**Chem 1013: mini-quiz # 23: Bronsted Acid/Base concepts A**

**Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

A Bronsted base is a(n) \_\_\_\_\_\_proton acceptor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A Bronsted acid is a(n) \_\_\_\_\_\_\_proton donor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What are the acid(A), base(B) , conjugate acid (CA) and conjugate base (CB) in the reactions below? (Write A, B, CB and CB above appropriate species below)

A B CB CA

HPO32- + CO32- -🡪 PO32- + HCO3- (2 pts)

A B CB CA

HClO3 + H(Cr2O7)- 🡪 ClO3- + H2(Cr2O7) (2 pts)

The reaction proposed by Bronsted below `splits’ water to generate OH‑.

CO32- + H-OH 🡪 HCO3- + OH-

What is the name for this kind of water-splitting reaction ? hydrolysis

**Chem 1013: mini-quiz # 23: Bronsted Acid/Base concepts B**

**Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

A Bronsted acid is a(n) \_\_\_\_\_\_\_\_\_proton donor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A Bronsted base is a(n) \_\_\_\_\_\_\_\_\_proton acceptor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What are the acid(A), base(B) , conjugate acid (CA) and conjugate base (CB) in the reactions below? (Write A, B, CB and CB above appropriate species below)

**B A CA CB**

PO32- + HCO32- -🡪 HPO32- + CO3-2 (2 pts)

**A B CB CA**

HPO42- + H(Cr2O7)- 🡪 PO4-3 + H2(Cr2O7) (2 pts)

The reaction proposed by Bronsted below `splits’ water to generate OH‑.

CO32- + H-OH 🡪 HCO3- + OH-

What is the name for this kind of water-splitting reaction ? hydrolysis