一、简答题 (共5小题,其中1题8分,2、3题各10分,4题6分,共34分)

1

2

3

4 6

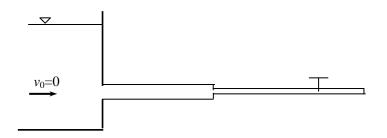
二、论述题 (共3小题,每小题15分,共45分)

1 15

2 15

3

三、作图题(10分)



四、计算题 (共 6 小题 , 其中 1,2,3,4 每小题 10 分 , 5 题 8 分 , 6 题 13 分 , 共 61 分)

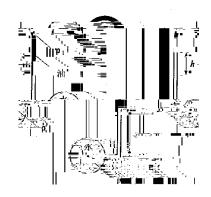
$$z = 0.2m$$

U

$$h = 0.1m$$

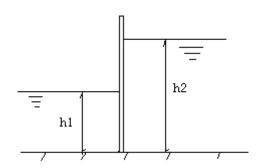
$$\rho_1 = 920.0 kg / m^3$$

 $\rho_1 = 920.0 kg / m^3$ $\rho = 1000.0 kg / m^3$



2. 10 b=2m

 $h_1 = 3m$ $h_2 = 6m$



10*m*

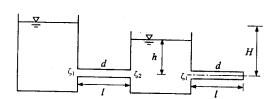
d = 100mm

 $\lambda = 0.025$

$$\xi_1 = 0.5$$

 $\xi_2 = 1.0$

h = 3m



4 (10)

 $d_1 = 200mm$

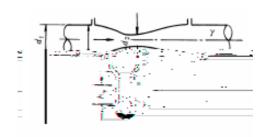
 $d_2 = 100mm,$

 $\gamma = 8.50 \text{kN} / \text{m}^3 \qquad \gamma_p = 136.0 \text{kN} / \text{m}^3$

 $\mu = 0.95$

 $h_p = 150mm$

Q



5. (8)

6. 13

b = 10m h = 3m

 $m = 1 \qquad n = 0.014$

Q

i = 0.001

 $d_1 = 0.15m$ $d_2 = 0.03m$

 $Q=0.03m^3/s$

