**Pre-Assessment Quiz (1 point each)**

1. **What are the unit(s) of the Reynolds number? (LO1)**
2. It is unitless
3. kg·s
4. kg/s
5. kg/m3
6. **Which type of fluid flow is smooth, and predictable? (LO3)**
7. Turbulent
8. Viscous
9. Laminar
10. Inertial
11. **What value of Reynolds number indicates laminar flow? (LO1, LO2 and LO3)**
12. 2000
13. 5000
14. 7000
15. 10000
16. **The ratio of inertia force to viscous force is known as (LO1 and LO2)**
17. Grashof number
18. Reynolds number
19. Fourier number
20. Nusselt number
21. **In Reynolds number (ρvd) / μ, the letter μ denotes (LO1 and LO2)**
22. kinematic viscosity
23. absolute viscosity
24. coefficient of friction
25. none of the above

**Post- Assessment Quiz (1 point each)**

* 1. **Velocity within the given fields would be similar in magnitude, direction and turbulence pattern when (LO1, LO2 and LO3)**

1. Nusselt number are different
2. Nusselt number are same
3. Reynolds number are different
4. Reynolds number are same
   1. **A pipe has a diameter of 0.2 m in which a fluid flows with a velocity of 0.3 m3/s. Determine whether the flow is laminar or turbulent calculating the Reynolds number. Assume kinematic viscosity = 0.5 × 10-4 m2 /s. (LO1, LO2 and LO3)**
5. the flow is laminar having Reynolds number 1200
6. the flow is turbulent having Reynolds number 2100
7. the flow is laminar having Reynolds number 2200
8. the flow is neither laminar nor turbulent
   1. **What is the appropriate definition of streamflow? (LO3)**
9. The way in which water moves within a stream channel
10. The direction of the flow of the water within a stream
11. The velocity of the water within a stream
12. The amount of water within a stream
    1. **Which of the following is NOT a characteristic of a stream with laminar streamflow? (LO3)**
13. Quiet
14. Water that moves quickly
15. Water that flows in a straight line
16. No visible physical barriers
    1. **The turbulent flow has (LO3)**
17. streakline motion
18. parabolic velocity distribution
19. random orientation of fluid particles
20. small slope of velocity profile at the wall