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# **CHEMISTRY**

# **BOOKS - NCERT EXEMPLAR**

# ACIDS, BASES AND SALTS

**Multiple Choice Questions** 

1. The correct way of making a solution of acid

in water is to

A. add water to acid .

B. add acid to water .

C. mix acid and water simultaneously .s

D. add water to acid in a shallow container .

Answer: B

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2. Products of a neutralisation reaction are

always

A. an acid and a base .

B. an acid and a salt .

C. a salt and water .

D. a salt and a base .

Answer: C

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**3.** Turmeric is a natural indicator. On adding its paste to acid and base separately, which colours would be observed

A. Yellow in both acid and base .

B. Yellow in acid and red in base .

C. Pink in acid and yellow in base .

D. Red in acid and blue in base .

Answer: B

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**4.** Phenolphthalein is a synthetic indicator and its colours in acidic and basic solutions, respectively are

A. red and blue .

B. blue and red.

C. pink and colourless.

D. colouriess and pink

Answer: A

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**5.** When the soil is too basic , plants do not grow well in it . To improve its quality what must be added to the soil ?

- A. Organic matter
- B. Quick lime
- C. Slaked lime
- D. Calamine solution

Answer: A



6. Litmus, a natural dye is an extract of which

of the following ?

- A. China rose (Gudhal)
- B. Beetroot
- C. Lichen
- D. Blue berries (Jamun

Answer: C

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7. Neutralisation reaction is a

A. physical and reversible change .

B. physical change that cannot be reversed

C. chemical and reversible chemical change

D. chamical change that cannot be

reversed.

Answer:

**8.** A solution changes the colour of turmeric indicator from yellow to red. The solution is

A. basic

B. acidic

C. neutral

D. either neutral or acidic

# Answer:

9. Which of the following set of substances

contain acids ?

A. Grapes, lime water

B. Vinegar, soap

C. Curd, milk of magnesia

D. curd, grapes

Answer: D

**10.** On adding phenolphthalein indicator to a colourless solution, no change is observed. What is the nature of this solution ?

A. Basic

- B. Either acidic or basic
- C. Either acidic or neutral
- D. Either neutral or acidic

## Answer:

**11.** Which of the following is an acid -base indicator ?

A. Vinegar

B. Lime water

C. Turmeric

D. Baking soda

Answer: C

1. Look at the given reaction .

Hydrochloric acid + Sodium hydroxide (base)

ightarrow Sodium chloride (salt)+ Water

Sodium chloride formed in this reaction remains in solution form .Can we get solid chloride from this solution ? Suggest a method (if any).



2. State whether the following statements are

true or false . Correct the false statements . All

substances are either acidic or basic .



## 3. State true or false.

A compound if acidic will turn all indicators

red .

**4.** State true or false.

Lime water turns red litmus blue .

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5. State true of false.

Common salt dissolved in water turns blue

litmus red .

**6.** State true or false.

Phenolphthalein is a natural indicator.



7. State True or False.

Calamine can be used to treat ant 's sting .

8. State true or false.

Lemon water is basic in nature .

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**9.** Paheli is suffering from indigestion due to acidity. Is it advisable to give her orange juice in this situation ?

A. Yes

B. No

C. Maybe

D. Always

### Answer: B

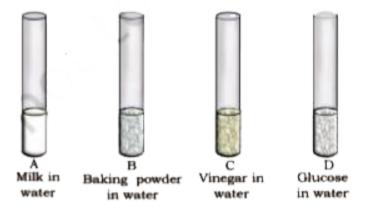


## **Short Answer Questions**

**1.** Look at Figure 5.1 which shows solutions taken in test tubes A,B,C and D. What colour is expected when a piece of red litmus paper is

dropped in each test tube ? Nature of the

solutions is given in the table for your help .



Test Tube	Nature of Solution	Change in colour of red litmus
А	Neutral	
В	Basic	
С	Acidic	
D	Neutral	



2. While playing in a park, a child was stung by a wasp . Some elders suggested applying paste of baking soda and others lemon juice as remedy. Which remedy do you think is appropriate and why?

