



# CHEMISTRY

## BOOKS - NTA MOCK TESTS

### THE S-BLOCK ELEMENTS TEST

#### Multiple Choice Question

1. In curring cement plasters water is sprinkled from time to time This helps in

A. keep it cool

B. developing interlocking needle-like crystals of hydrated silicates

C. hydrating sand and gravel mixed with cement

D. converting sand into silicic acid

**Answer: B**



[View Text Solution](#)

2.  $KO_2$  (potassium super oxide) is used in oxygen cylinders in space and submarines because it.

A. Eliminates nitrogen

B. Produce moisture

C. Absorbs  $CO_2$

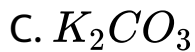
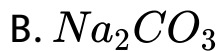
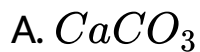
D. Produce ozone

**Answer: C**



**View Text Solution**

3. The compound A on heating gives a colourless gas and a residue that is dissolved in water to obtain B. Excess of  $CO_2$  is bubbled through aqueous solution of B, C is formed which is recovered in the solid form. Solid C on gentle heating gives back A. The compound is

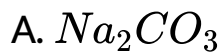


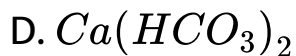
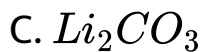
**Answer: A**



**View Text Solution**

**4.  $CO_2$  cannot be obtained by heating :**

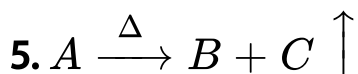




**Answer: A**



**View Text Solution**



Both A and B releases same gas D and forms  $Na_2ZnO_2$ , when they are treated with zinc metal in the presence sodium hydroxide. Identify the incorrect statement for the above reactions.

A. D given white dense fumes with concentrated HCl.

B. C is paramagnetic .

C. The reaction  $A \xrightarrow{\Delta} B + C$  is not a redox reaction.

D. D is used to make fertilizers.

**Answer: C**



[View Text Solution](#)

6.  $CO_2$  gas along with solid (Y) is obtained when sodium salt (X) is heated. (X) is again obtained when

$CO_2$  gas is passed into aqueous solution of (Y). (X) and (Y) are

- A.  $Na_2CO_3, Na_2O$
- B.  $Na_2CO_3, NaOH$
- C.  $NaHCO_3, Na_2CO_3$
- D.  $Na_2CO_3, NaHCO_3$

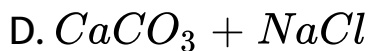
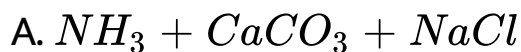
**Answer: C**



**View Text Solution**

7. Which of the following compounds is consumed during the preparation of  $Na_2CO_3$  by Solvay's process

?



**Answer: A**



**View Text Solution**

8. Plaster of Paris on making a paster with a little water sets into a hard mass due to the formation of



A.  $CaSO_4$

B.  $CaSO_4 \cdot H_2O$

C.  $CaSO_4 \cdot 2H_2O$

D. None of these

**Answer: C**



**View Text Solution**

9. Calcium is obtained by

A. Electrolysis of molten  $CaCl_2$

B. Electrolysis of solution of  $CaCl_2$  in water

C. Reduction of  $CaCl_2$  with carbon

D. Roasting of lime stone

**Answer: A**



**View Text Solution**

**10.** Pick out the statement (s) which is/are not true about the diagonal relationship of Li and Mg.

(i) Polarising powers of

$Li^+$  and  $Mg^{2+}$  are almost the same .

(ii) Like Li, Mg decomposes water very fast.

(iii) Both LiCl and  $MgCl_2$  are deliquescent.

(iv) Like Li, Mg does not form solid bicarbonates.

A. (i) and (ii)

B. (ii) and (iii)

C. Only (ii)

D. Only (i)

**Answer: C**



**View Text Solution**

**11.** The element that gives a peroxide on burning with air is

A. lithium

B. sodium

C. rubidium

D. caesium

**Answer: B**



**View Text Solution**

**12.** The order of increasing density is

A.  $Li < K < Na < Rb < Cs$

B.  $Li < Na < K < Rb < Cs$

C.  $Cs < Rb < K < Na < Li$



**Answer: A**



**View Text Solution**

**13.** The molecular formula of Glauber's salt is

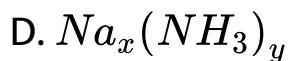
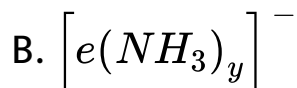


**Answer: D**



[View Text Solution](#)

14. When Na reacts with liquid  $NH_3$ , the substance formed is

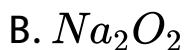
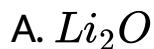


**Answer: B**



[View Text Solution](#)

