

Answer on Question #66943 - Chemistry - Physical Chemistry

Question:

Question 12 : The pH of a neutral solution is

- 6
- 8
- 5
- 7

Question 13 : How long would a constant current of 18.0 amperes be required to flow in order for 9000. coulombs of charge to pass through a cell

- 50 s
- 0.002 s
- 200 s
- 500 s

Question 14 : The conjugate base of HCl is

- HOCl
- H+
- OH-
- Cl-

Question 15 : Buffering is:

- all of these
- due to LeChatelier's Principle
- influenced by the common ion effect
- is a process that is done by a solution made up of a weak acid and its salt

Solution:

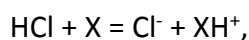
Question 12: Neutral solution is the one solution whose pH is 7. So the correct answer: 7.

Question 13: $I = \frac{q}{t}$

$$t = \frac{q}{I} = \frac{9000}{18} = 500 \text{ sec}$$

So the correct answer: 500 s.

Question 14: Conjugated particle basis and is formed after the acid when given pronon.



Where HCl – acid, X – base, Cl⁻ - conjugate base, XH⁺ - conjugate acid.

So the correct answer: Cl⁻.

Question 15: The correct answer: all of these.

Answer: Question 12: 7;

Question 13: 500 s;

Question 14: Cl⁻;

Question 15: all of these.