

## Water and Objects (10 pt)

### Part A. Merger of water drops (2.0 point)

**A.1** (2.0pt)

$v =$

### Part B. A vertically placed board (4.5 points)

**B.1** (0.6pt)

$P =$

**B.2** (0.8pt)

$f_x =$

**B.3** (0.8pt)

$f_x =$

**B.4** (0.8pt)

$a =$

$\ell =$

**B.5** (1.5pt)

$$z(x) =$$

**Part C. Interaction between two rods floating on the water surface (3.5 points)**

**C.1** (1.0pt)

$$F_x =$$

**C.2** (1.5pt)

$$F_x =$$

**C.3** (1.0pt)

$$z_0 =$$