

[ I ]

(1) あ : (a)                      い : (b)                      う : (d)                      え : (f)  
      お : (e)                      か : (e)

(2) ア : 12                      イ : 8                      ウ : 18

(3) ①  $\text{CaCO}_3 + \text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{Ca}(\text{HCO}_3)_2$   
      ②  $\text{CaCO}_3 + 2\text{HCl} \rightarrow \text{CaCl}_2 + \text{CO}_2 + \text{H}_2\text{O}$   
      ③  $\text{Zn} + 2\text{H}_2\text{O} + 2\text{NaOH} \rightarrow \text{Na}_2[\text{Zn}(\text{OH})_4] + \text{H}_2$   
      ④  $\text{Zn}(\text{OH})_2 + 4\text{NH}_3 \rightarrow [\text{Zn}(\text{NH}_3)_4]^{2+} + 2\text{OH}^-$

(4) 0.75 [K]

(5) (i) [反応式]  $\text{CaF}_2 + \text{H}_2\text{SO}_4 \rightarrow 2\text{HF} + \text{CaSO}_4$   
      [体積] 66.4 [mL]  
      (ii) (b), (c), (d)

(6) [S の配位数] 4  
      [密度] 4.1 [g/cm<sup>3</sup>]

(7) A : H<sub>2</sub>O                      B : CO                      C : CO<sub>2</sub>

[II] (1) (あ) : 青 (い) : 白 (う) : 6  
(え) : 吸熱 (お) : 再結晶

(2) (i) [硫酸銅(II)] 正塩 [塩化ナトリウム] 正塩  
(ii) [硫酸銅(II)水溶液] 酸性 [塩化ナトリウム水溶液] 中性

(3) (i)  $\text{NaCl} + \text{H}_2\text{SO}_4 \rightarrow \text{NaHSO}_4 + \text{HCl}$   
(ii)  $\text{Cu} + 2\text{H}_2\text{SO}_4 \rightarrow \text{CuSO}_4 + \text{SO}_2 + 2\text{H}_2\text{O}$

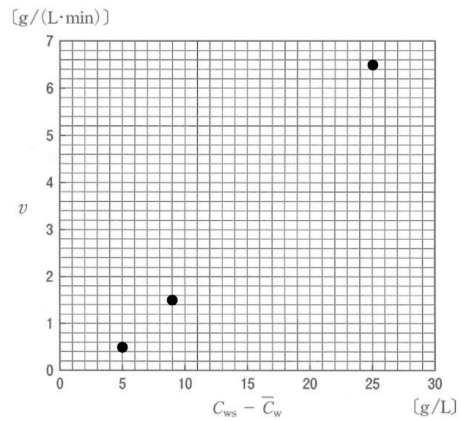
(4) 24 [°C]

(5)  $3.3 \times 10^2$  [g]

(6) (i) A : 306 B : 312 C : 293  
D : 313 E : 6.5 F : 0.5

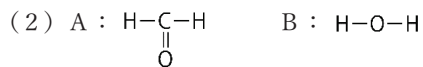
(ii) [傾き] 0.30 [/min]

(iii) (う)

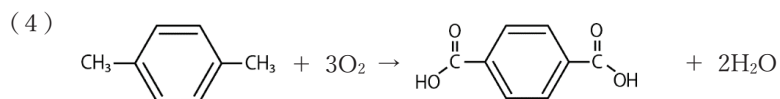
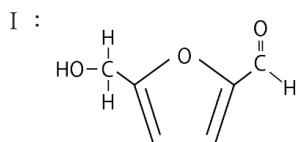


〔Ⅲ〕

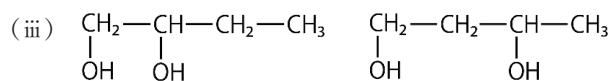
- (1) あ : (a)                      い : (c)                      う : (e)                      え : (g)  
 お : (k)                          か : (l)                      き : (m)                      く : (o)  
 け : (q)                          こ : (s)



- (3) C : 浸透圧                      D : アミラーゼ                      E : マルトース  
 F : グルコース                      G : 3                                  H : ホルミル



- (5) (i) 90                                  (ii) 9.0 [g]



- (6) (i)  $4.7 \times 10^4$                       (ii) 0.55 [kg]