

[Show instructions](#)

Questions 1-20 of 65 | Page 1 of 3

Fluid Mechanics**Question 1** (10 points)

The diameter of a pipe depends on

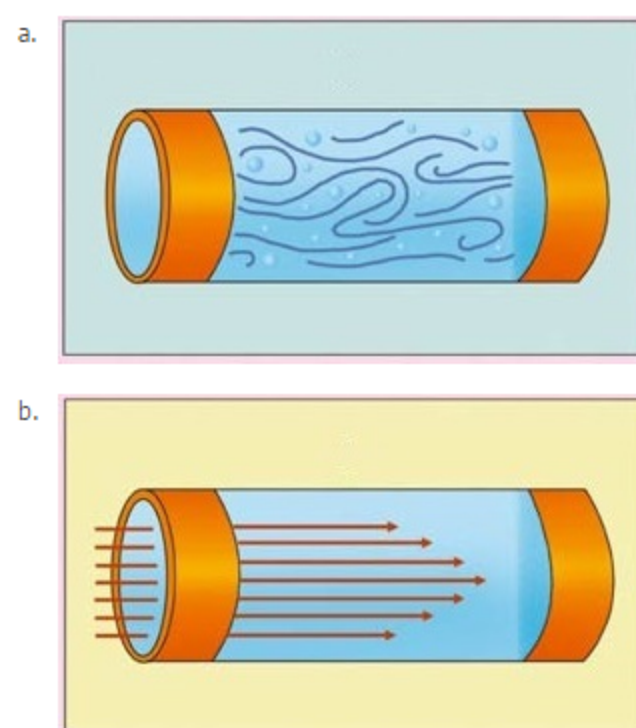
- a the flow required in the system
- b the inlet and outlet head difference
- c the available pressure
- d the system velocity
- e All of the above

Question 5 (10 points)

Match the flow regime with the corresponding picture.

Column A

1. ___ Laminar
2. ___ Turbulent

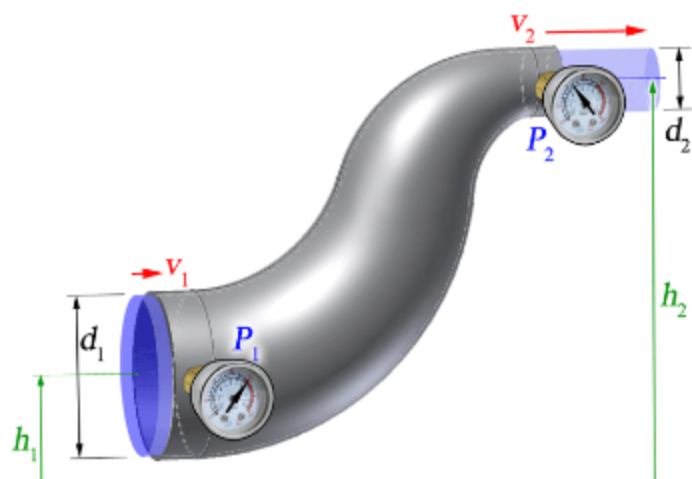
Column B**Question 6** (10 points)

The Reynolds number is, (more than one option may be correct)

- a a numerical and dimensionless value
- b the ratio of the dynamic forces of the fluid mass with respect to the deformation stresses caused by viscosity.
- c an indicator of the temperature of the fluid
- d None of the above

Question 8 (10 points)

The figure shown below describes



- a the mass conservation principle
- b the relationship between the inlet and outlet velocity of a fluid
- c the energy conservation principle
- d All of the above are correct

Question 14 (10 points)

Variables present in Darcy's equation for pressure loss calculation are

- a Friction Factor
- b Pipe length
- c Flow velocity
- d Pipe diameter
- e All of the above

Question 17 (10 points)

Flow rate, velocity and pressure loss are co-dependent variables, thus, to determine the diameter of a piping system one of the following variables must be fixed in order to determine the rest (more than one option may be correct):

- a Pressure loss
- b Pipe wall thickness
- c Velocity
- d System configuration
- e All of the above