7. Laminar Flow

1. The velocity distribution in laminar flow through a circular pipe follow the (Chalt JE-08)
   a) Linear law b) Parabolic law c) Logarithmic law d) None

2. In laminar, incompressible flow in a circular pipe, the ratio between Avg velocity and max. velocity would be (SSC JE-08)
   a) $\frac{1}{2}$ b) $\frac{1}{3}$ c) $\frac{2}{3}$ d) $\frac{1}{\sqrt{2}}$

3. An oil having kinematic viscosity .25 stokes flow through a pipe of 10cm dia. The flow will be critical as a velocity of about (UKD JE-08)
   a) .5 $\frac{m}{s}$ b) 1.5 $\frac{m}{s}$ c) 1.8 $\frac{m}{s}$ d) 4.6 $\frac{m}{s}$

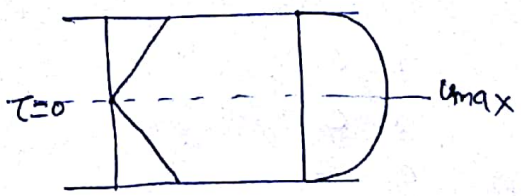
4. An oil with sp. gr .85 and viscosity 3.8 Poise flow in a 5cm dia Horizontal Pipe at 2 $\frac{m}{s}$. The Reynold No will be (UKD JE-08)
   a) 224 b) 2240 c) 22.4 d) 22400

5. The flow of fluid through a pipe is laminar when (Raj-2015) + (SSC JE-15) + 12
   a) The fluid is Ideal b) The fluid is viscous c) Re less to 2000. d) None

6. The discharge of a liquid of kinetic viscosity $4 \times 10^{-2}\ m^2/s$ through 80mm dia pipe is $3200\pi \times 10^{-4}\ m^3/s$. The flow is (SSC JE-14)
   a) laminar b) Turbulent c) transition d) critical

7. Water at 20°c is flowing through a 20cm dia pipe. Take kinematic viscosity of water at 20°C = .0101 stoke. Assume that the changes from laminar to turbulent at Re = 2320. The critical velocity will be (SSC JE-15)
   a) 1117 $\frac{cm}{s}$ b) .117 $\frac{cm}{s}$ c) 1.117 $\frac{cm}{s}$ d) 111.7 $\frac{cm}{s}$

8. What can definitely be said about the tube flow in the diag below. (UPSSSC JE-15)
   a) Turbulent Flow
   b) Compressible Flow
   c) laminar Flow
   d) Incompressible Flow



9. Nature of Flow is determine By (SJVNL-AE-13)

a) mach No. b) Froude No c) Reynold No d) Weber's No

10. For Laminar Flow in a pipe, v is eaual to (SSC JE-16)

a) v_{max} b) $.5\ v_{max}$ c) $.25\ v_{max}$ d) $2v_{max}$

11. Water at 20°c Flowing through a 20 cm dia Pipe. Take kinematic viscosity of water is .0101 stoke. Assume that the change From laminar to turbulent at Re = 2320. The critical velocity will be (SSC JE-16)

a) 1.117 $\frac{cm}{sec}$ b) 11.17 $\frac{cm}{sec}$ c) 111.7 $\frac{cm}{sec}$ d) 1.117 $\frac{m}{s}$.

12.

Key.

1 - b	7 - c
2 - a	8 - c
3 - a	9 - c
4 - a	10 - b
5 - c	11 - d
6 - a	