

**I SEMESTER EXAMINATION 2017-2018**

**Std. : X**  
**Date: 10-10-17**

**Sub: SCIENCE I**

**Marks: 40**  
**Time: 2hrs.**

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**Q.1 A] i) Fill in the blanks**

**(2)**

1. The formulae of chloride of metal M is  $MCl_2$ . The metal M belongs to \_\_\_\_\_ group.
2. Sodium or Potassium salt of higher fatty acid is termed as \_\_\_\_\_.

**ii) State whether the following statements are true or false**

**(2)**

1. Phenolphthalein is a synthetic type of indicator.
2. Eka-aluminium was later named as Germanium.

**iii) What is the formula of bleaching powder?**

**(1)**

**B] Choose the correct alternative and rewrite the following**

**(5)**

1. If the potential difference across the ends of a conductor is 200V and the resistance of the conductor is  $44\Omega$ , then the current flowing through it is \_\_\_\_\_.  
a. 0.2 A      b. 0.5 A      c. 2 A      d. 5 A
2. Which of the following is not required to find the pH of a given solution?  
a. pH paper      b. Litmus paper      c. Standard pH value chart      d. Universal indicator
3. Reaction of iron nails with copper sulphate solution is an example of \_\_\_\_\_ reaction.  
a. Combination      b. Decomposition      c. Displacement      d. Double displacement
4. If the equivalent resistance is to be decreased, then the resistance should be connected in \_\_\_\_\_.  
a. Series      b. parallel      c. mixed arrangement      d. series or parallel
5. Which of the following has pH more than 7?  
a. Pure water      b. NaOH solution      c. HCl solution      d. Lemon juice

**Q.2 Answer any FIVE of the following**

**(10)**

1. What are indicators? Classify them and give examples.
2. State Dobereiner's Triads giving one example.
3. Differentiate between resistances in series and parallel.
4. Grills of doors and windows are always painted before they are used. Give reason.
5. Elements in the same group show same valency. Give reason.
6. Name the acid present in the following:
  - a. Tamarind
  - b. Red ants
  - c. Vinegar
  - d. Buttermilk

**Q.3 Answer any FIVE of the following**

**(15)**

1. Water is added to the Plaster of Paris.
  - a. What do you observe?
  - b. Name the new substance formed?
  - c. Give two uses of POP.
2. A Potential difference of 250 volts is applied across a resistance of  $1000\Omega$  in an electric iron. Find:
  - a. Current
  - b. Heat energy produced in joules for 12 seconds.
3. Give any three ways how we can contribute to reduce pollution.
4. Define Redox reaction. Explain with the help of an example.
5. What are the main features of Mendeleev's periodic table?
6. A person has sour taste in the mouth and burning sensation of the stomach:
  - a. What is he suffering from?
  - b. Why does it happen?
  - c. What substances are used as remedy?

**Q.4 Attempt any ONE of the following**

**(5)**

1.
  - a. What is Double displacement reaction? Give examples.
  - b. Explain green house effect.
2.
  - a. What is an electric circuit?
  - b. Draw a neat diagram and write the use of:
    - i) Wire crossing
    - ii) Plug key (on)
    - iii) Rheostat
    - iv) Electric bulb