	Explain its significance.	
(C)	In a normal shock wave occurring in a helium (k=1.66) the density downstream of the shock is three times that on the upstream. Calculate the corresponding pressure ratio and velocity ratio. What are the Mach numbers upstream and downstream of the shock?	10
Q.6 (A)	Three pipes with details as following are connected in parallel between two points **Pipe** **Length** **Diameter** f 1 1000 m 20 cm 0.02 2 1200 m 30 cm 0.015 3 800 m 15 cm 0.02 When the total discharge of 0.30 m^3/sec flows through the system, calculate distribution of discharge and head loss between the junctions.	10
(B)	Explain Prandtl mixing length theory for turbulent fluid flow.	05
(C)	Write short note on induced drag on an aerofoil.	05