

ECAT Physics Chapter 6 Fluid Dynamics

Sr	Questions	Answers Choice
1	Where the streamlines are very close to each other, the pressure will be	A. low B. zero C. high D. all of them
2	In a normal healthy person the value of diastolic pressure is	A. 75 - 80 torr B. 100 torr C. 120 torr D. none of them
3	When each particle of the fluid moves along a smooth path, this path is known as	A. straight path B. smooth path C. haphazard path D. streamline
4	A body is floating in a liquid. The up thrust on the body is	A. Equal to weight of liquid displaced B. Zero C. Less than the weight of liquid displaced D. Weight of body-weight of liquid displaced
5	If one of the pipes has a much smaller diameter than the other and are placed horizontally then from both sides of Bernoulli's equation, we can drop the term	A. P B. $\frac{1}{2} \rho v^2$ C. ρgh D. none of them
6	Fluid A is more viscous than fluid B. While flowing through a pipe of the same dimensions and material which fluid takes longer to travel at 25°C?	A. fluid B B. fluid A C. both take the same time D. not possible to determine from given information
7	Drag force increases if speed of the object moving through the fluid:	A. Increases B. Decreases C. Remains constant D. None of these
8	Ball pen functions on the principle of	A. Viscosity B. Boyle's law C. Gravitational force D. Surface tension
9	The property of fluids due to which they resist their own flow is called:	A. Drag force B. Surface tension C. Viscosity D. None of these
10	Under normal circumstances, the volume of blood is sufficient to keep the vessels	A. flatted for all times B. inflated for all times C. inflated for small times D. none of them
11	When a water droplet falls through air, the net force on it is	A. Net force = drag force - weight B. Net force = weight - drag force C. Net force = drag force + weight D. Net force = weight + drag force
12	The resistance offered by a fluid to a solid moving inside it is called:	A. Drag force B. Surface force C. Viscosity D. None of these
13	Two copper balls of 1 cm and 2 cm in diameter are simultaneously dropped in the same viscous medium. The terminal velocity of bigger ball is:	A. Not affected due to its size B. Twice that of small size ball C. Four times that of small size ball D. 1/4th of that of small size ball
14	The density of water is 10^3 kg/m^3 . The water pressure on a submarine is $2.0 \times 10^7 \text{ N/m}^2$. The depth of the submarine below the surface of the water, in meters, is approximately	A. 200 m B. 11000 m C. 2000 m D. 8000 m
		A. Compressible fluid

15	Blood is an	<p>B. incompressible fluid</p> <p>C. hard</p> <p>D. none of them</p>
16	The un-steady streamline flow is called	<p>A. laminar flow</p> <p>B. turbulent flow</p> <p>C. both of them</p> <p>D. none of them</p>
17	The body passing a viscous medium affected by:	<p>A. One force only</p> <p>B. Two forces only</p> <p>C. Four forces</p> <p>D. None of these</p>
18	In Bernoulli's theorem the relation between velocity and pressure is	<p>A. Inverse</p> <p>B. Direct</p> <p>C. None of the above</p> <p>D. Both a and b</p>
19	With the increase of temperature viscosity	<p>A. Increase</p> <p>B. Decrease</p> <p>C. Remains same</p> <p>D. Doubles</p>
20	When the droplet moves with terminal velocity in a fluid, the net force acting on the droplet is:	<p>A. $F_{D} - mg$</p> <p>B. Zero</p> <p>C. $mg - F_{D}$</p> <p>D. None of these</p>