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3. Form a sentence using the following words -

baking soda, ant bite, moist, effect, neutralised, rubbing.





# 4. Match the substance in Column I with those

# in Column II .

Column I		Column II	
(a)	Tartaric acid	(1)	soap
(b)	Calcium hydroxide	(11)	curd
(c)	Formic acid	(111)	unripe mangoes
(d)	Sodium hydroxide	(tv)	ant's sting
(e)	Lactic acid	(v)	lime water

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5. Fill the blanks in the following sentences

Lemon juice and vinegar taste \_\_\_\_\_

because they contain					
<b>Watch Video Solution</b>					
<b>6.</b> Turmeric and litmus areacid-base indicators.					
Watch Video Solution					
<b>7.</b> Phenolphthalein gives colour with lime water.					
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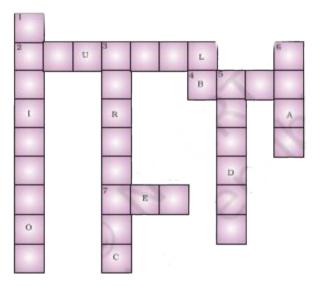
8. When an acidic solution is mixed with a basic solution, they \_\_\_\_\_ each other forming \_\_\_\_\_ and water .
Match Video Solution

Long Answer Questios

**1.** Boojho, Paheli and their firend Golu were provided with a test tube each containing

China rose solution which was pink in colour .Boojho added two drops of solution 'A' in his test tube and got dark pink colour .Paheli added 2 drops of solution 'B' to her test tube and got green colour.Golu added 2 drops of solution 'C' but could not get any change in colour Suggest the possible cause for the variation in their results.

**2.** Fill in the cross word given as Figure 5.2 with the help of the clues provided .



# ACROSS

(2) The solution which does not change the colour of either red or blue litmus .

(4) Phenolphthalein gives pink colour in this type of solution .

(7) Colour of blue litmus in lemon juice.

DOWN (1) It is used to test whether a substance is acidic or basic .

(3) It is a natural indicator and gives pink colour in basic solution .

(5) Nature of ant's sting.

(6) It is responsible for increase in

temperature during a neutralisation reaction.

**3.** A farmer was unhappy because of his low crop yield . He discussed the problem with an agricultural scientist and realised that the soil of his field was either too acidic or too basic . What remedy would you suggest the farmer to neutralise the soil ?

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**4.** You are provided with four test tubes containing sugar solution baking soda

solution, tamarind solution, salt solution. Write down an activity to find the nature (acidic /basic/neutral) of each solution.

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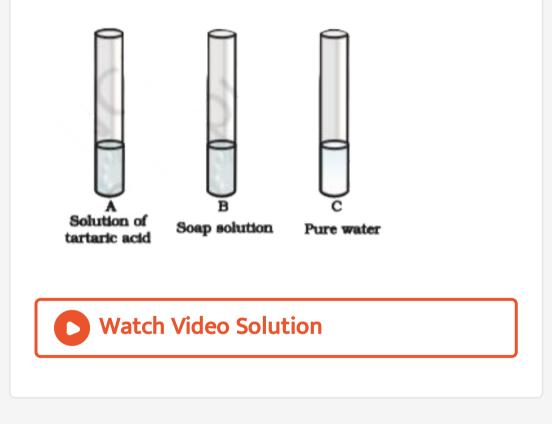
5. You are provided with three test tubes A,B and C as shown in Figure 5.3 with different liquids . What will you observe when you put (a) a piece of blue litmus paper in each test tube .

(b) a piece of red litmus paper in each test

tube .

(c) a few drops of phenolphthalein solution to

each test tube .



**6.** Pahell observed that most of the fish in the pond of her village were gradually dying .She

also observed that the waste of a factory in their village is flowing into the pond which probably caused the fish to die .

(a) If the factory waste is acidic in nature , how

can it be neutralised ?

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7. Explain two neutralisation reactions related

to daily life situation .