

and sharpness?

- (b) The head of water over an orifice of diameter 50 mm is 12m. find the actual discharge and actual velocity of jet at vena-contracta. Take $C_d = 0.6$ and $C_v = 0.98$ **07**

Q-8 **Attempt all questions** **(14)**

- (a) A horizontal venturimeter with inlet and throat diameters 30 cm and 15 cm respectively is used to measure the flow of water. The reading of differential manometer connected to inlet and throat is 10 cm of mercury. Determine the rate of flow. Take $C_d = 0.98$. **07**
- (b) A jet of water, issuing from a sharp-edged vertical orifice under a constant head of 10 cm, at a certain point, has the horizontal and vertical co-ordinates measured from the vena- contracta as 20 cm and 10 cm respectively. Find the value of C_v . Also find the value of C_c if $C_d = 0.6$ **07**

