

CH0210 Momentum Transfer Laboratory  
Quiz

Register No. \_\_\_\_\_  
Batch. \_\_\_\_\_  
Max. Marks: 10

Date : \_\_\_/\_\_\_/\_\_\_  
Time : \_\_\_:\_\_\_  
Duration: 20 Min

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Instructions :

- a) Encircle the correct answer
  - b) Do not encircle more than one answer
1. Which of the following relation is **CORRECT**? The relationship between relative and absolute pressure is given by
    - (a) gauge pressure + barometric pressure = absolute pressure
    - (b) absolute pressure + barometric pressure = gauge pressure
    - (c) all of the above
    - (d) none of these
  2. Identify which of the following is **TRUE**? The increase in pressure that accompanies the decrease in velocity is called as
    - (a) pressure recovery
    - (b) pressure difference
    - (c) both (a) and (b)
    - (d) none of these
  3. The theoretical discharge ( $Q$ ) through a sharp-crested triangular notch is proportional to
    - (a)  $H^{1/2}$
    - (b)  $H$
    - (c)  $H^{5/2}$
    - (d) none of these
  4. Which one of the following sentence is **FALSE**? Centrifugal pump
    - (a) delivers fluid at a uniform pressure without pulsations
    - (b) runs at lower speed than positive displacement pump
    - (c) both (a) and (b)
    - (d) all of the above
  5. A triangular tank having length ' $L$ ', breadth ' $B$ ', height ' $H$ ', is used to store water. If this tank is drained, the actual discharge or the volumetric flow rate ( $Q$ ) in  $\text{m}^3/\text{s}$  of water is identified using the expression
    - (a)  $V = \frac{Q}{A}$
    - (b)  $Q = \frac{L \times B \times H}{t}$
    - (c) both (a) and (b)
    - (d) none of these

6. Which of the following relation is **CORRECT**? The frictional head loss due to contraction of pipe is
- (a) ratio of pressure drop across the pipe contraction and fluid density
  - (b) ratio of pressure drop across the pipe contraction and fluid viscosity
  - (c) all of the above
  - (d) none of these
7. Identify which of the following is **TRUE**? The Reynolds number is a
- (a) dimensionless number
  - (b) ratio of inertial force and viscous force
  - (c) both (a) and (b)
  - (d) none of these
8. A fluid having a density of  $886 \text{ kg/m}^3$  is flow in a pipe of diameter 0.2 m. If the velocity of the fluid is 2.28 m/s, the maximum flow rate in the pipe is \_\_\_\_\_ kg/s
- (a) 60.2
  - (b) 65.1
  - (c) 63.5
  - (d) none of these
9. The overall efficiency of a pump is the ratio of
- (a) output power of pump to input power of pump
  - (b) product of mass flow rate and head
  - (c) input power of pump to output power of pump
  - (d) none of these
10. Identify, which one of the following sentence is **FALSE**? In variable area meter, the drop in pressure is
- (a) the drop in pressure is constant
  - (b) the flow rate is a function of the area of constriction
  - (c) the flow rate is not a function of the area of constriction
  - (d) all of the above