

#### **CHEMISTRY**

# BOOKS - FULL MARKS CHEMISTRY (TAMIL ENGLISH)

**ACID, BASES AND SALTS** 

**Exercise I Choose The Correct Answer** 

**1.** 
$$Zn+2HCl o ZnCl_2+.....$$

(a)  $H_2$  (b)  $O_2$  (c)  $CO_2$ 

2. Apple contains malic acid. Orange contains
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•••••

(a) citric acid

(b) ascorbic acid



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**3.** Acids in plants and animals are organic acids. Whereas Acids in rocks and minerals

are.....

(a) Inorganic acids (b) Weak acids



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- 4. Acids turn blue litmus paper to
- (a) Green
- (b) Red
- (c) Orange



**5.** Since metal carbonate and metal bicarbonate are basic they react with acids to give salt and water with the liberation of ..... a.  $NO_2$  b.  $SO_2$  C.  $CO_2$ 



- **6.** The hydrated salt of copper sulphate has colour
- (a) Red (b) White (c) Blue



#### **Exercise Ii Answer In Brief**

**1.** Name any two metals which do not react with sodium hydroxide.



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**2.** Write any four uses of acids.



**3.** Give the significance of pH of soll in agriculture.



4. When does the acid rain occur?



5. What are the uses of Plaster of Paris?



**6.** Two acids 'A' and 'B'are given. Acid A gives one hydrogen lon per molecule of the acid in solution. Acld B gives two hydrogen ions per molecule of the acid in solution.

- (i) Find out acid A and acid B.
- (ii) Which acid is called the King of Chemicals?



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7. Define aquaregia.



- 8. Correct the mistakes:
- (a) Washing soda is used for making cakes and bread soft, spongy.
- (b) Calcium sulphate hemihydrate is used in textile industry.
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**9.** What is neutralization reaction? Give an example.



#### **Exercise Iii Answer In Detail**

**1.** Why does distiled water not conduct electricity whereas rain water does?



**2.** Plaster of Paris should be stored in a moisture proof container. Why?



3. Write any four uses of bases.



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**4.** Write any five uses of salts.



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5. Sulphuric acid is called King of Chemicals.

Why is it called so?

## Additional Questions I Short Answers Questions

1. What are acids?



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2. Why is the term basicity is used for acids?



3. What are bases?



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**4.** "All alkalis are bases, but not all bases are alkalis". Justify this statement.



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**5.** What is the correct procedure of mixing an acld and water? Why?

**6.** All acids contain one or more hydrogen atoms, but not all substances containing hydrogen are acids. Support this statement with examples.



**7.** Explain the role of pH in our digestive system.



## Additional Questions I Long Answers Questions

1. Explain water of erystallisation.



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2. What are four types of salts?



**3.** Classify acids based on their sources and basicity.



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**4.** Name the acid present in the given table.



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**5.** Desertbe the tests used to determine acids and bases.



6. Differentiate between Acids and Bases.



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## Activity

1. Take about 10 ml of dilute hydrochloric acid in a test tube and add a few pieces of zine. granules into it. What do you observe? Why

are bubbles formed in the solution? Take a burning candle near a bubble containing hydrogen gas, the flame goes off with "Popping' sound. This confirms that metal displaces hydrogen gas from the dilute acid.



- **2.** Take solutions of hydrochloric acid or sulphuric acid.
- . Fix two nails on a cork and place the cork in a 100 ml beaker.

. Connect the nails to the two terminals of a 6V battery through a bulb and a switch as shown in Figure.

. Now pour some dilute HCl in the beaker and switch on the current. Repeat the activity with dilute sulphuric acid, glucose and alcohol solutions. What do you observe now?

. Does the bulb glow in all cases?



**3.** Collect the following samples from the science laboratory- Hydrochloric acid, sulphate acid and Nitric acid, Sodium hydroxide, Potassium hydroxide. Take 2 ml of each solution in a test tube and test with a litmust paper and indicators phenolphthaleia nad Methyl orange. Tabulate your observations.



**4.** Fill in the blanks in the following table based on the concept of water of cystallisation.



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**5.** Boil about 100 ml of ground water in a vessel dryness. After all water get evaporated observe the inner wall of the vessel. Can you observe any deposits?



