A sudden large jump between the values of second and third ionization energies of an element would be associated with the electronic configuration:
  - 1s<sup>2</sup>, 2s<sup>2</sup>2p<sup>6</sup>, 3s<sup>1</sup>
  - 1s<sup>2</sup>, 2s<sup>2</sup>2p<sup>6</sup>, 3s<sup>2</sup>3p<sup>1</sup>
  - 1s<sup>2</sup>, 2s<sup>2</sup>2p<sup>6</sup>, 3s<sup>2</sup>3p<sup>2</sup>
  - 1s<sup>2</sup>, 2s<sup>2</sup>2p<sup>6</sup>, 3s<sup>2</sup>
- Which of the following reacts with water with high rate?
  - Li
  - Rb
  - Na
  - K
- The substance used as pigment in paint is
  - Borax
  - Alumina
  - Lithopone
  - None of these
- Acidic solution of S<sub>2</sub>O<sub>3</sub><sup>2-</sup> is converted to ..... in presence of I<sub>2</sub>
  - S<sub>4</sub>O<sub>6</sub><sup>2-</sup> + I<sup>-</sup>
  - SO<sub>4</sub><sup>2-</sup> + I<sup>-</sup>
  - SO<sub>3</sub> + I<sup>-</sup>
  - S<sub>4</sub>O<sub>6</sub><sup>2-</sup> + I<sub>3</sub><sup>-</sup>

12. Soda lime is  
a) NaOH                                      b) NaOH and CaO                                      c) CaO                                      d) Na<sub>2</sub>CO<sub>3</sub>
13. Lithopone is a mixture of:  
a) Barium sulphate and zinc sulphide  
b) Barium sulphide and zinc sulphide  
c) Calcium sulphate and zinc sulphide  
d) Calcium sulphide and zinc sulphide
14. Alkali metal chloride soluble in pyridine is:  
a) LiCl                                      b) CsCl                                      c) NaCl                                      d) KCl
15. The characteristic colours given by calcium, strontium and barium in the flame test are respectively  
a) Brick red, apple green, crimson                                      b) Crimson, apple green, brick red  
c) Crimson, brick red, apple green                                      d) Brick red, crimson, apple green
16. Sodium thiosulphate is formed when:  
a) NaOH is neutralised by H<sub>2</sub>SO<sub>4</sub>  
b) Na<sub>2</sub>S is boiled with S  
c) Na<sub>2</sub>SO<sub>3</sub> is boiled with Na<sub>2</sub>S and I<sub>2</sub>  
d) Na<sub>2</sub>SO<sub>4</sub> is boiled with Na<sub>2</sub>S
17. In the following reaction,  
NaOH + S → A + Na<sub>2</sub>S + H<sub>2</sub>O ; A is  
a) Na<sub>2</sub>SO<sub>4</sub>                                      b) Na<sub>2</sub>SO<sub>3</sub>                                      c) Na<sub>2</sub>S                                      d) Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>
18. Sodium peroxide which is a yellow solid, when exposed to air becomes white due to the formation of  
a) H<sub>2</sub>O<sub>2</sub>                                      b) Na<sub>2</sub>O                                      c) Na<sub>2</sub>O and O<sub>3</sub>                                      d) NaOH and Na<sub>2</sub>CO<sub>3</sub>
19. Sedimentary rocks laid down under water mainly contain:  
a) CaO                                      b) Ca(OH)<sub>2</sub>                                      c) CaCO<sub>3</sub>                                      d) CaSO<sub>4</sub>
20. Potash alum is used in purification of water because:  
a) It kills the micro-organisms  
b) It precipitates the colloidal matter  
c) It removes the hardness of water  
d) It catalyses the removal of impurities