

- 1 Given the following data, compute the suspended load weight discharge using Brooks method.

$$\begin{array}{llllll}
 q = 9 \text{ m}^3/\text{s/m} & ; & n = 0.02 & ; & R = D = 5 \text{ m} & ; & S = 0.001 \\
 d_{50} = 0.2 \text{ mm} & ; & a = 0.25 \text{ m} & ; & C_a = 0.0001 & \text{by dry weight}
 \end{array}$$

- 2 Given the following data, compute the Total load using Einstein method.

$$\begin{array}{llllll}
 Q = 55.5 \text{ m}^3/\text{s} & ; & W = 41.0 \text{ m} & ; & R = D = 2.0 \text{ m} & ; & S = 0.000077 \\
 V = 0.69 \text{ m/s} & ; & d_{65} = 0.195 \text{ mm}
 \end{array}$$

Sieve Analysis Results:

Size group (mm)	Geometric mean size (mm)	Percentage of material available
0.062-0.125	0.0888	40
0.125-0.250	0.1768	45
0.250-0.500	0.3536	15