***To determine G:***

From sample no. 1:

$$M\_{4}=M\_{3}-M\_{s} \left(1-\frac{1}{G}\right)$$

 (The symbols are used in accordance with the symbols written in the theory.)

$$or, 2080-1475=960 \left(1-\frac{1}{G}\right)$$

 ***Hence, G = 2.70***

***Second Part:***

 *Sample 2:*

$$ω=\left(\frac{M\_{2}-M\_{1}}{M\_{3}-M\_{4}} x\frac{G-1}{G}- 1\right) x 100=\left(\frac{970}{2050-1475} x\frac{1.7}{2.7}-1\right) x 100=6.2 \%$$

$$M\_{s}=\left(M\_{3}-M\_{4} \right) x\frac{G}{G-1}=\left(2050-1475\right)x\frac{2.70}{1.70}=913.24 grams$$

$$Hence, V\_{s}=\frac{M\_{s}}{ρ\_{s}}=\frac{913.24}{2.7}=338.24 ml$$

$$M\_{w}=M-M\_{s}=970-913.24=56.76 grams$$

$$Hence, V\_{w}=56.76 ml$$

$$e=\frac{V\_{v}}{V\_{s}}=\frac{V-V\_{s}}{V\_{s}}=\frac{\left(\left(\frac{970}{2.05}\right)-338.24\right)}{338.24}=0.40$$

$$S\_{r}=\frac{V\_{w}}{V\_{v}}=42\%$$

*Sample 3:*

Similarly, ***ω = 17.7 %***

 ***e = 0.48***