

**Practice 32.11.**

Ephedrine Hydrochloride Nasal Drop (Remington 20<sup>th</sup> ed. )

Ephedrine Hydrochloride		0.5 g
Chlorobutanol		0.5 g
Sodium chloride		0.5 g
Purified water	q.s.	100 ml

**Practice 32.12.**

Oxymetazoline Hydrochloride Nasal Spray

Oxymetazoline Hydrochloride	5 mg
Benzalkonium chloride	1.5 g
EDTA	5 mg
pH 6.0 phosphate buffer	10 ml

**Practice 32.4.**

Silver Nitrate Eye Drop

15 ml, prepare an isotonic 1% silver nitrate solution.

**Practice 32.15.**

Aluminum Sulphate Ear Drop

Aluminum Sulphate		225 g
Acetic acid (% 33)		250 ml
Tartaric acid		45 g
Calcium carbonate		100 g
Purified water		750 ml

**Practice 32.16.**

Phenolic Ear Drop

Phenol-Glycerine*		40 ml
Glycerine	q.s.	100 ml

\* *Phenol-Glycerine*

<i>Phenol</i>		<i>160 g</i>
<i>Glycerine</i>		<i>840 g</i>

**Practice 32.17.**

Sodium Bicarbonate Ear Drop (Remington 20<sup>th</sup> ed.)

Sodium bicarbonate		5 g
Glycerine		30 ml
Purified water	q.s.	100 ml

### Practice 31.10.

#### Dialysis Solution

<b>Solution I</b>		<b>Molecular weight</b>
Sodium chloride	214.800 g	58.5
Potassium chloride	2.612 g	74.6
Calcium chloride dihydrate	7.720 g	147.0
Magnesium chloride hexahydrate	3.558 g	203.0
Acetic acid (%100)	4.207 g	60.0
Water obtained by reverse osmosis method	q.s. 1000.000 ml	
<b>Solution II</b>		
Sodium bicarbonate	84.0 g	84.0
Water obtained by reverse osmosis method	q.s. 1000.0 ml	

#### Preparation:

Solution I and Solution II are mixed at specific ratios and diluted with water obtained by reverse osmosis. (Solution I + Solution II + Water obtained by reverse osmosis method: 1 liter + 1.225 liter + 32.775 liters)

#### Questions:

1. Why should this formulation be prepared with water obtained by reverse osmosis?
2. Calculate the amounts of mEq / l, mmol / l and total solution osmolarities of  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{HCO}_3^-$ ,  $\text{Cl}^-$ , and  $\text{CH}_3\text{COO}^-$  in the prepared solution.
3. What is the pH of the diluted solution?
4. How is this solution used?
5. What are the characteristics of the ideal dialysis solution?