

## **Wecker: Brody's Human Pharmacology, 5th Edition**

### **Chapter 01: Pharmacodynamics: Receptors and Concentration-Response Relationships**

#### **Test Bank**

#### **Multiple Choice**

1. The majority of medications available today act on which superfamily of cellular membrane receptor?

- A. Ligand-gated ion channel
- B. G-protein-coupled receptor
- C. Receptor tyrosine kinase
- D. Nuclear hormone receptor
- E. Cytokine receptor

ANS: B. The majority of drugs available act on G-protein-coupled receptors.

2. Nalbuphine is an effective pain reliever because of its activity at mu-opioid receptors. However, if given to a patient who has recently received morphine (which also affects mu-opioid receptors) for postoperative pain, nalbuphine can worsen his or her pain. Thus nalbuphine is said to have what kind of activity at mu-opioid receptors?

- A. Full agonist
- B. Partial agonist
- C. Competitive antagonist
- D. Non-competitive antagonist
- E. Allosteric modifier

ANS: B. Nalbuphine is a partial agonist at opioid receptors.