

$$V_c = \sqrt[3]{\frac{Q^2}{B^2 y}}$$

For a cut throat flume of flume length 15 m

the actual discharge was found $258 \text{ m}^3/\text{s}$

If the throat width was 25 m

then what is the theoretical discharge for free flow condition. a) calculate the

~~submerg~~ submerg ~~had~~ in downstream region is submergence ratio is 16.09% .

b) what is the state of flow.

Q #8 d) At what distance the upstream flow ~~at~~ depth was measured?

[Use Fig - 5.2]

For a partial flow

Actual Discharge	H _a
0.0287	0.218
0.031	0.118
0.033	0.119

$2.7 = \frac{3812 Q^2}{H_a}$
 $Q^2 = \frac{K}{C_d}$
 $Q = \frac{K}{C_d}$
 $0.65 =$

a) Plot Q vs H_a graph

b) calculate the value of K from the graph is

c) ~~What~~ What is the coeff of discharge 0.28.

For a partial flow is discharge correction

$Q_E = 0.5 \times 5 \times 10^3 \text{ m}^3/\text{s}$. Measure the value of upstream head at free flow condition give a percentage submergence 55%.

b) Find out theoretical discharge at both free flow and submerged flow condition.

(calibrate the apparatus for 4 ft)

(Use figures)

$W = 4$

For a throat width of 10cm in a Venturi flume what would be the (a) hydraulic exponent given channel width 12 inch and if the upstream head is 24.05 cm and downstream head is 17.42 cm respectively.

Also find

b) what would be the velocity of at downstream section for submerged condition

c) Also

(1.5)
1.5 B.S.G. $\frac{1}{2}$
(1.5)
1.5

