

ECAT Physics Chapter 6 Fluid Dynamics

Sr	Questions	Answers Choice
1	According to Stoke's law, drag force depends on	A. Initial velocity B. Final velocity C. Terminal velocity D. Instantaneous velocity
2	The fluid is incompressible, if its density is	A. zero B. constant C. very high D. very small
3	The law of conservation of energy gives us	A. equation of continuity B. Bernoulli's theorem C. both of them D. none of them
4	Bernoulli's equation is based upon law of conversation of	A. mass B. momentum C. Energy D. None
5	Deep water almost runs still when surface water flow in rivers. What does it explains	A. Magnus effect B. Equation of continuity C. Surface energy D. Bernoulli's equation
6	The terminal velocity of a small size spherical body of radius R moving in a fluid varies as	A. R B. R^2 C. $1/R$ D. $(1/R)^2$
7	The irregular and unsteady flow of the fluid is called	A. turbulent flow B. steady flow C. either of them D. both of them
8	Machine parts are jammed due to:	A. Increasing in viscosity of lubricant B. Decreasing in viscosity of lubricant C. Decreasing in surface tension of lubricant D. None of these
9	The product of cross-sectional area of the pipe and the fluid speed at any point along the pipe is called	A. constant rate B. volume rate C. flow rate D. steady rate
10	Fog droplets are suspended in air when their weight is balanced by:	A. Force of gravity B. Upward thrust due to air C. Surface tension D. None of these
11	The unit of viscosity in SI system is:	A. $\text{Kg}^{-1} \text{m} \text{sec}^{-1}$ B. $\text{Kg} \text{m}^{-1} \text{sec}^{-1}$ C. $\text{Kg} \text{m}^{-1} \text{sec}^{-1}$ D. None of these
12	Substances that do not flow easily have	A. large coefficient of viscosity B. small coefficient of viscosity C. either of them D. none of them
13	A container has a small hole in the bottom. Air can go through this hole, but water cannot. This can be best explained by the statement that	A. water contains hydrogen atoms, air does not B. water molecules are smaller than molecules in the air C. water molecules are smaller than molecules in the air D. surface tension of the water prevents it from

14	Matter is made up of very tiny particles called	B. Molecules C. Ions D. None of these
15	Bernoulli's equation is important in the field of	A. Electrical circuit B. Magnetism C. Photoelectric effect D. Flow of fluids
16	Fire fighters have a jet attached to the head of their water pipes in order to head of their water pipes in order to	A. Increase the mass of water flowing per second B. Avoid wastage of water C. Increase the velocity of water flowing out D. Increase the volume of water flowing per second
17	The smooth or steady streamline flow is known as	A. laminar flow B. turbulent flow C. both of them D. none of them
18	Drag force increases if speed of the object moving through the fluid:	A. Increases B. Decreases C. Remains constant D. None of these
19	Blood has a density	A. Equal to water B. Greater then water C. Lesser then water D. None of these
20	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