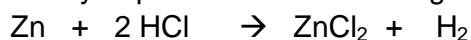


**CHEMICAL DISPLACEMENT REACTION**

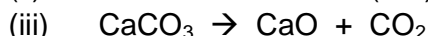
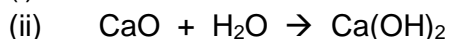
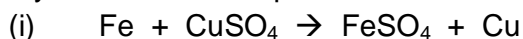
This page contains CCE model questions – Concept wise.

Now we know the formation of different varieties of questions from Chemical displacement reaction.

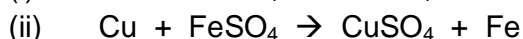
1. What do you understand about Chemical displacement reaction ?
2. Explain chemical displacement reaction with two examples.
3. Give any two examples for chemical displacement reactions.
4. How can you prove that the following chemical reaction is a displacement reaction ?



5. Identify the chemical displacement reaction from the following equations.

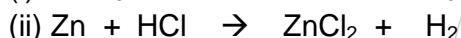
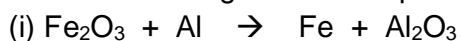


6. Iron is more reactive than copper. Which of the following reactions are possible ?



7. If we kept iron nail into copper sulphate for 10 minutes, brown coating appeared on iron nail. Can you guess the reason ?

8. Balance the following chemical equations.



9. Sailaja kept an iron nail into a blue colour aqueous solution. After some time the nail was coated with brown colour. The remaining solution turns into pale green colour.

Now answer the following questions.

(i) What is the blue colour solution?

(ii) What is the brown colour coated on nail?

(iii) Which type of chemical reaction it is ?

(iv) Write the chemical equation for the reaction.

10. Observe the following chemical equation. And answer the questions.



(i) What are the reactants ?

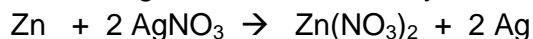
(ii) What are the products ?

(iii) Which type of chemical reaction it is ?

(iv) How can we determine hydrogen gas evolved in this reaction?

11. Is the reaction between Copper and Iron sulphate possible ? Why ?

12. Explain the following chemical reaction by the concept of chemical displacement reaction.



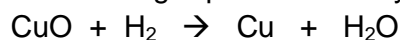
13. An element 'X' reacts with another substance 'PQ' and forms 'XQ' and 'P'.

What do you say about the reactivity of the elements 'X' and 'P' ?

14. If we kept iron nail into copper sulphate aqueous solution, Iron displaces copper from copper sulphate aqueous solution and forms Iron sulphate aqueous solution and copper.

Write the chemical equation for this reaction and indicate the physical states of the reactants and products.

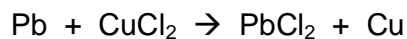
15. Observe the following equation. Identify the type of chemical reaction.



16. Observe the following equation. Identify the type of chemical reaction. Write a brief note to support your answer.

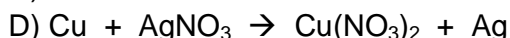
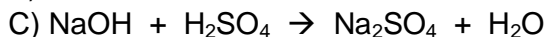
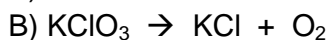
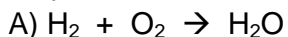


17. Write the chemical reaction shown below in a sentence by using the names of the substances.

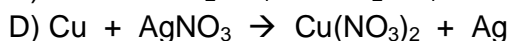
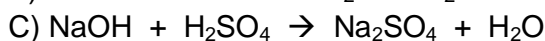
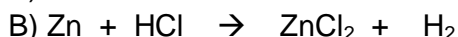
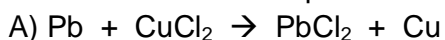


18. Write any two chemical equations which represent chemical displacement reaction.

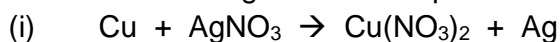
19. Identify the chemical displacement reaction from the following.



20. This is not a chemical displacement reaction.



21. Observe the following chemical displacement reactions.



Is the reaction between Fe and  $\text{AgNO}_3$  possible ? or Not ?

22. Dilute hydrochloric acid reacts with Zinc granules and liberates a gas.

(i) What is the liberated gas ?

(ii) How can you determine it ?

23. How can you perform a chemical displacement reaction in your school laboratory ?

24. You were given a tray containing the following substances or chemicals .

Zinc granules

Silver string

Zinc sulphate

Gold leaf

Silver nitrate

Platinum wire

Which do you select to perform Chemical displacement reaction?

25. If you want to explain about chemical displacement reaction to your friend, What apparatus or chemicals or substances do you choose ? Make a list.

