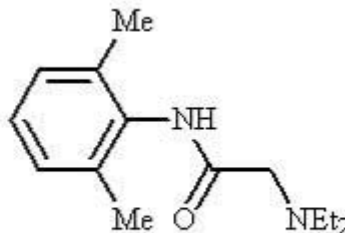


Procaine



Lidocaine

**Pharmaceutic
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(Pharmaceutica
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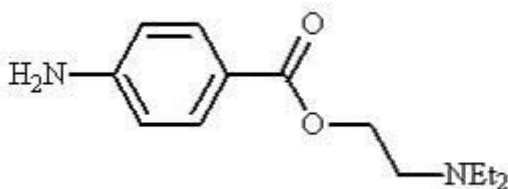
(Objective Type Questions)

Note:

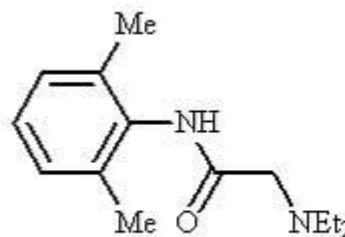
1. **Which of the following strategies will increase the polarity and water solubility of a drug?**
 - a. Removing polar functional groups
 - b. Adding extra alkyl groups
 - c. Replacing an aromatic ring with a nitrogen containing heterocyclic ring
 - d. Replacing an alkyl group with a larger alkyl group

2. **Polyamine polystyrene resins belong to which category of ion-exchange resins?**
 - a. Strongly Acidic Cation Exchange Resins
 - b. Strongly Basic Anion Exchange Resins
 - c. Weakly Acidic Cation Exchange Resins
 - d. Weakly Basic Anion Exchange Resins

3. **Lidocaine is a longer lasting local anaesthetic than procaine. Which of the following statements is false?**



Procaine



Lidocaine

- a. Lidocaine is more stable to hydrolysis.
- b. The methyl substituents in lidocaine are important to its stability.
- c. The amide group in lidocaine is important to its stability.
- d. The NH₂ group in procaine makes procaine less stable than lidocaine.

4. **What is meant by a lead compound in medicinal chemistry?**

- a. A drug containing the element lead.
- b. A leading drug in a particular area of medicine.
- c. A compound that acts as the starting point for drug design and development
- d. A drug which is normally the first to be prescribed for a particular ailment.

5. **Oxytocin produces the following effects:**

- a. It causes contraction of the uterus
- b. It assists the progress of spermatozoa into the uterine cavity
- c. It brings about milk ejection from the lactating mammary gland
- d. All of the above

6. **Which of the following organs is a target for prolactin?**

- a. Liver
- b. Adrenal cortex
- c. Thyroid
- d. Mammary gland

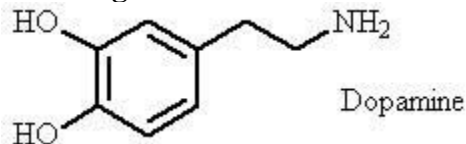
7. **Some drugs containing an ester group are inactive *in vitro*, but are active once the drug has been absorbed *in vivo*. What term is used for such drugs?**

- a. Postdrugs
- b. Predrugs
- c. Metabolites
- d. Prodrugs

8. **Vasopressin possesses the following:**

- a. Antidiuretic property
- b. Vasodilatation property
- c. Release of a thyroid hormone into the plasma
- d. Diuretic property

9. **In Parkinson's disease, there is a lack of the neurotransmitter dopamine in the brain. Adding dopamine itself is not very effective for a variety of reasons. Which of the following statements is not a valid explanation?**



- a. Dopamine is too polar to cross the blood-brain barrier.
- b. Dopamine is chemically unstable.
- c. Dopamine is metabolised to inactive metabolites
- d. Dopamine shows no selectivity between dopamine receptors in the brain and peripheral dopamine receptors.

10. **Some peptides and proteins have been used as drugs. Which of the following statements is untrue?**

- a. Protein drugs suffer a disadvantage in that they could produce an immune response
- b. Peptides and proteins generally show poor bioavailability.
- c. Peptide drugs are susceptible to peptidase enzymes.
- d. Peptide drugs are susceptible to metabolic enzymes but not to digestive enzymes