ECAT Pre General Science Physics Chapter 6 Fluid Dynamics

Sr	Questions	Answers Choice
1	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
2	The analysis of fluid motion becomes simplified by using	A. law of conservation B. law of conservation of energy C. both of them D. none of them
3	The smooth or steady streamline flow is known as	A. laminar flow B. turbulent flow C. both of them D. none of them
4	Where the streamlines are very close to each other, the pressure will be	A. low B. zero C. high D. all of them
5	The value for systolic blood pressure for a normal healthy person is	A. 140 torr B. 80 torr C. 90 torr D. 120 torr
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	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
8	Fluids resist force, This property is called	A. Stiffness B. Strength C. Ductility D. Elasticity
9	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
10	When the speed of a body in a fluid increases then the drag force	A. decreases B. becomes zero C. increases D. non of them
11	The application of Bernoulli's equation is	A. Torricelli's theorem B. Venture relation C. Binomial theorem D. Both a and b
12	What are the SI base units of the coefficient of viscosity	A. Kg m s⁻² B. kgm² s⁻² C. Kg m s⁻¹ D. kg m⁻¹s⁻¹
13	When there is no internal frictional forces between the adjacent layers of fluid, then the fluid is called	A. incompressible B. compressible C. viscous D. non viscous
14	According to Stoke's law, drag force depends on	A. Initial velocity B. Final velocity C. Terminal velocity

		D. Instantaneous velocity
15	Internal friction of fluid is called	A. Surface tension B. Viscosity C. Resistance D. Cohesive force
16	The terminal velocity of a small size spherical body of radius R moving in a fluid varies as	A. R B. R² C. 1/R D. (1/R)²
17	The unit of viscosity is SI system is:	A. Kg⁻¹m sec⁻¹ B. Kgm⁻¹ sec⁻¹ C. Kg⁻¹m⁻¹ sec D. None of these
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	Pressure exerted by a gas on the walls of its container in due to	A. adhesion between the gas molecules and the container B. cohesion between the gas molecules and the container C. collision between the gas molecules and the container D. surface tension of the gas
20	According to the equation of continuity, when water falls from the tap, it's speed increases and its cross-sectional area	A. decreases B. increases C. becomes zero D. none of them