26.  $\text{Fe}_2\text{O}_3 + 2 \text{Al} \rightarrow \text{Al}_2\text{O}_3 + \text{Fe}$  Which type of chemical reaction it is? [     ]

A) Chemical combination

B) Chemical displacement

C) Chemical decomposition

D) Chemical double decomposition

27. Why do we scratch iron nail with sand paper before doing an experiment with iron nail and copper sulphate?

28. During the experiment between iron key and copper sulphate solution, what are the observations we can identify ? Write any two of them ?

29. Write the procedure of activity to verify chemical displacement reaction by using the following key words.

Beaker

spatula

copper sulphate

water

aqueous solution

Iron bolt

brown coating

colour changed

displacement reaction

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30. Ranadheer :  $A + XY \rightarrow AY + X$  represents chemical displacement reaction.  
Jasmine :  $A + XY \rightarrow XA + Y$  represents chemical displacement reaction.  
What do you say ? Whom do you support ?

31. Observe the following chemical equations.

- i)  $Pb + CuCl_2 \rightarrow PbCl_2 + Cu$
- ii)  $Cl_2 + 2 NaBr \rightarrow 2 NaCl + Br_2$
- iii)  $NaOH + H_2SO_4 \rightarrow Na_2SO_4 + H_2O$
- iv)  $Cu + AgNO_3 \rightarrow Cu(NO_3)_2 + Ag$

Which of the above equations represents chemical displacement reaction ? [      ]

- A) (i) and (ii) only
- B) (i), (ii) and (iii)
- C) (i), (ii) and (iv)
- D) (i), (ii), (iii) and (iv)

32. In a reaction, an element displaces other element from its compound. This type of reactions are called as ..... [      ]

- A) Chemical combination
- B) Chemical displacement
- C) Chemical decomposition
- D) Chemical double decomposition

33. Assertion (P) :  $Cu + FeSO_4 \rightarrow \dots\dots\dots$  reaction is not possible.

Reason (R) : Cu is less reactive than iron.

Then identify the correct one :

- A) P is true and R is true. R is not the correct explanation for P
- B) P is true and R is true. R is the correct explanation for P
- C) P is false and R is true. R is the correct explanation for P
- D) P is true and R is false.

34. Observe the following statements :

- (i)  $Cu + AgNO_3 \rightarrow Cu(NO_3)_2 + Ag$  is chemical displacement reaction
- (ii)  $NaOH + H_2SO_4 \rightarrow Na_2SO_4 + H_2O$  is not a chemical displacement reaction

Then identify the correct choice .

- A) (i) and (ii) both are true
- B) (i) and (ii) both are false
- C) (i) is true and (ii) is false
- D) (i) is false and (ii) is true

35. A student added dil. HCl to the test tube containing Zinc granules. And made the following observations.

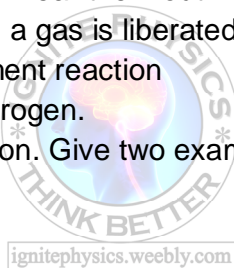
- (i) The surface of zinc granules become black
- (ii) A gas evolved from the test tube
- (iii) The gas turns the lime water into white colour

Which of the observations are true ?

- A) (i) and (ii) only
- B) (i), (ii) and (iii)
- C) (ii) and (iii)
- D) only (ii)

36. Write ant two examples of chemical displacement reactions in which hydrogen gas is liberated ?

37. In a chemical displacement reaction, ..... element displaces ..... element from its compound. [     ]
- A) high reactive , less reactive
  - B) less reactive, high reactive
  - C) any, same reactive
  - D) None of the above are correct.
38. In a chemical displacement reaction, an element “X” displaces other element “Y” from its compound. Then identify the correct statement . [     ]
- A) “X” is less reactive than “Y”
  - B) “Y” is more reactive than “X”
  - C) “X” is more reactive than “Y”
  - D) “X” and “Y” are equal reactive elements
39. Read the following sentences. They are related to the procedure of an activity “Chemical displacement reaction”. But the order of the sentences is disturbed. So rewrite the sentences in a correct sequence.
- (i) Add 10 drops of Dil. HCl to the test tube.
  - (ii) It gives pop sound.
  - (iii) Take 2 or 3 Zinc granules.
  - (iv) Take a test tube.
  - (v) Keep a burning match stick near the mouth of test tube.
  - (vi) A reaction takes place and a gas is liberated.
  - (vii) This is chemical displacement reaction
  - (viii) We identify the gas as hydrogen.
40. Define chemical displacement reaction. Give two examples.



**Academic standards were not indicated.**  
**This is to create awareness among children.**  
**If they learn conceptually, they can easily write answers to any question.**  
**If any one prepared this type of list, please send them to me.**