15. Which one of the following on hydrolysis gives the corresponding metallic hydroxide,  $H_2O_2$  and  $O_2$  ?

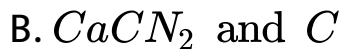
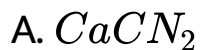


**Answer: B**



[View Text Solution](#)

16.  $CaC_2 + N_2 \rightarrow A$ , product A is



D. None of these

**Answer: B**

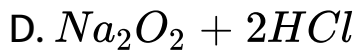
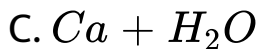
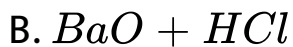


**View Text Solution**

17. Which of the following reactions produces hydrogen ?







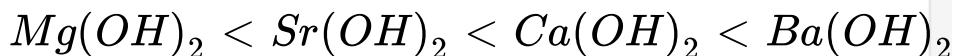
**Answer: C**



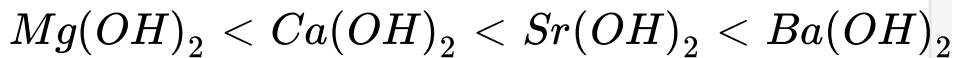
**View Text Solution**

**18.** The correct order of thermal stability of hydroxide is

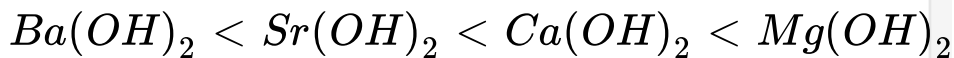
A.



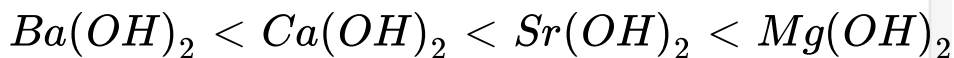
B.



C.



D.



**Answer: B**



**View Text Solution**

**19.** In polymeric  $(BeCl_2)_n$ , there are

- A. three-centre four-electron bonds.
- B. three-centre three-electron bonds.
- C. two-centre three-electron bonds.
- D. three-centre two-electron bonds.

**Answer: A**

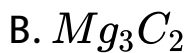


**View Text Solution**

20. Metal carbides on reaction with  $H_2O$  form  $CH_4$ .

Carbide can be

A.  $CaC_2$



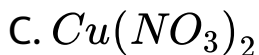
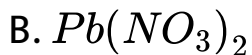
D. All of these

**Answer: C**



**View Text Solution**

**21.** Nitrogen dioxide cannot be prepared by heating.



D.  $AgNO_3$

**Answer: A**



**View Text Solution**

**22.** Which of the following is the strongest reducing agent in aqueous solution ?

A. Na

B. Li

C. K

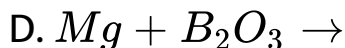
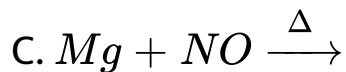
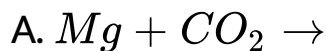
D. Cs.

**Answer: B**



**View Text Solution**

**23.** In which of the following reactions, MgO is not formed ?

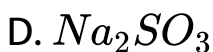
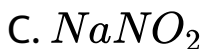
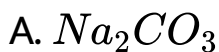


**Answer: B**



**View Text Solution**

24. An aqueous solution of salt 'R' when treated with dil HCl, a colourless gas is given out. The gas so evolved when passed through acidified  $KMnO_4$  decolourises  $KMnO_4$  solution. The salt 'R' is



**Answer: D**



25. Which of the following ions will have the maximum hydration energy ?



**Answer: D**



**View Text Solution**



26. Which product is formed in the following reaction

?



A. Potassium sulphide

B. Potassium sulphate

C. Sulphur dioxide

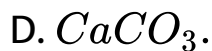
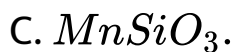
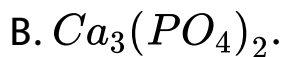
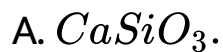
D. Sulphur trioxide

**Answer: B**



**View Text Solution**

27. Thomas salg is

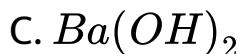


**Answer: B**



**View Text Solution**

28. Barium burns in air to form



**Answer: D**



[View Text Solution](#)

**29.** An element having electronic configuration

$1s^2 2s^2 2p^6 3s^2 3p^6 4s^1$  forms

A. acidic oxide.

B. basic oxide.

C. amphoteric oxide.

D. neutral oxide.

**Answer: B**

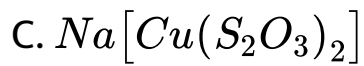


**View Text Solution**

30. An excess of  $Na_2S_2O_3$  react with aqueous  $CuSO_4$  to give

A.  $CuS_2O_3$

B.  $Cu_2S_2O_3$



**Answer: D**



**View Text Solution**