

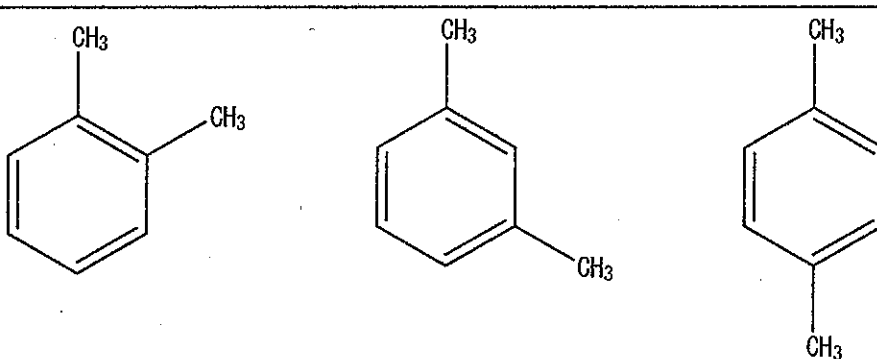
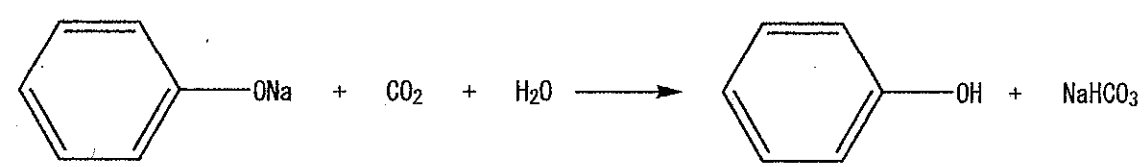
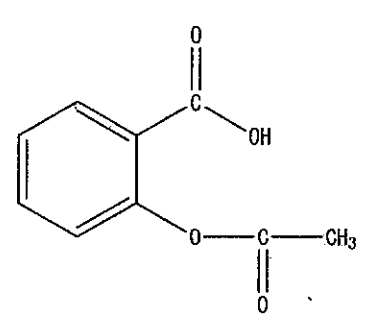
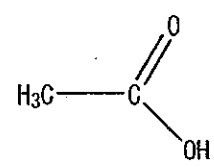
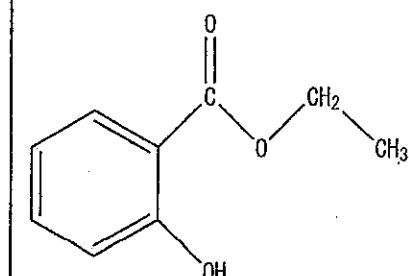
I

| | | | | | | | | |
|-----|-----|---|------|---|----------------------|--|-------|--|
| 問1 | (1) | ア | 18 | B | 陽性 | C | 電子親和力 | |
| | | A | 自由電子 | | | | | |
| | (2) | ② | | | | | | |
| | (3) | 元素記号: Ar | | | 電子配置: K2, L8, M8 | | | |
| | (4) | 名称: メタン | | | 分子式: CH ₄ | | | |
| (5) | ① | | | | | | | |
| 問2 | (1) | 組成式: Al ₂ O ₃ | | | (2) | イ: 塩基性酸化物 ウ: 酸性酸化物 | | |
| | (3) | Cl ₂ O ₇ : +7 SO ₃ : +6 | | | (4) | Na ₂ O: -2 Na ₂ O ₂ : -1 | | |
| | (5) | 反応式: MgO + 2HCl → MgCl ₂ + H ₂ O | | | | | | |
| | (6) | 反応式: SiO ₂ + 2NaOH → Na ₂ SiO ₃ + H ₂ O | | | | | | |
| | (7) | 反応式: P ₄ O ₁₀ + 6H ₂ O → 4H ₃ PO ₄ | | | | | | |

II

| | | | | | | | | | |
|-----|-------------------------------|--|------------------|-------------------|-----------------|--------------|-------------------|---|-----|
| 問1 | (1) | ア | 2Cl ⁻ | イ | Cl ₂ | ウ | 2H ₂ O | | |
| | | エ | 2OH ⁻ | オ | H ₂ | エとオの解答順は問わない | | | |
| | (2) | 965 (9.65 x 10 ²) G | | | | | | | |
| (3) | 2.50 x 10 ⁻² mol/L | | | | | | | | |
| 問2 | (1) | A | 酸性塩 | B | 塩基性塩 | C | 正塩 | D | 塩基性 |
| | (2) | NaClO | | CaSO ₄ | | | | | |
| | (3) | 反応式: CH ₃ COOK + HCl → CH ₃ COOH + KCl | | | | | | | |
| | (4) | 1.25 x 10 ⁻² mol/L | | | | | | | |

III

| | | (1) A | アルデヒド | B | ケトン | C | 還元 |
|-----|-----|---|--|---|--|---|---|
| 問 1 | (1) | 化合物名: アセトアルデヒド | | | | | |
| | (2) | 構造式: | $\begin{array}{c} \text{H}_3\text{C}-\text{C}=\text{O} \\ \\ \text{H} \end{array}$ | | | | |
| | (3) | 2 | | | | | |
| | (4) | 構造式: | $\begin{array}{c} \text{CH}_3 \\ \\ \text{H}_3\text{C}-\text{C}-\text{OH} \\ \\ \text{CH}_3 \end{array}$ | | | | |
| | (5) | $2\text{C}_2\text{H}_5\text{OH} + 2\text{Na} \rightarrow 2\text{C}_2\text{H}_5\text{ONa} + \text{H}_2 \uparrow$ | | | | | |
| | (6) | $2\text{C}_2\text{H}_5\text{OH} \rightarrow \text{C}_2\text{H}_5\text{OC}_2\text{H}_5 + \text{H}_2\text{O}$ | | | | | |
| 問 2 | (1) |  | | | | | |
| | (2) |  | | | | | |
| | (3) | A | 2,4,6-トリブロモフェノール | B | トリニトロトルエン | C | 安息香酸 |
| | (4) | D |  | E |  | F |  |